



**Song Sparrow Solar Project**  
Wetland and Waterbody Delineation Report

February 1, 2024

Prepared for:

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## Sign-off Sheet


This document entitled Song Sparrow Solar Wetland and Waterbody Delineation Report was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of Clearway Energy, Inc. (the "Client"). The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party and Stantec will not be liable to such third party.

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## 1.0 INTRODUCTION

### 1.1 PURPOSE

The Clearway Energy LLC (Clearway) is proposing to develop the Song Sparrow Solar Facility (the “Project”) within Ballard County, Kentucky. (**Appendix A, Figure 1**). The Project includes 1,405.4 acres of primarily upland and riparian forested areas and agricultural fields. Highway KY 358 runs north to south through the western portion of the Project and Highway KY 473 run north to south through the eastern part of the Project. The Project is located approximately 10 miles southwest of the city of Paducah, Kentucky.

Stantec Consulting Services Inc. (Stantec) was retained by Clearway to conduct a delineation of potential waters of the United States (WOUS), including wetlands, streams, waterbodies, and potentially isolated wetlands within the Project area. Wetlands that are considered WOUS are subject to regulation under Section 404 of the Clean Water Act (CWA) and the jurisdictional regulatory authority lies with the U.S. Army Corps of Engineers (USACE).

Stantec completed the delineation of wetlands and waterbodies from February 20-24, 2023, and February 28 through March 3, 2023. The information contained in this report reflects the current site conditions that were observed during the field delineation.

### 1.2 LOCATION OF PROJECT

The Project is located approximately 10 miles southwest of Paducah in Ballard County, Kentucky. The Project is within the Humphrey Creek watershed (HUC-12 051402060601) within the Lower Ohio watershed (HUC-6 051402). The Project is drained by Humphrey Creek and an unnamed tributary to Humphrey Branch. Humphrey Creek flows north through the central portion of the Project (Appendix A, Figure 1).

## 2.0 METHODS

### 2.1 WETLAND DELINEATION

Prior to completing the survey, a desktop review of the Project area was conducted using the LA Center, Kentucky USGS 7.5 Minute Series topographic maps (Appendix A, Figure 1), U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey of Ballard County, Kentucky (USDA 1972) (Appendix A, Figures 3-5), the National Wetlands Inventory database (NWI [USFWS 2023]), the National Hydrography Dataset (NHD [USGS 2023]), and the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL [FEMA 2023]) (Appendix A, Figure 6), and aerial imagery mapping to assess the likelihood of occurrence and probable location of wetlands and waterbodies within the Project area. Delineated features are presented in Appendix A, Figures 7-12.

Stantec conducted field surveys within the Project area from February 20-24, 2023, and February 28 through March 3, 2023. Wetland boundaries were assessed using the “Routine On-site Determination Method” as described in the USACE Wetland Delineation Manual (USACE Environmental Laboratory 1987) and the Regional Supplement to the

## SONG SPARROW SOLAR WETLAND AND WATERBODY DELINEATION REPORT

Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0) (USACE 2012). As of August 17, 1991, the USACE was directed to utilize the USACE Wetland Delineation Manual (USACE Environmental Laboratory 1987) to identify and delineate wetlands potentially subject to regulation under Section 404 of the CWA.

Wetlands were classified according to “Classification of Wetlands and Deepwater Habitats of the United States” (Cowardin et al. 1979). In this classification system, wetland habitats are divided into five major systems including: (1) Marine, (2) Estuarine, (3) Lacustrine, (4) Palustrine, and (5) Riverine. Each of these systems is further divided into subsystems, classes, and subclasses. Vegetative communities were inventoried to assess the dominant plant species in each of four vegetative layers: trees, saplings/shrubs, herbs, and woody vines. The wetland indicator status for each of the dominant species was obtained using the 2020 National Wetland Plant List (USACE 2020). The wetland soil indicators were obtained using the Munsell soil-color chart (Munsell Color 2009) and the hydric soil field indicators (USDA, NRCS 2010). The wetland boundary and sampling points were identified and surveyed using a handheld Global Positioning System (GPS) unit and mapped with Geographical Information System (GIS) software. Stantec collected data and completed relevant assessment forms, which included: USACE Wetland Determination Forms (WDF). Datasheets are provided in Appendix B.

## 2.2 STREAM DELINEATION

Streams that demonstrated a continuously defined channel (bed and bank), ordinary high-water mark (OHWM), and the disturbance of terrestrial vegetation were delineated within the Project area, per the protocols outlined in the USACE’s Guidance on Ordinary High Water Mark Identification (Regulatory Guidance Letter, No. 05-05; USACE 2005). Delineated streams were classified as ephemeral, intermittent, or perennial per definitions in the 85 Federal Register 22250 (effective June 22, 2020). The centerline of each waterway, or both banks for streams 15 feet or wider, was identified and surveyed using a sub-meter accurate handheld GPS unit and mapped with GIS software. Potential waterways without a continuously defined channel (bed and bank), OHWM, or disturbance of terrestrial vegetation were considered upland drainage features.

## 3.0 OVERVIEW OF PROJECT AREA

### 3.1 GEOLOGY AND TOPOGRAPHY

The Project lies within the western portion of the Mississippi Embayment physiographic province of Kentucky. This region is relatively flat laying and contains numerous lakes, swamps, sloughs, and ponds. The Cretaceous, Tertiary, and Quaternary sediment consist of unconsolidated gravel, silt, sand, and clays that have been deposited by the Mississippi River. (KGS 2012). The Mississippi Embayment is part of the Western Mesophytic forest region described by Braun (1950). In the eastern section of the Mississippian Plateau where the Project is located, the slopes contain beech- (Fagus) dominated mixed mesophytic forest with oak (Quercus), oak-hickory (Q.-Carya), and oak-chestnut (Q.-Castanea) forest types on the drier slopes and ridges.

## 3.2 CLIMATE

The average February and March temperatures in Ballard County are 54 degrees Fahrenheit (F), and the average daily minimum temperature is 33 degrees F. The annual high temperature for Paducah is 68 degrees F and the annual low temperature is 47 degrees F. Precipitation in Paducah averages 49.08 inches per year. Most of the precipitation falls from April through July (U.S. Climate Data 2023). Ballard County experienced approximately 3.5 inches of precipitation during February 2023 in the month leading up to the fieldwork and an additional 0.3 inches throughout the field effort (U.S. Climate Data 2023).

## 3.3 SOILS

The Soil Survey of Ballard County, Kentucky (USDA 1972) and the NRCS Web Soil Survey were consulted to assess soil types within the Project area (USDA, NRCS 2010). A copy of the soil map is included in Appendix A, Figure 2. Soils within the Project area with respective acreages and percentages are included in Appendix C, Table 1. Five soil series listed within the Project area were considered predominantly hydric as shown in Appendix C, Table 1.

## 4.0 RESULTS

### 4.1 EXISTING CONDITIONS

Upland habitat within the Project area consists of forest areas, agricultural fields, and existing gravel farm roads. The agricultural fields appear to have been previously planted with soybeans (*Glycine max*) and corn (*Zea Mays*). Forest areas were dominated by southern red oak (*Quercus falcata*), red maple (*Acer rubrum*), sugarberry (*Celtis laevigata*), and black cherry (*Prunus serotina*). Dominant herbaceous plants in the forested areas included purple dead-nettle (*Lamium purpureum*), coral berry (*Symphoricarpos orbiculatus*), Japanese honeysuckle (*Lonicera japonica*), and couch grass (*Elymus repens*). The delineation was conducted during the early season with bare land post-harvest from the past season of growth.

### 4.2 WETLAND HABITAT

There were 39 wetlands identified within the Project area, totaling 4.80 acres (**Appendix A, Figures 7-12**). Of the 39 wetlands 28 are considered jurisdictional, totaling 4.03 acres. The jurisdictional wetlands include a mixture of Cowardin classes: 1.23 acres of palustrine emergent (PEM), 0.36 acres of palustrine shrub-scrub (PSS), 0.45 acres of palustrine forested (PFO), and 0.98 acres of PSS/PFO, 0.39 acres of PSS/PEM, and 0.63 acres of PEM/PFO. Of the 39 wetlands, 11 were considered non-jurisdictional. The non-jurisdictional wetlands include a mixture of Cowardin classes: 0.26 acres of PEM, 0.38 acres of PFO, and 0.12 acres of PSS/PEM. Appendix B contains the WDF for the wetlands identified within the Project area. Non-jurisdictional features on the site were typically found in upland forested areas and agricultural fields with no surface water connection to other jurisdictional features. Representative photographs of the wetland are provided in Appendix D. The wetlands are summarized in Appendix C, Table 2.

### 4.3 STREAM HABITAT

258 stream features were identified within the Project area, totaling 104,535.4.0 linear feet (**Appendix A, Figures 7-12**). Additionally, 25 non-jurisdictional upland drainage features were delineated within the Project, totaling 13,919.9 linear feet. These upland drainage features lacked the required features to be considered a stream and in general did not have a defined bed and bank and/or ordinary highwater mark throughout the reach but were mapped for siting purposes for solar panels. These features form on the landscape seasonally after crop harvest due to the slope of the landscape and bare soil after harvest. Of the 258 stream features, 72 were considered jurisdictional totaling 63,006.2 linear feet. The table of stream determination datasheets is found in Appendix B. Of the 258 stream features 186 were considered non-jurisdictional at a total of 41,577.7 linear feet. Representative photographs of the streams are provided in Appendix D. The streams are summarized in Appendix C, Table 3.

### 4.4 OPEN WATER HABITAT

Nine (9) open waters were identified within the Project, totaling 1.68 acres (**Appendix A, Figures 7-12**). Of the nine (9) open water features one (1) was considered jurisdictional, a total of 1.38 acres. The remaining eight (8) open water features were considered non-jurisdictional, a total of 0.30 acres. Representative photographs of the open waters are provided in Appendix D. The open waters are summarized in Appendix C, Table 4.

## 5.0 REGULATORY CONSIDERATIONS

Federal, state, and local permits or certificates that are potentially applicable to the Project are described below. The information provided is based on preliminary information on natural resources identified in the Project area and vicinity through Stantec's review of publicly available maps, applicable regulations, agency information, field survey, and Stantec's previous experience permitting projects in Kentucky. Consultation with federal, state, and local agencies may be necessary to further determine which permits may be applicable and/or required for the Project.

At the time of submittal of this report, "The U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers are in receipt of the U.S. Supreme Court's May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency*. In light of this decision, the agencies are interpreting the phrase "waters of the United States" consistent with the Supreme Court's decision in *Sackett*. The agencies are developing a rule to amend the final "Revised Definition of 'Waters of the United States'" rule, published in the *Federal Register* on January 18, 2023, consistent with the U.S. Supreme Court's May 25, 2023 decision in the case of *Sackett v. Environmental Protection Agency*" (EPA 2023). The Jurisdictional Determinations presented in this report reflect what Stantec believes USACE will be considering going forward.

#### Clean Water Act Section 404 Permit

The Project may require authorization under the federal Clean Water Act (CWA) Section 404 for any proposed impacts to jurisdictional WOUS. The USACE regulates the discharge of fill material in WOUS, including wetlands, under Section 404 of the Clean Water Act (33 U.S.C. §1344), Section 10 of the Rivers and Harbors Act of 1899 (33

## SONG SPARROW SOLAR WETLAND AND WATERBODY DELINEATION REPORT

U.S.C. §403), and Section 103 of the Marine Protection Research and Sanctuaries Act of 1972 (33 U.S.C. §1413). Discharge of fill material includes digging, trenching, or equipment crossing of a jurisdictional waterbody.

The Project is located in the USACE Louisville District and may be eligible for NWP 51, and/or NWP 57, provided that all conditions of NWP 51, and/or NWP 57 are met. Project impacts to jurisdictional WOUS that result in permanent loss would need to be kept under 0.5 acre for both NWP 51 and NWP 57. If no permanent impacts for the Project are assumed, and all impacts to jurisdictional WOUS would be temporary in nature, compensatory mitigation would likely not be required. Compensatory mitigation would be required for permanent impacts exceeding 0.10 acre. A project restoration plan would be required as part of the USACE NWP 51 and/or NWP 57 application. If the Project impacts cannot meet the conditions of NWP 51 and/or NWP 57, an Individual CWA Section 404 Permit may be required from the USACE. Stantec assumes an Individual CWA Section 404 Permit will not be required from the USACE, as the Project is anticipated to meet all the conditions of NWP 51 and/or NWP 57. Typical timeframe for completing a draft of the PCN application would be approximately three (3) weeks. The review time by the USACE for this type of permit application is 45-60 days from when they receive a complete application. No fee is associated with this type of permit application. A pre-construction notification is not required if impacts are less than 0.10 acre.

### Clean Water Act Section 401 Water Quality Certification

Section 401 of the CWA (33 U.S.C. §1344) mandates that a Section 401 Water Quality Certification (WQC) be obtained from the State of Kentucky prior to any discharge of dredged or fill material into WOUS. The Kentucky Division of Water (KDOW) administers the WQC program in Kentucky.

As indicated above, the Project may qualify for authorization by the USACE under NWP 51 and/or NWP 57, provided that the conditions of the permits are met and/or a waiver can be obtained. The KDOW has certified many of the USACE 404 NWPs by automatically granting state 401 WQC to activities covered under NWPs, provided that the project meets special limitations and conditions. If the Project impacts cannot meet the state conditions of NWP 51 and/or NWP 57, an Individual CWA Section 401 Permit may be required from KDOW. Stantec assumes an Individual CWA Section 401 Permit will not be required from the KDOW, as the Project is anticipated to meet all the state conditions of NWP 51 and/or NWP 57.

### Clean Water Act Section 402 National Pollutant Discharge Elimination System (NPDES) Permit

For Section 402, construction sites with a disturbed area of one or more acres are required to either obtain individual NPDES permits for stormwater discharges or be covered by the Construction General Permit. In Kentucky, the Kentucky Energy and Environment Cabinet (KEEC) administers the National Pollutant Discharge Elimination System program, in compliance with NPDES guidelines, to issue a Construction General Permit (KYR10) which authorizes discharge of stormwater associated with construction activity. Submission of a NOI to KEEC is required and must be authorized prior to ground disturbing construction activities.

Each applicant under the Construction General Permit is required to prepare a Stormwater Pollution Prevention Plan (SWPPP) prior to the commencement of grading activities and implement the SWPPP during construction activities. The primary objective of the SWPPP is to identify, construct, implement, and maintain Best Management Practices (BMPs) to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site. BMPs may include programs, technologies, processes, practices, and devices that control, prevent, remove, or reduce pollution. The SWPPP would also address BMPs developed specifically to reduce

## SONG SPARROW SOLAR WETLAND AND WATERBODY DELINEATION REPORT

pollutants in stormwater discharges following the completion of construction activities. The review time by the KEEC for the NOI permit is 21 days and application fees will vary depending upon the total acreage of ground disturbance.

### Floodplain Permit

A floodplain development permit may be required when construction activities consisting of above ground facilities or any ground disturbance occurring within a mapped Federal Emergency Management Agency (FEMA) special flood hazard area. Coordination with county and local officials will be required to determine the extent of consultation and permits that will be required when working within their jurisdiction.

Stantec used the Federal Emergency Management Agency (FEMA) Flood Map Services Center website to identify floodplain boundaries within the Project area. FEMA regulates development within floodplains and requires permits for development within the 100-year flood zone. Stantec downloaded preliminary floodplain data for Ballard County from the FEMA Flood Map Services Center. This map data is provided on Figure 3 in Appendix A. 168.49 acres of the Project area is in the 100-year floodplain the majority of which being centered around Humphreys Creek watershed. Clearway should consult with FEMA and/or Ballard County if development is planned to take place within the 100-year flood zone.

## 6.0 CONCLUSION

Stantec conducted a delineation of potential WOUS within the Project area located in Ballard County, Kentucky. The purpose and objective of the wetland and waterbody delineation was to identify the extent and location of potential jurisdictional wetlands and waterbodies within the Project area.

28 potential USACE-jurisdictional wetlands, totaling 4.03 acres, 72 potential USACE-jurisdictional streams, totaling 63,006.2 linear feet, and one (1) potential USACE-jurisdictional open water feature, totaling 1.38 acres, were identified.

Stantec's opinion regarding the presence/absence of jurisdictional WOUS and isolated is preliminary. Only the USACE can provide an official determination of the presence and extent of jurisdictional WOUS. Wetlands that are considered WOUS are subject to regulation under Section 404 of the CWA and the jurisdictional regulatory authority lies with the USACE. Stantec recommends that Clearway contact the USACE Louisville District for final jurisdictional review and concurrence with Stantec's opinion regarding the presence/absence of WOUS within the Project area prior to construction activities associated with this Project.



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[X](#)
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# **APPENDICES**

## Appendix A FIGURES



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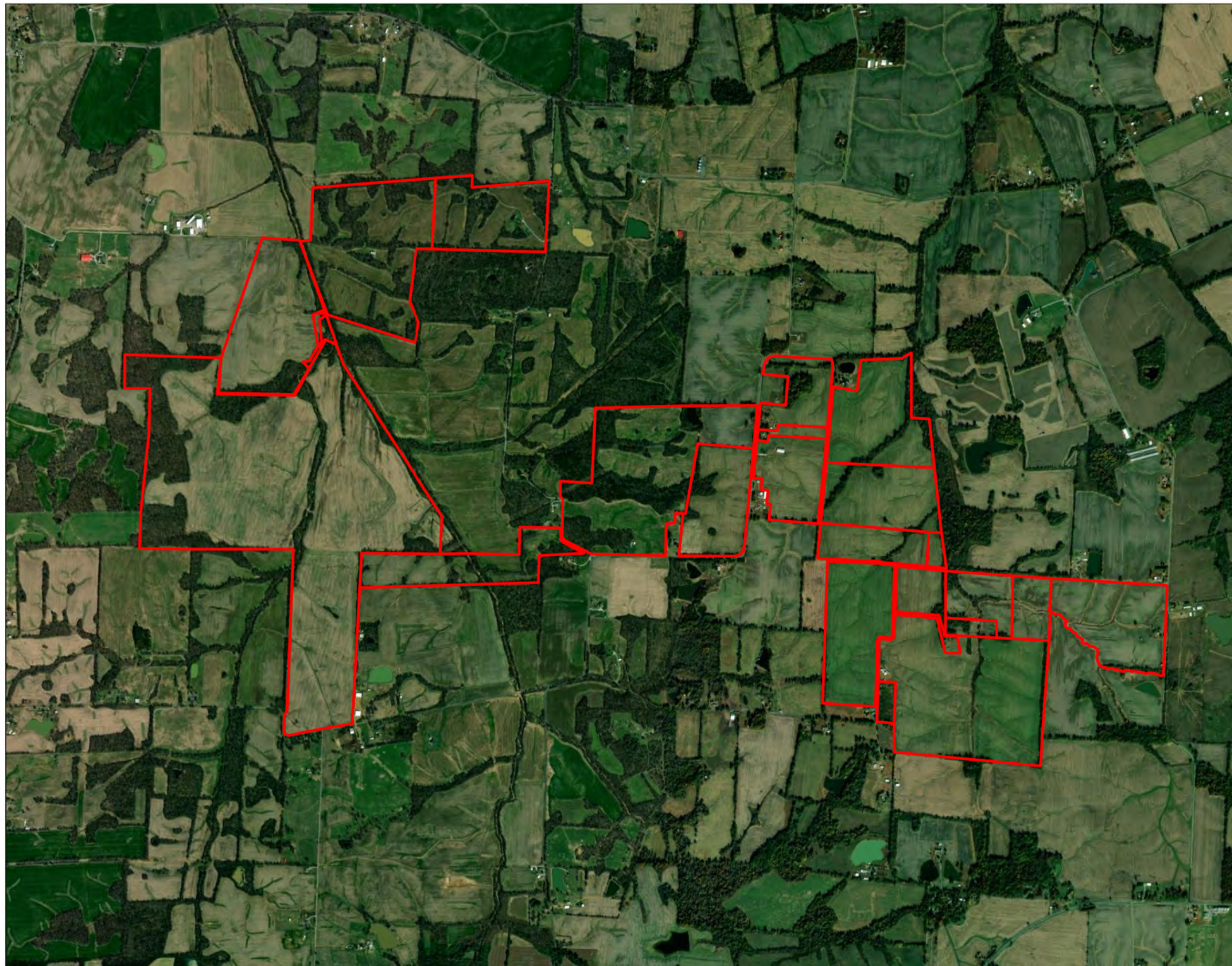


Figure No.

1

Title

### Project Area Map

Client/Project 172607907

Song Sparrow Solar LLC  
Song Sparrow Solar Project  
Wetland and Waterbody Delineation Report

Project Location Prepared by MNA on 2024-02-01  
Ballard County, TR by CMK on 2024-02-01  
Kentucky IR by SPK on 2024-02-01



0 1,750 3,500 Feet

(At original document size of 11x17)  
1 inch = 1,750 feet

### Legend

Project Boundary



Notes  
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet  
2. Data Sources: Song Sparrow Solar LLC, Stantec  
3. Background: Aerial Imagery Basemap





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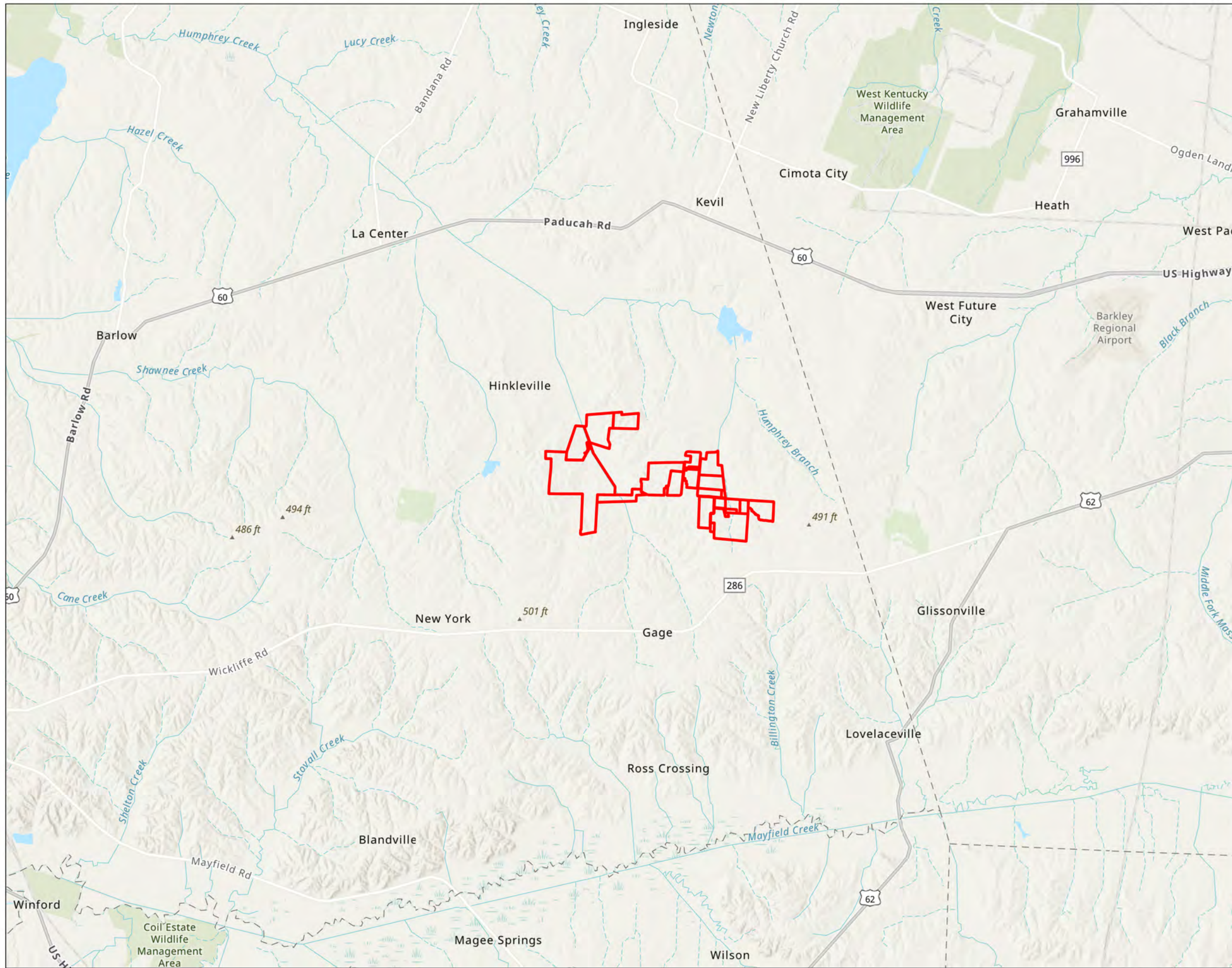


Figure No.  
**2**

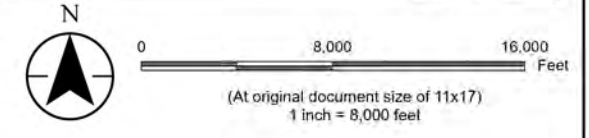
Title  
**Project Topographic Overview Map**

Client/Project  
Song Sparrow Solar LLC  
Song Sparrow Solar Project  
Wetland and Waterbody Delineation Report


172607907

Project Location  
Ballard County,  
Kentucky

Prepared by MNA on 2024-02-01  
TR by CMK on 2024-02-01  
IR by SPK on 2024-02-01



Legend

 Project Boundary



- Notes
- 1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet
  - 2. Data Sources: Song Sparrow Solar LLC, Stantec
  - 3. Background: Topographic BaseMap









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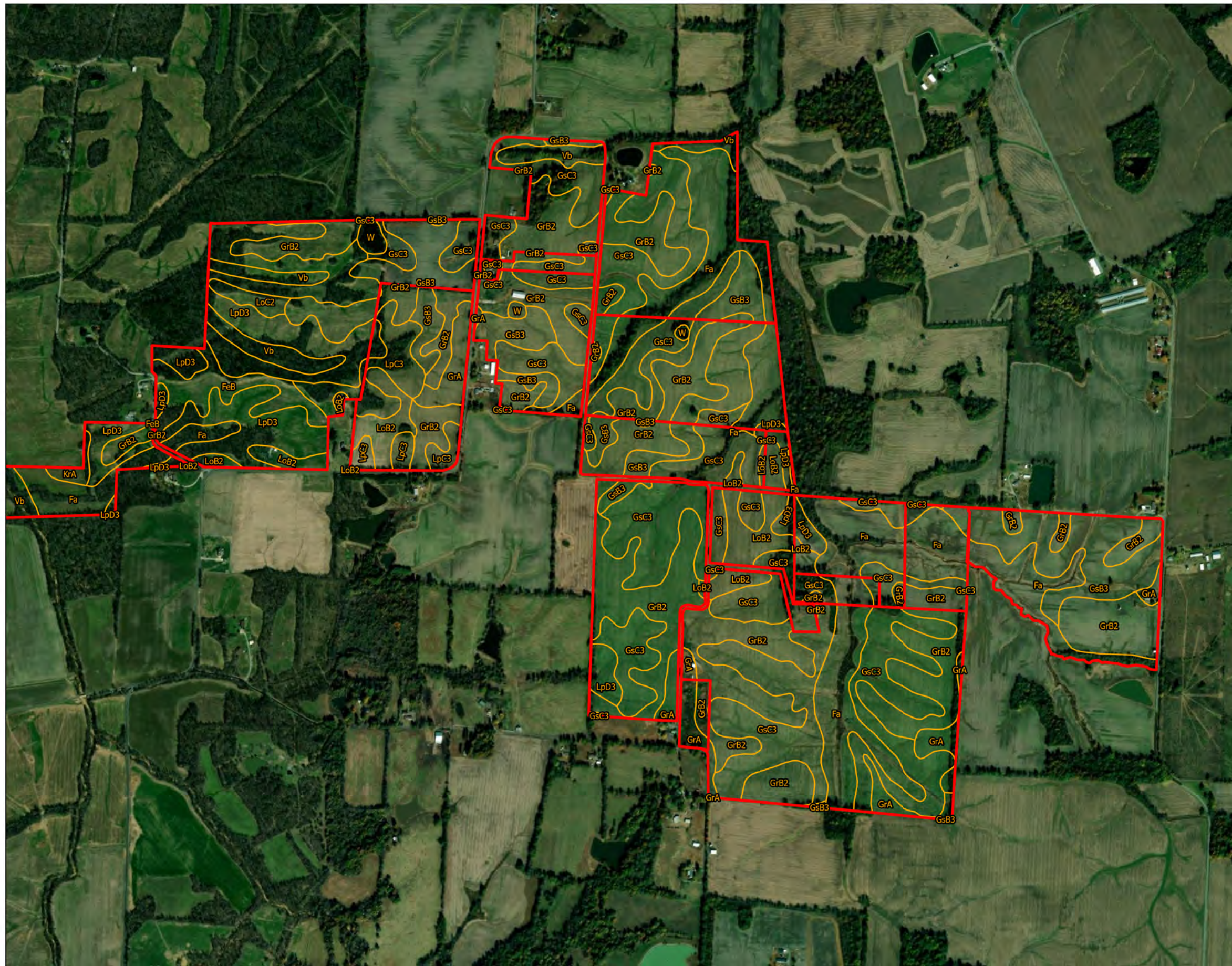
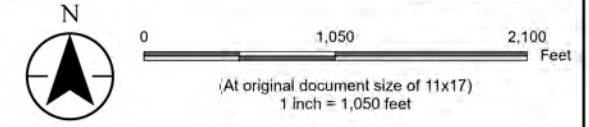


Figure No. 4

**National Resources Conservation Service (NRCS) Soil Survey Data Map**

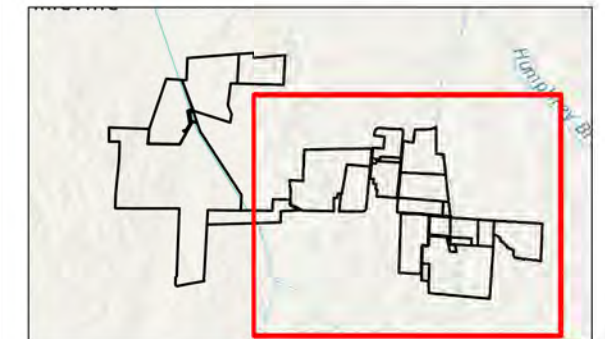
Client/Project: Song Sparrow Solar LLC, Song Sparrow Solar Project, Wetland and Waterbody Delineation Report

Project Location: Ballard County, Kentucky. Prepared by MNA on 2024-02-01, TR by CMK on 2024-02-01, IR by SPK on 2024-02-01.



**Legend**

- Project Boundary
- NRCS Soil Series
- Hydric Soils



- Notes**
- Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet
  - Data Sources: Song Sparrow Solar LLC, Stantec, NRCS
  - Background: Aerial Imagery Basemap





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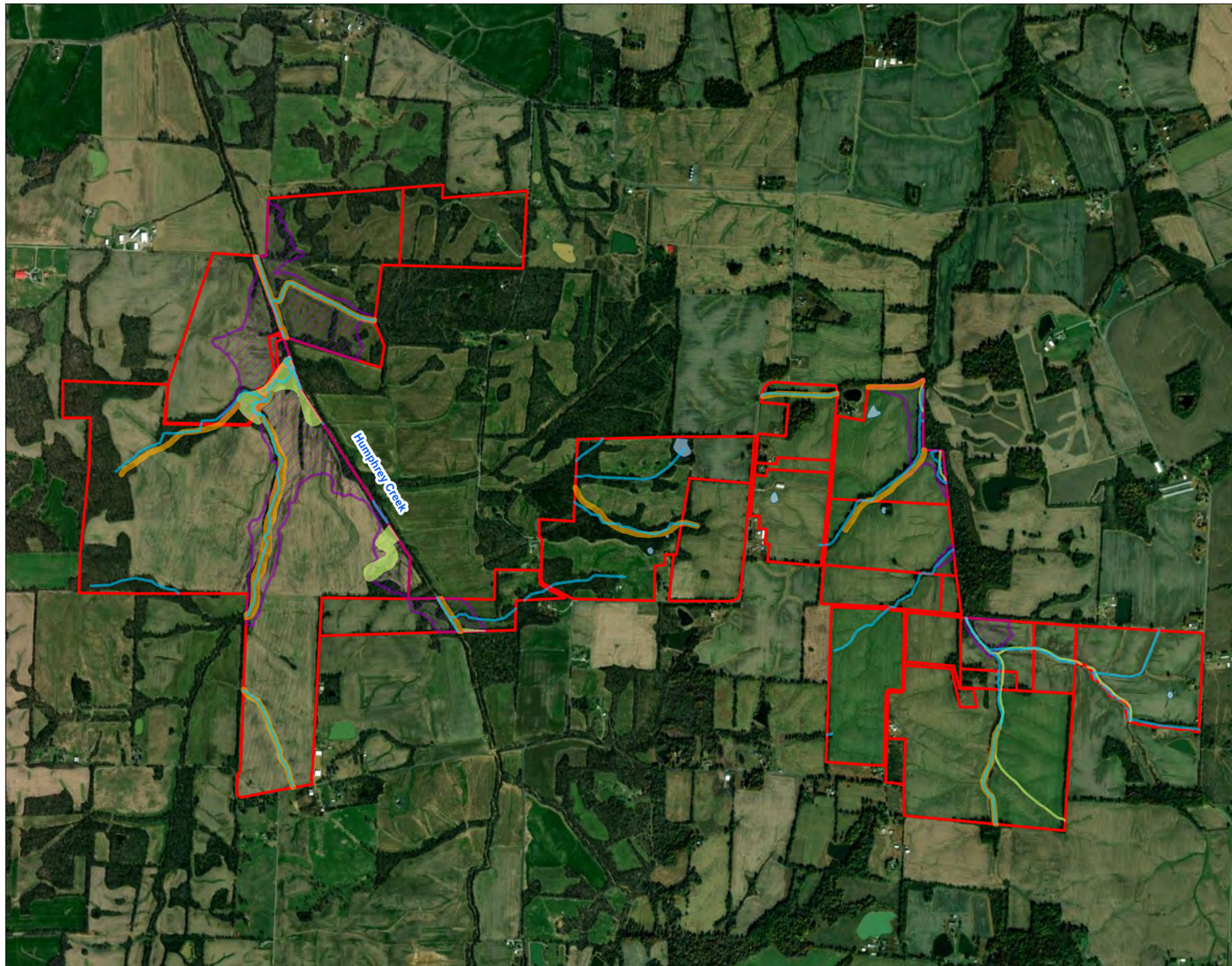


Figure No.  
**5**

Title  
**National Wetlands Inventory (NWI), National Hydrography Database (NHD), and Federal Emergency Management Agency (FEMA) Map**

Client/Project  
Song Sparrow Solar LLC  
Song Sparrow Solar Project  
Wetland and Waterbody Delineation Report

Project Location  
Ballard County,  
Kentucky

Prepared by MNA on 2024-02-01  
TR by CMK on 2024-02-01  
IR by SPK on 2024-02-01

172607907

N

0 1,600 3,200 Feet

(At original document size of 11x17)  
1 inch = 1,600 feet

Legend

- Project Boundary
- FEMA 100-year Floodplain
- NHD Streams

**NWI Wetland Types**

- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine



Notes

1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet
2. Data Sources: Song Sparrow Solar LLC, Stantec, NWI, NHD, FEMA
3. Background: Aerial Imagery Basemap





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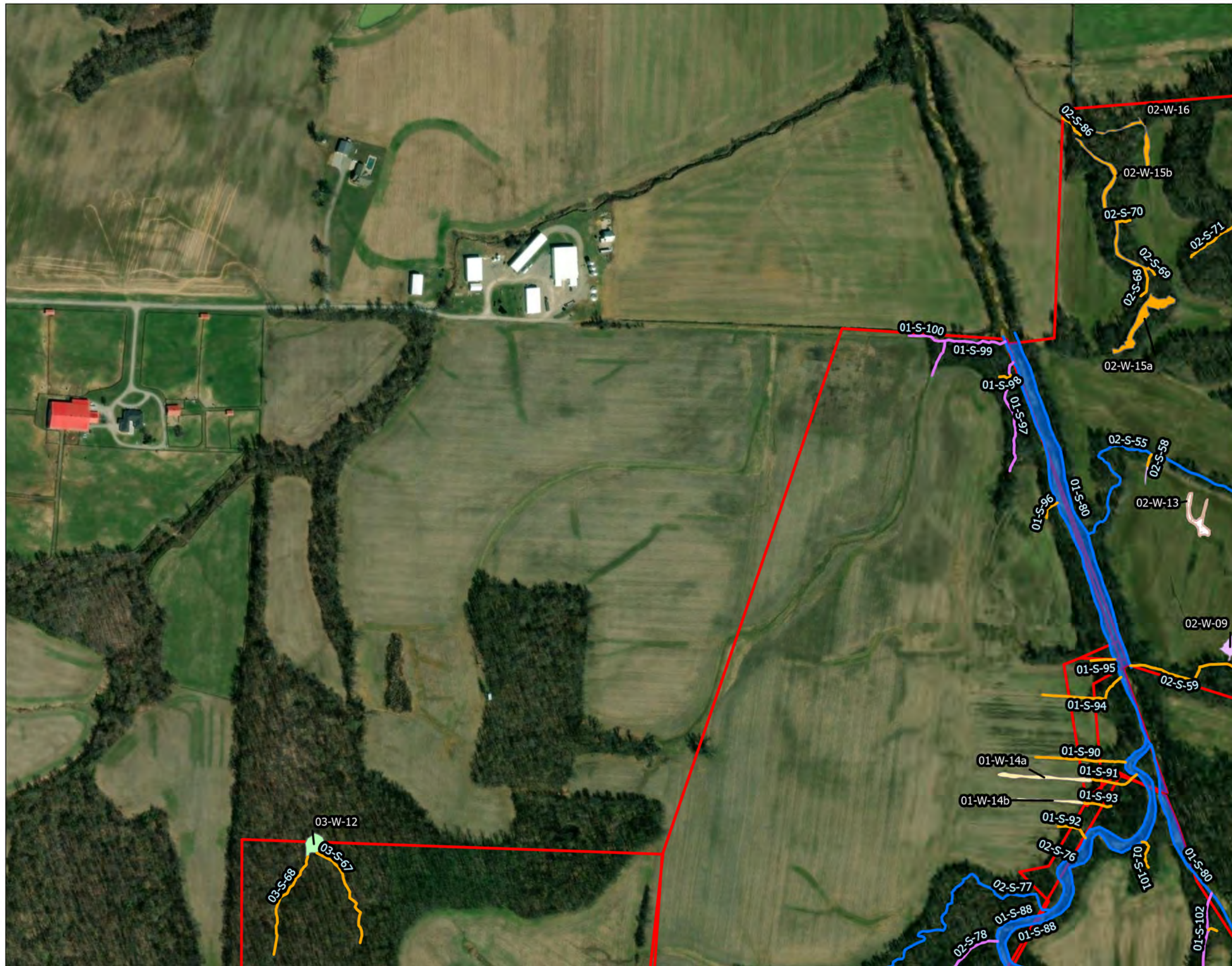
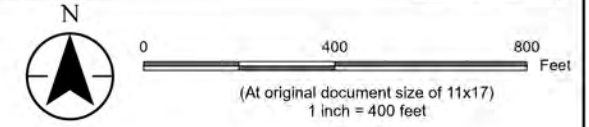


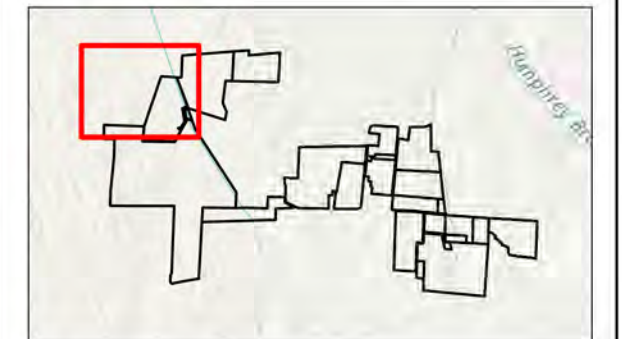
Figure No. **6**  
Title **Wetland and Waterbody Delineation Map**

Client/Project **Song Sparrow Solar LLC** 172607907  
**Song Sparrow Solar Project**  
**Wetland and Waterbody Delineation Report**

Project Location **Ballard County, Kentucky** Prepared by MNA on 2024-02-01  
TR by CMK on 2024-02-01  
IR by SPK on 2024-02-01



- Legend**
- Project Boundary
  - Delineated Streams**
  - Jurisdictional - Intermittent
  - Jurisdictional - Perennial
  - Non-Jurisdictional - Upland Drainage
  - Non-Jurisdictional - Ephemeral
  - Non-Jurisdictional - Intermittent
  - Delineated Wetlands**
  - Jurisdictional - PEM
  - Jurisdictional - PFO
  - Jurisdictional - PSS
  - Jurisdictional - PEM/PFO
  - Jurisdictional - PSS/PEM
  - Jurisdictional - PSS/PFO
  - Non-Jurisdictional - PEM
  - Non-Jurisdictional - PFO
  - Non-Jurisdictional - PSS/PEM
  - Delineated Open Water**
  - Jurisdictional
  - Non-Jurisdictional



**Notes**  
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet  
2. Data Sources: Song Sparrow Solar LLC, Stantec  
3. Background: Aerial Imagery Basemap





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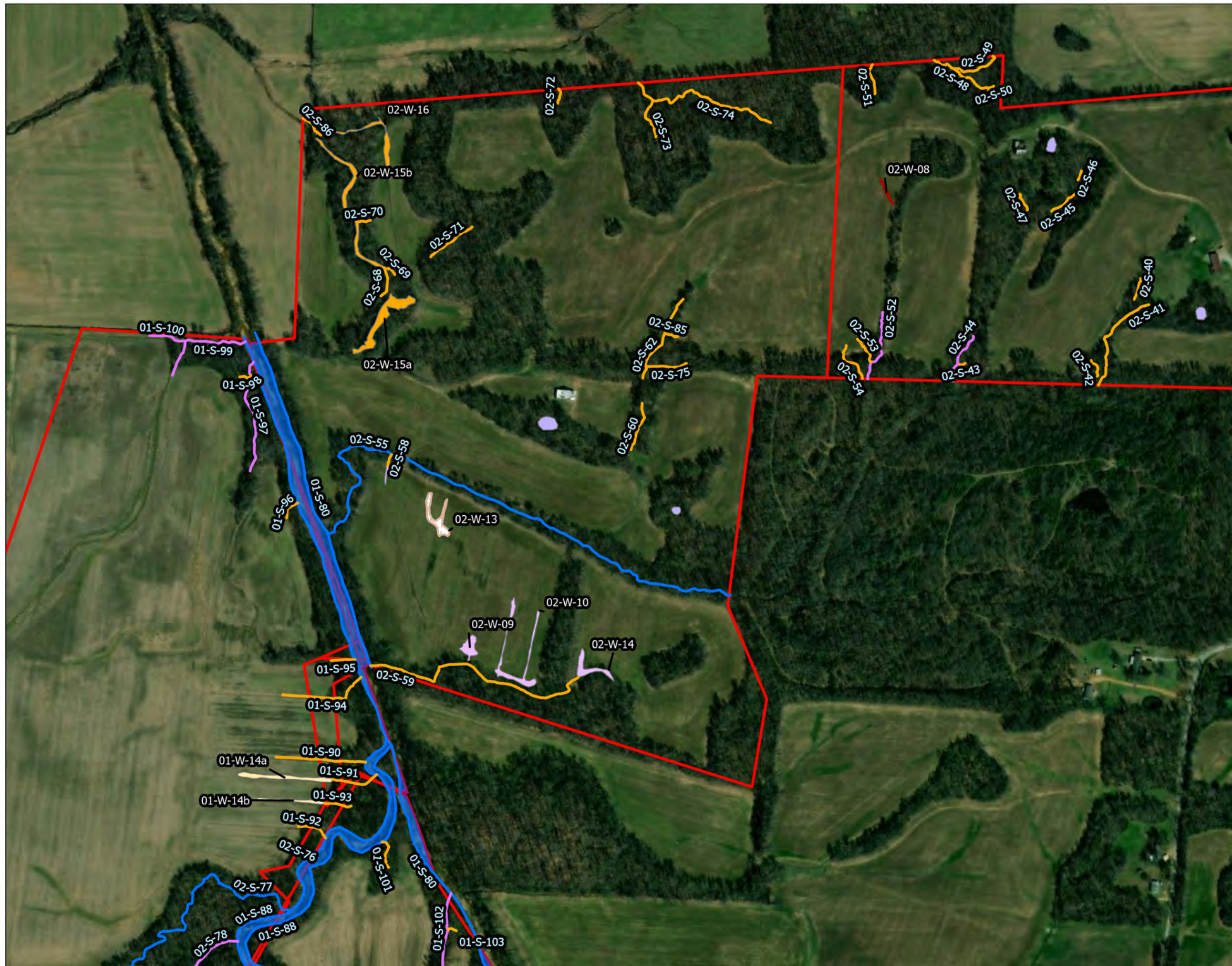
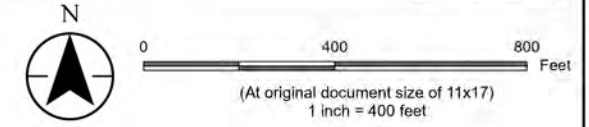


Figure No. 7  
Title  
**Wetland and Waterbody Delineation Map**

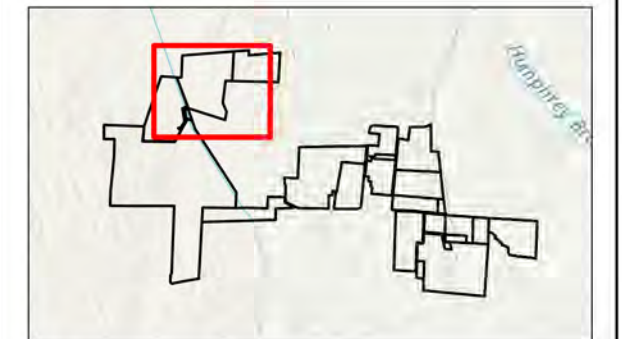
Client/Project  
Song Sparrow Solar LLC  
Song Sparrow Solar Project  
Wetland and Waterbody Delineation Report  
172607907

Project Location  
Ballard County,  
Kentucky

Prepared by MNA on 2024-02-01  
TR by CMK on 2024-02-01  
IR by SPK on 2024-02-01



- Legend**
- Project Boundary
  - Delineated Streams**
    - Jurisdictional - Intermittent
    - Jurisdictional - Perennial
    - Non-Jurisdictional - Upland Drainage
    - Non-Jurisdictional - Ephemeral
    - Non-Jurisdictional - Intermittent
  - Delineated Wetlands**
    - Jurisdictional - PEM
    - Jurisdictional - PFO
    - Jurisdictional - PSS
    - Jurisdictional - PEM/PFO
    - Jurisdictional - PSS/PEM
    - Jurisdictional - PSS/PFO
    - Non-Jurisdictional - PEM
    - Non-Jurisdictional - PFO
    - Non-Jurisdictional - PSS/PEM
  - Delineated Open Water**
    - Jurisdictional
    - Non-Jurisdictional



**Notes**  
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet  
2. Data Sources: Song Sparrow Solar LLC, Stantec  
3. Background: Aerial Imagery Basemap





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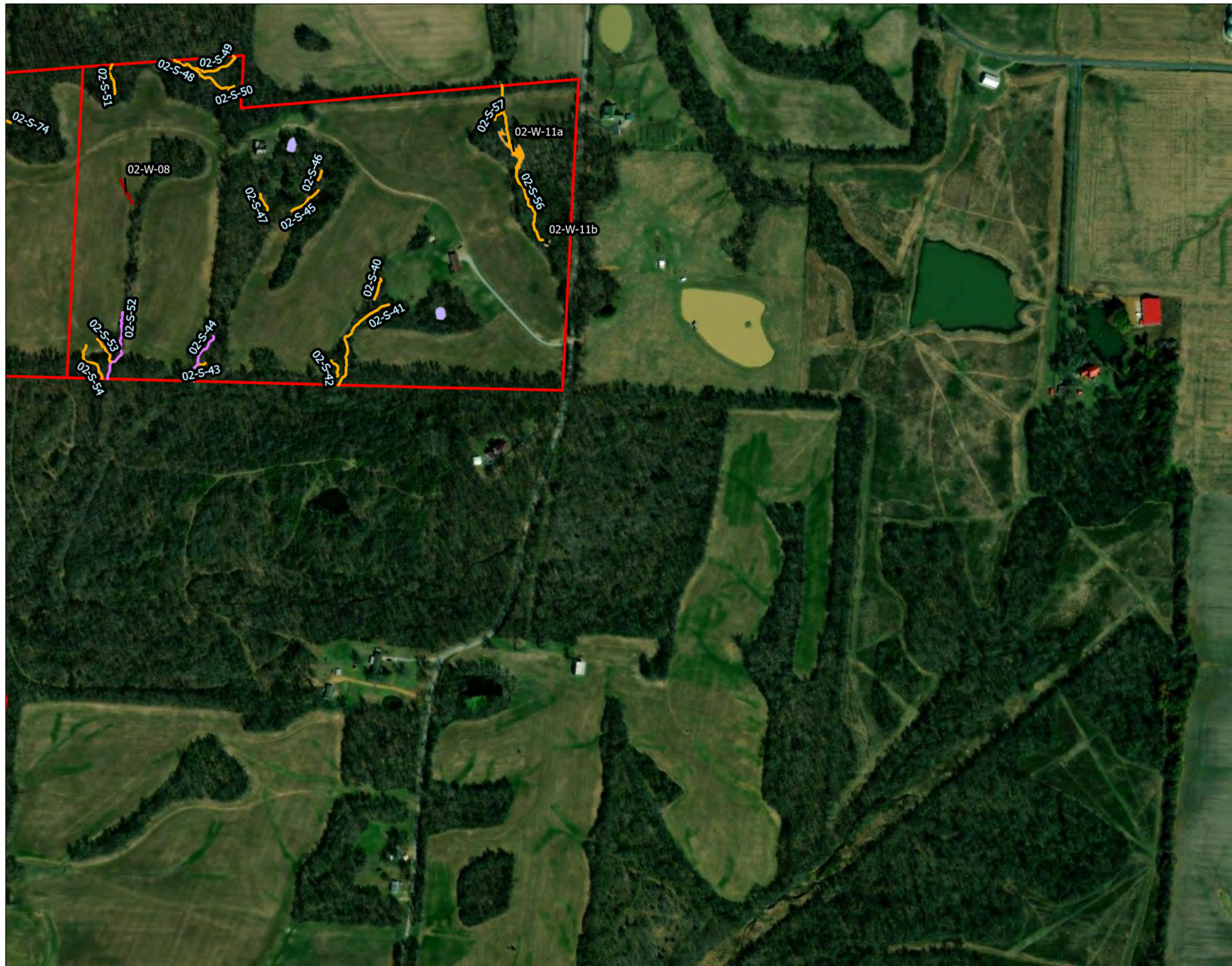
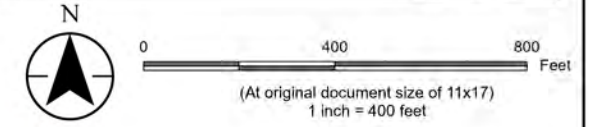
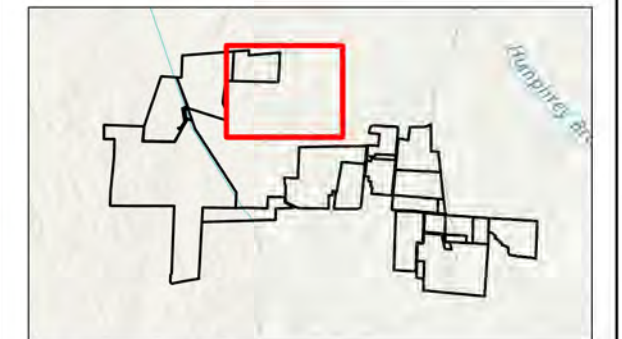


Figure No. 8  
Title Wetland and Waterbody Delineation Map

Client/Project Song Sparrow Solar LLC 172607907  
Song Sparrow Solar Project  
Wetland and Waterbody Delineation Report  
Project Location Ballard County, Kentucky Prepared by MNA on 2024-02-01  
TR by CMK on 2024-02-01  
IR by SPK on 2024-02-01



- Legend**
- Project Boundary
  - Delineated Streams**
  - Jurisdictional - Intermittent
  - Jurisdictional - Perennial
  - Non-Jurisdictional - Upland Drainage
  - Non-Jurisdictional - Ephemeral
  - Non-Jurisdictional - Intermittent
  - Delineated Wetlands**
  - Jurisdictional - PEM
  - Jurisdictional - PFO
  - Jurisdictional - PSS
  - Jurisdictional - PEM/PFO
  - Jurisdictional - PSS/PEM
  - Jurisdictional - PSS/PFO
  - Non-Jurisdictional - PEM
  - Non-Jurisdictional - PFO
  - Non-Jurisdictional - PSS/PEM
  - Delineated Open Water**
  - Jurisdictional
  - Non-Jurisdictional



**Notes**  
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet  
2. Data Sources: Song Sparrow Solar LLC, Stantec  
3. Background: Aerial Imagery Basemap





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Figure No.  
**9**

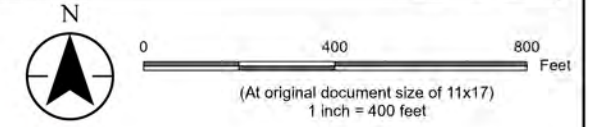
Title  
**Wetland and Waterbody Delineation Map**

Client/Project  
Song Sparrow Solar LLC  
Song Sparrow Solar Project  
Wetland and Waterbody Delineation Report

172607907

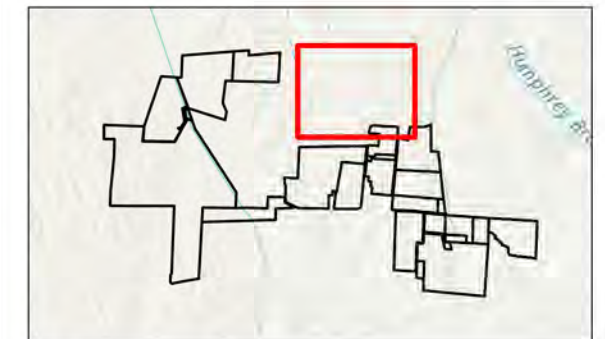
Project Location  
Ballard County,  
Kentucky

Prepared by MNA on 2024-02-01  
TR by CMK on 2024-02-01  
IR by SPK on 2024-02-01



Legend

- Project Boundary
- Delineated Streams**
- Jurisdictional - Intermittent
- Jurisdictional - Perennial
- Non-Jurisdictional - Upland Drainage
- Non-Jurisdictional - Ephemeral
- Non-Jurisdictional - Intermittent
- Delineated Wetlands**
- Jurisdictional - PEM
- Jurisdictional - PFO
- Jurisdictional - PSS
- Jurisdictional - PEM/PFO
- Jurisdictional - PSS/PEM
- Jurisdictional - PSS/PFO
- Non-Jurisdictional - PEM
- Non-Jurisdictional - PFO
- Non-Jurisdictional - PSS/PEM
- Delineated Open Water**
- Jurisdictional
- Non-Jurisdictional



Notes  
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet  
2. Data Sources: Song Sparrow Solar LLC, Stantec  
3. Background: Aerial Imagery Basemap





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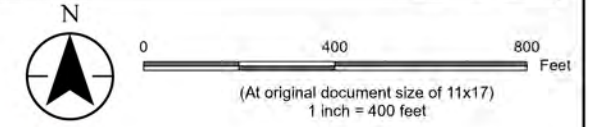
Figure No.  
**10**

Title  
**Wetland and Waterbody Delineation Map**

Client/Project  
Song Sparrow Solar LLC  
Song Sparrow Solar Project  
Wetland and Waterbody Delineation Report

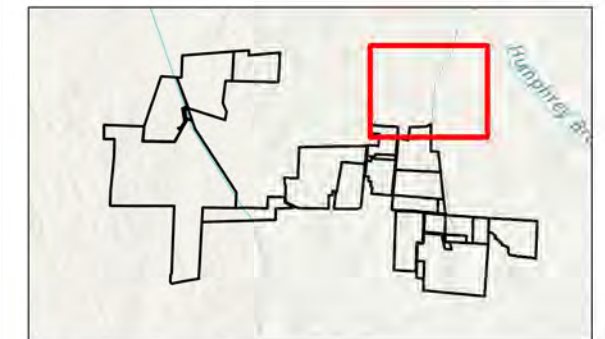
Project Location  
Ballard County,  
Kentucky

Prepared by MNA on 2024-02-01  
TR by CMK on 2024-02-01  
IR by SPK on 2024-02-01



Legend

- Project Boundary
- Delineated Streams**
- Jurisdictional - Intermittent
- Jurisdictional - Perennial
- Non-Jurisdictional - Upland Drainage
- Non-Jurisdictional - Ephemeral
- Non-Jurisdictional - Intermittent
- Delineated Wetlands**
- Jurisdictional - PEM
- Jurisdictional - PFO
- Jurisdictional - PSS
- Jurisdictional - PEM/PFO
- Jurisdictional - PSS/PEM
- Jurisdictional - PSS/PFO
- Non-Jurisdictional - PEM
- Non-Jurisdictional - PFO
- Non-Jurisdictional - PSS/PEM
- Delineated Open Water**
- Jurisdictional
- Non-Jurisdictional



Notes  
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet  
2. Data Sources: Song Sparrow Solar LLC, Stantec  
3. Background: Aerial Imagery Basemap





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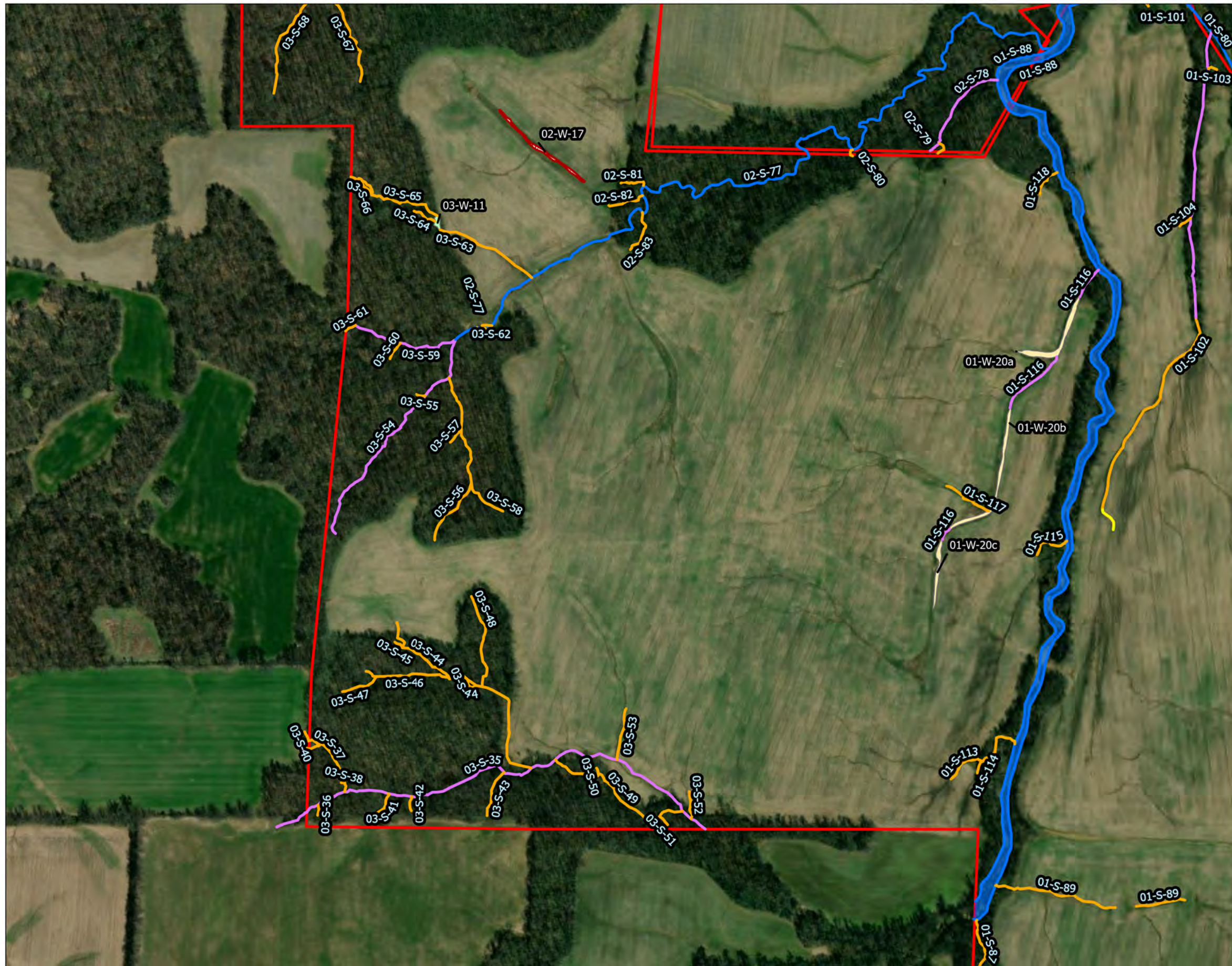
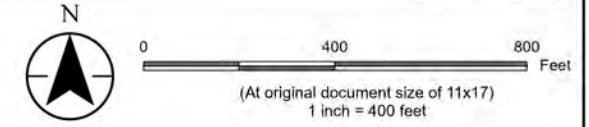
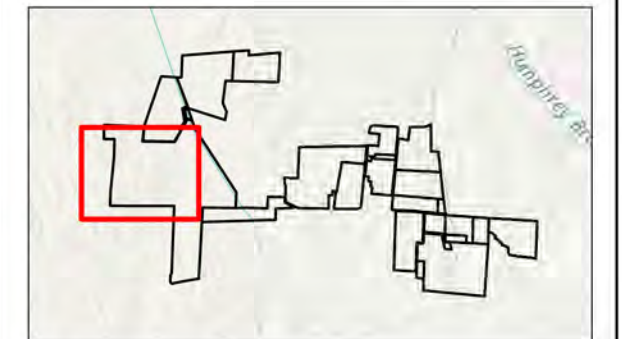


Figure No. 11  
Title **Wetland and Waterbody Delineation Map**  
Client/Project Song Sparrow Solar LLC  
Song Sparrow Solar Project  
Wetland and Waterbody Delineation Report  
Project Location Ballard County, Kentucky  
Prepared by MNA on 2024-02-01  
TR by CMK on 2024-02-01  
IR by SPK on 2024-02-01



- Legend**
- Project Boundary
  - Delineated Streams**
    - Jurisdictional - Intermittent
    - Jurisdictional - Perennial
    - Non-Jurisdictional - Upland Drainage
    - Non-Jurisdictional - Ephemeral
    - Non-Jurisdictional - Intermittent
  - Delineated Wetlands**
    - Jurisdictional - PEM
    - Jurisdictional - PFO
    - Jurisdictional - PSS
    - Jurisdictional - PEM/PFO
    - Jurisdictional - PSS/PEM
    - Jurisdictional - PSS/PFO
    - Non-Jurisdictional - PEM
    - Non-Jurisdictional - PFO
    - Non-Jurisdictional - PSS/PEM
  - Delineated Open Water**
    - Jurisdictional
    - Non-Jurisdictional



**Notes**  
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet  
2. Data Sources: Song Sparrow Solar LLC, Stantec  
3. Background: Aerial Imagery Basemap





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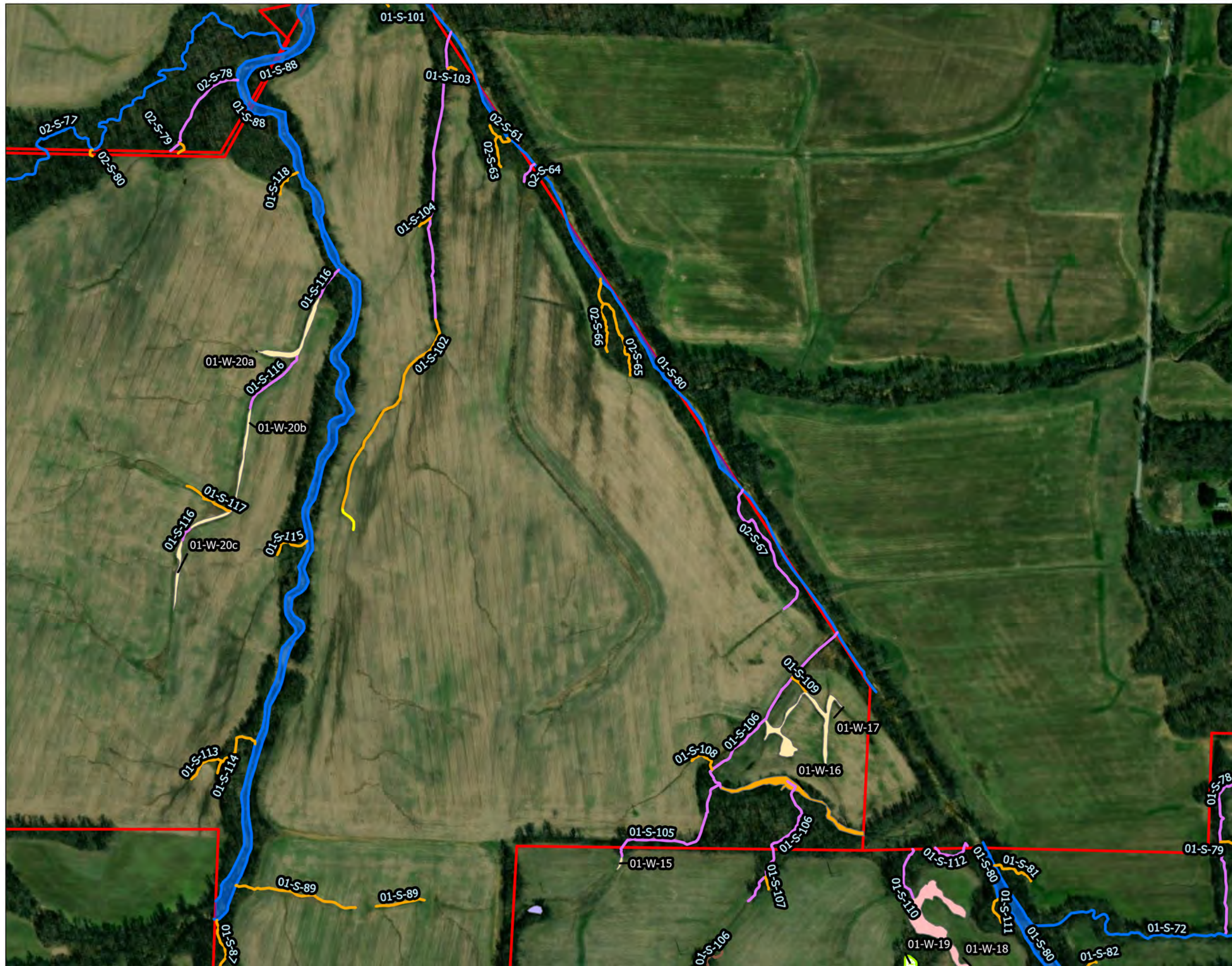


Figure No.  
12

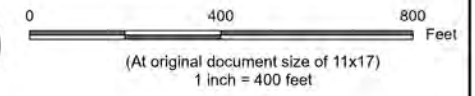
Title  
**Wetland and Waterbody Delineation Map**

Client/Project  
Song Sparrow Solar LLC  
Song Sparrow Solar Project  
Wetland and Waterbody Delineation Report

172607907

Project Location  
Ballard County,  
Kentucky

Prepared by MNA on 2024-02-01  
TR by CMK on 2024-02-01  
IR by SPK on 2024-02-01



Legend

- Project Boundary
- Delineated Streams**
- Jurisdictional - Intermittent
- Jurisdictional - Perennial
- Non-Jurisdictional - Upland Drainage
- Non-Jurisdictional - Ephemeral
- Non-Jurisdictional - Intermittent
- Delineated Wetlands**
- Jurisdictional - PEM
- Jurisdictional - PFO
- Jurisdictional - PSS
- Jurisdictional - PEM/PFO
- Jurisdictional - PSS/PEM
- Jurisdictional - PSS/PFO
- Non-Jurisdictional - PEM
- Non-Jurisdictional - PFO
- Non-Jurisdictional - PSS/PEM
- Delineated Open Water**
- Jurisdictional
- Non-Jurisdictional



- Notes
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet
  2. Data Sources: Song Sparrow Solar LLC, Stantec
  3. Background: Aerial Imagery Basemap





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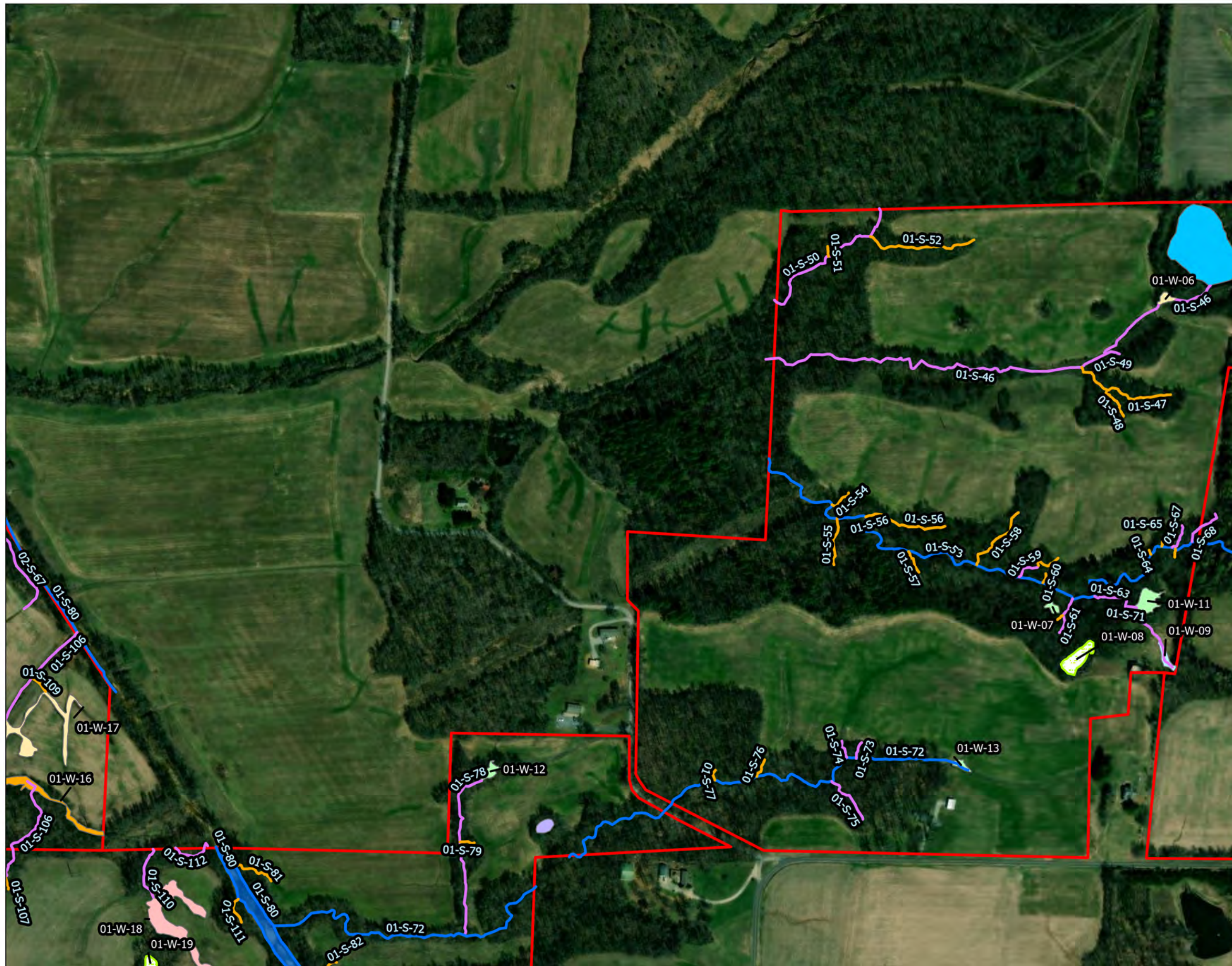
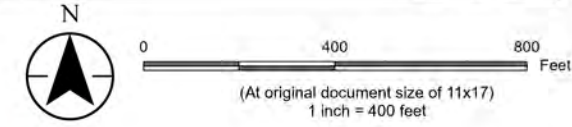


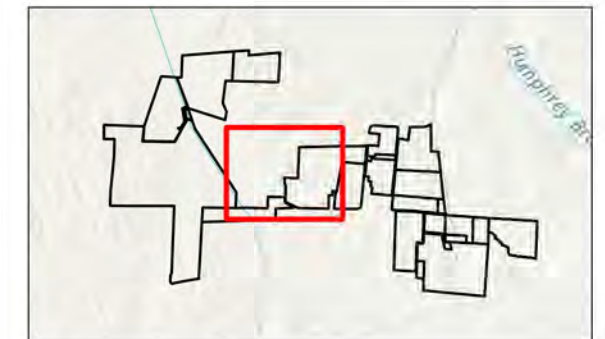
Figure No. 13  
Title Wetland and Waterbody Delineation Map

Client/Project Song Sparrow Solar LLC  
Song Sparrow Solar Project  
Wetland and Waterbody Delineation Report  
172607907

Project Location Ballard County, Kentucky  
Prepared by MNA on 2024-02-01  
TR by CMK on 2024-02-01  
IR by SPK on 2024-02-01



- Legend**
- Project Boundary
  - Delineated Streams**
    - Jurisdictional - Intermittent
    - Jurisdictional - Perennial
    - Non-Jurisdictional - Upland Drainage
    - Non-Jurisdictional - Ephemeral
    - Non-Jurisdictional - Intermittent
  - Delineated Wetlands**
    - Jurisdictional - PEM
    - Jurisdictional - PFO
    - Jurisdictional - PSS
    - Jurisdictional - PEM/PFO
    - Jurisdictional - PSS/PEM
    - Jurisdictional - PSS/PFO
    - Non-Jurisdictional - PEM
    - Non-Jurisdictional - PFO
    - Non-Jurisdictional - PSS/PEM
  - Delineated Open Water**
    - Jurisdictional
    - Non-Jurisdictional



Notes  
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet  
2. Data Sources: Song Sparrow Solar LLC, Stantec  
3. Background: Aerial Imagery Basemap





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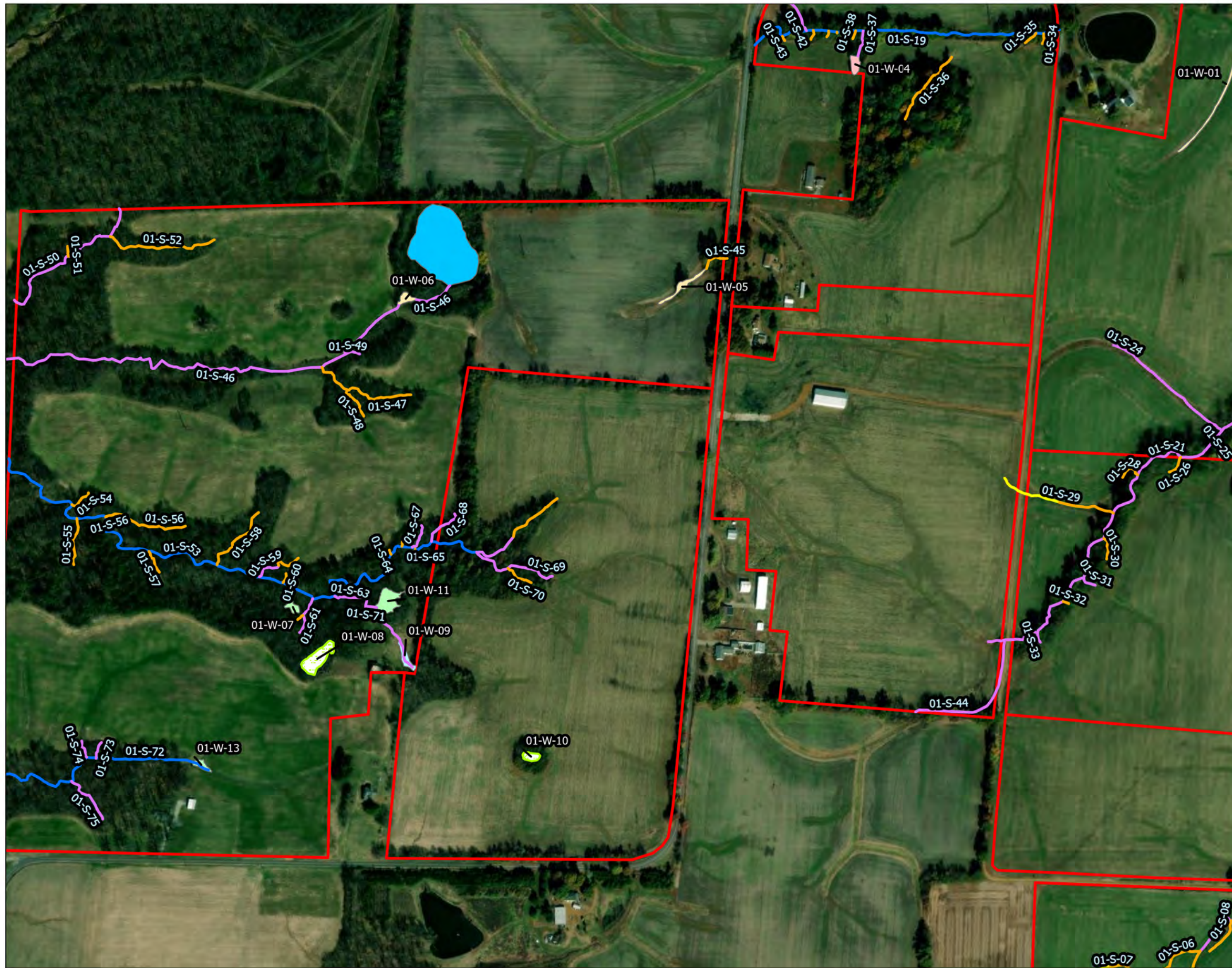


Figure No.

14

Title

**Wetland and Waterbody Delineation Map**

Client/Project  
Song Sparrow Solar LLC  
Song Sparrow Solar Project  
Wetland and Waterbody Delineation Report

172607907

Project Location  
Ballard County,  
Kentucky

Prepared by MNA on 2024-02-01  
TR by CMK on 2024-02-01  
IR by SPK on 2024-02-01

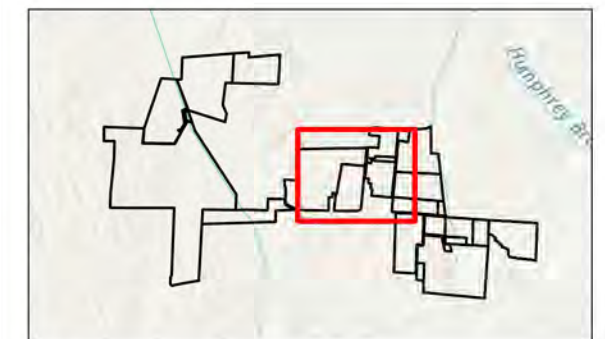


0 400 800 Feet

(At original document size of 11x17)  
1 inch = 400 feet

**Legend**

- Project Boundary
- Delineated Streams**
- Jurisdictional - Intermittent
- Jurisdictional - Perennial
- Non-Jurisdictional - Upland Drainage
- Non-Jurisdictional - Ephemeral
- Non-Jurisdictional - Intermittent
- Delineated Wetlands**
- Jurisdictional - PEM
- Jurisdictional - PFO
- Jurisdictional - PSS
- Jurisdictional - PEM/PFO
- Jurisdictional - PSS/PEM
- Jurisdictional - PSS/PFO
- Non-Jurisdictional - PEM
- Non-Jurisdictional - PFO
- Non-Jurisdictional - PSS/PEM
- Delineated Open Water**
- Jurisdictional
- Non-Jurisdictional



- Notes**
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet
  2. Data Sources: Song Sparrow Solar LLC, Stantec
  3. Background: Aerial Imagery Basemap



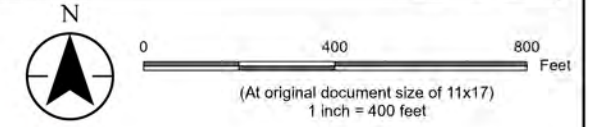


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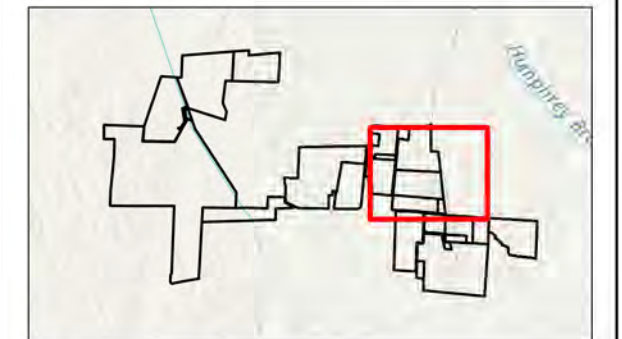


Figure No. 15  
Title Wetland and Waterbody Delineation Map

Client/Project Song Sparrow Solar LLC 172607907  
Song Sparrow Solar Project  
Wetland and Waterbody Delineation Report  
Project Location Ballard County, Kentucky Prepared by MNA on 2024-02-01  
TR by CMK on 2024-02-01  
IR by SPK on 2024-02-01



- Legend**
- Project Boundary
  - Delineated Streams**
    - Jurisdictional - Intermittent
    - Jurisdictional - Perennial
    - Non-Jurisdictional - Upland Drainage
    - Non-Jurisdictional - Ephemeral
    - Non-Jurisdictional - Intermittent
  - Delineated Wetlands**
    - Jurisdictional - PEM
    - Jurisdictional - PFO
    - Jurisdictional - PSS
    - Jurisdictional - PEM/PFO
    - Jurisdictional - PSS/PEM
    - Jurisdictional - PSS/PFO
    - Non-Jurisdictional - PEM
    - Non-Jurisdictional - PFO
    - Non-Jurisdictional - PSS/PEM
  - Delineated Open Water**
    - Jurisdictional
    - Non-Jurisdictional



Notes  
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet  
2. Data Sources: Song Sparrow Solar LLC, Stantec  
3. Background: Aerial Imagery Basemap





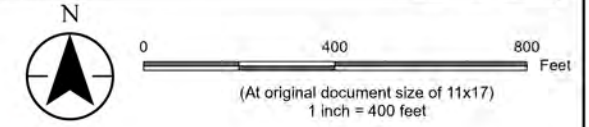
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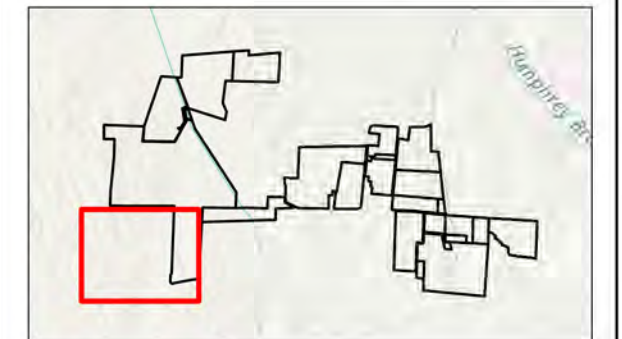
Figure No. 16  
Title **Wetland and Waterbody Delineation Map**

Client/Project 172607907  
Song Sparrow Solar LLC  
Song Sparrow Solar Project  
Wetland and Waterbody Delineation Report

Project Location Ballard County, Kentucky Prepared by MNA on 2024-02-01  
TR by CMK on 2024-02-01  
IR by SPK on 2024-02-01



- Legend**
- Project Boundary
  - Delineated Streams**
  - Jurisdictional - Intermittent
  - Jurisdictional - Perennial
  - Non-Jurisdictional - Upland Drainage
  - Non-Jurisdictional - Ephemeral
  - Non-Jurisdictional - Intermittent
  - Delineated Wetlands**
  - Jurisdictional - PEM
  - Jurisdictional - PFO
  - Jurisdictional - PSS
  - Jurisdictional - PEM/PFO
  - Jurisdictional - PSS/PEM
  - Jurisdictional - PSS/PFO
  - Non-Jurisdictional - PEM
  - Non-Jurisdictional - PFO
  - Non-Jurisdictional - PSS/PEM
  - Delineated Open Water**
  - Jurisdictional
  - Non-Jurisdictional



**Notes**  
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet  
2. Data Sources: Song Sparrow Solar LLC, Stantec  
3. Background: Aerial Imagery Basemap



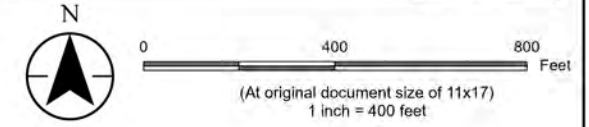


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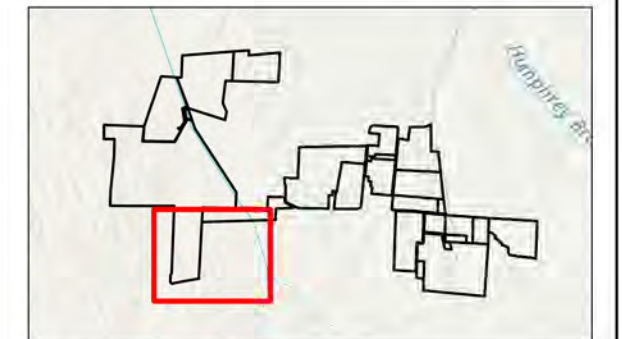


Figure No. 17  
Title Wetland and Waterbody Delineation Map

Client/Project Song Sparrow Solar LLC 172607907  
Song Sparrow Solar Project  
Wetland and Waterbody Delineation Report  
Project Location Ballard County, Kentucky Prepared by MNA on 2024-02-01  
TR by CMK on 2024-02-01  
IR by SPK on 2024-02-01



- Legend**
- Project Boundary
  - Delineated Streams**
    - Jurisdictional - Intermittent
    - Jurisdictional - Perennial
    - Non-Jurisdictional - Upland Drainage
    - Non-Jurisdictional - Ephemeral
    - Non-Jurisdictional - Intermittent
  - Delineated Wetlands**
    - Jurisdictional - PEM
    - Jurisdictional - PFO
    - Jurisdictional - PSS
    - Jurisdictional - PEM/PFO
    - Jurisdictional - PSS/PEM
    - Jurisdictional - PSS/PFO
    - Non-Jurisdictional - PEM
    - Non-Jurisdictional - PFO
    - Non-Jurisdictional - PSS/PEM
  - Delineated Open Water**
    - Jurisdictional
    - Non-Jurisdictional



**Notes**  
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet  
2. Data Sources: Song Sparrow Solar LLC, Stantec  
3. Background: Aerial Imagery Basemap



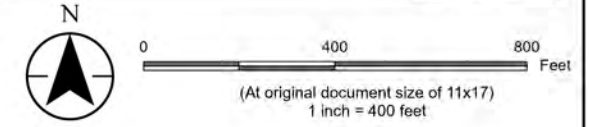


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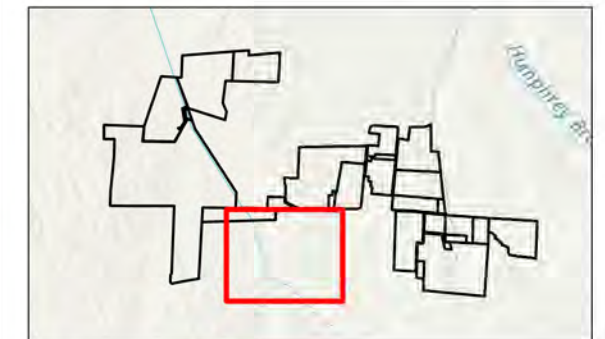


Figure No. 18  
Title Wetland and Waterbody Delineation Map

Client/Project Song Sparrow Solar LLC 172607907  
Song Sparrow Solar Project  
Wetland and Waterbody Delineation Report  
Project Location Ballard County, Kentucky Prepared by MNA on 2024-02-01  
TR by CMK on 2024-02-01  
IR by SPK on 2024-02-01



- Legend**
- Project Boundary
  - Delineated Streams**
  - Jurisdictional - Intermittent
  - Jurisdictional - Perennial
  - Non-Jurisdictional - Upland Drainage
  - Non-Jurisdictional - Ephemeral
  - Non-Jurisdictional - Intermittent
  - Delineated Wetlands**
  - Jurisdictional - PEM
  - Jurisdictional - PFO
  - Jurisdictional - PSS
  - Jurisdictional - PEM/PFO
  - Jurisdictional - PSS/PEM
  - Jurisdictional - PSS/PFO
  - Non-Jurisdictional - PEM
  - Non-Jurisdictional - PFO
  - Non-Jurisdictional - PSS/PEM
  - Delineated Open Water**
  - Jurisdictional
  - Non-Jurisdictional



**Notes**  
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet  
2. Data Sources: Song Sparrow Solar LLC, Stantec  
3. Background: Aerial Imagery Basemap



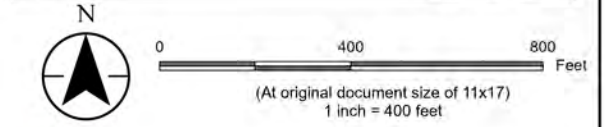


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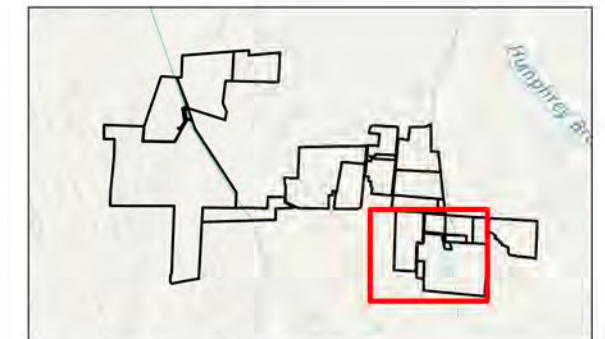


Figure No. 19  
Title **Wetland and Waterbody Delineation Map**

Client/Project: Song Sparrow Solar LLC, Song Sparrow Solar Project, Wetland and Waterbody Delineation Report  
Project Location: Ballard County, Kentucky  
Prepared by MNA on 2024-02-01, TR by CMK on 2024-02-01, IR by SPK on 2024-02-01



- Legend**
- Project Boundary
  - Delineated Streams**
    - Jurisdictional - Intermittent
    - Jurisdictional - Perennial
    - Non-Jurisdictional - Upland Drainage
    - Non-Jurisdictional - Ephemeral
    - Non-Jurisdictional - Intermittent
  - Delineated Wetlands**
    - Jurisdictional - PEM
    - Jurisdictional - PFO
    - Jurisdictional - PSS
    - Jurisdictional - PEM/PFO
    - Jurisdictional - PSS/PEM
    - Jurisdictional - PSS/PFO
    - Non-Jurisdictional - PEM
    - Non-Jurisdictional - PFO
    - Non-Jurisdictional - PSS/PEM
  - Delineated Open Water**
    - Jurisdictional
    - Non-Jurisdictional



**Notes**  
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet  
2. Data Sources: Song Sparrow Solar LLC, Stantec  
3. Background: Aerial Imagery Basemap



Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.



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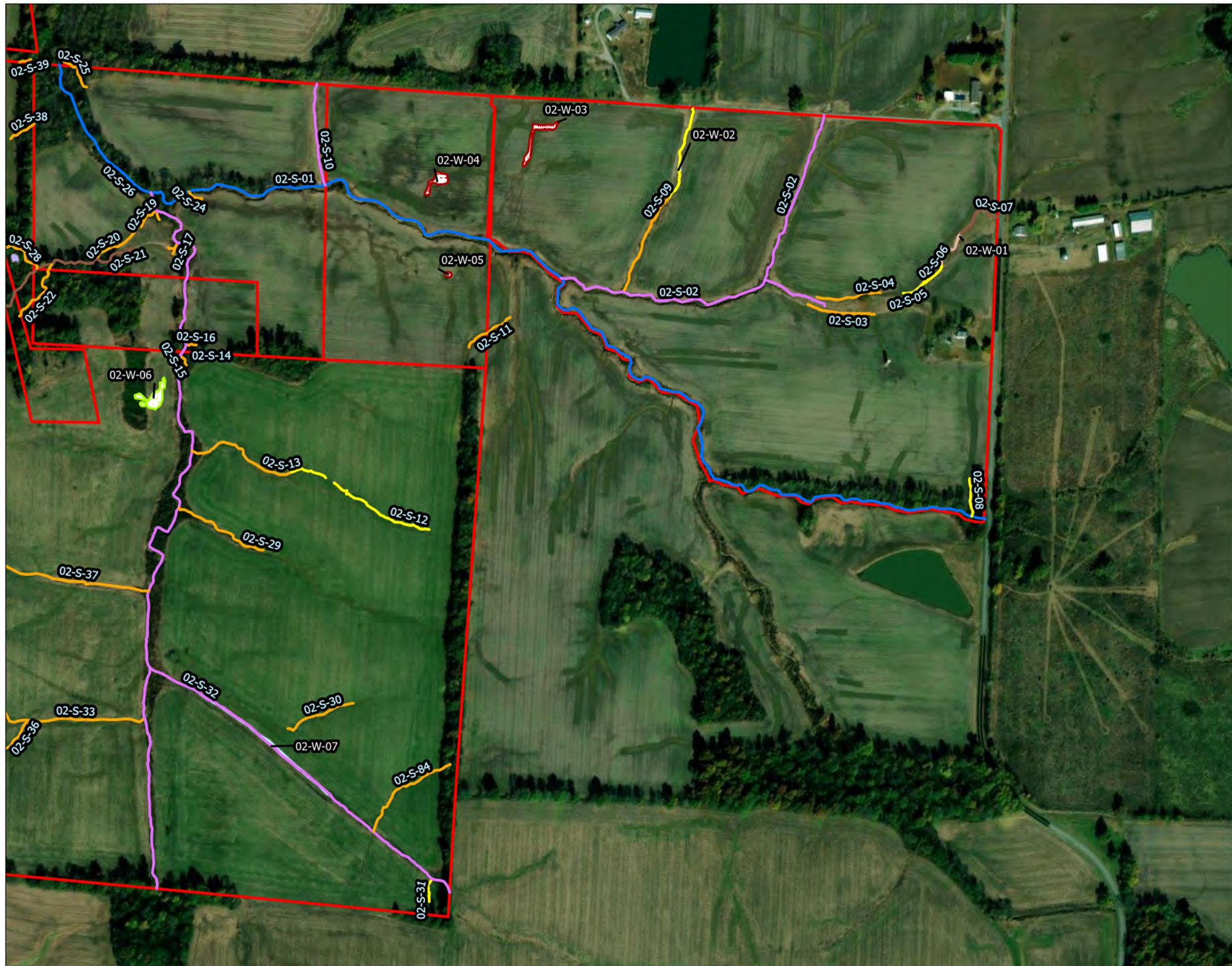
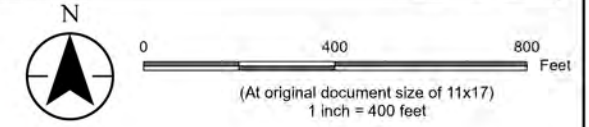


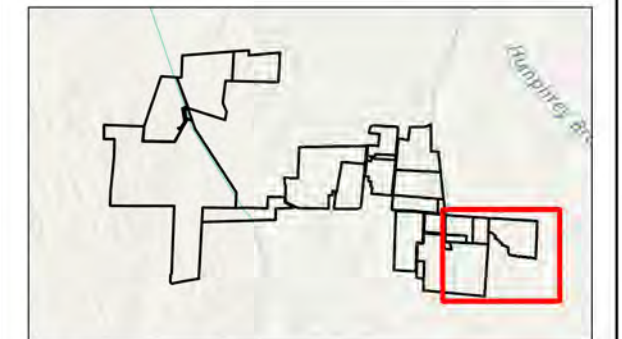
Figure No. 20  
Title  
**Wetland and Waterbody Delineation Map**

Client/Project  
Song Sparrow Solar LLC  
Song Sparrow Solar Project  
Wetland and Waterbody Delineation Report  
172607907

Project Location  
Ballard County,  
Kentucky  
Prepared by MNA on 2024-02-01  
TR by CMK on 2024-02-01  
IR by SPK on 2024-02-01



- Legend**
- Project Boundary
  - Delineated Streams**
    - Jurisdictional - Intermittent
    - Jurisdictional - Perennial
    - Non-Jurisdictional - Upland Drainage
    - Non-Jurisdictional - Ephemeral
    - Non-Jurisdictional - Intermittent  - Delineated Wetlands**
    - Jurisdictional - PEM
    - Jurisdictional - PFO
    - Jurisdictional - PSS
    - Jurisdictional - PEM/PFO
    - Jurisdictional - PSS/PEM
    - Jurisdictional - PSS/PFO
    - Non-Jurisdictional - PEM
    - Non-Jurisdictional - PFO
    - Non-Jurisdictional - PSS/PEM  - Delineated Open Water**
    - Jurisdictional
    - Non-Jurisdictional



**Notes**  
1. Coordinate System: NAD 1983 StatePlane Kentucky FIPS 1600 Feet  
2. Data Sources: Song Sparrow Solar LLC, Stantec  
3. Background: Aerial Imagery Basemap





## Appendix B WETLAND DETERMINATION AND STREAM RBP DATA FORMS

Reach Name	Epifaunal Substrate	Embeddedness	Velocity/Depth Regime	Sediment Deposition	Flow Status	Alteration	Riffles/Bends	Left Stability	Right Stability	Left Veg	Right Veg	Rip Left	Rip Right	Total	Flow Regime
01-S-01	1	2	8	2	13	14	13	1	1	1	1	0	0	57	EPH
01-S-02	12	12	11	7	8	15	13	4	4	4	4	5	5	104	INT
01-S-02	1	2	8	2	13	14	13	1	1	1	1	0	0	57	EPH
01-S-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UD
01-S-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UD
01-S-05	1	2	4	2	3	14	13	1	1	3	3	0	0	47	EPH
01-S-06	1	2	8	2	13	14	13	1	1	1	1	0	0	57	EPH
01-S-06	13	8	17	7	13	15	13	6	5	5	5	4	4	115	INT
01-S-07	1	2	8	2	13	14	13	1	1	1	1	0	0	57	EPH
01-S-08	1	2	3	2	1	12	8	1	1	1	1	0	0	33	EPH
01-S-09	13	12	13	14	9	12	12	4	4	6	6	4	4	113	INT
01-S-10	2	2	4	2	13	12	4	4	4	3	3	0	0	53	EPH
01-S-11	5	6	6	8	8	14	16	7	7	4	4	5	5	95	EPH
01-S-12	4	3	6	2	13	12	10	4	4	4	4	4	4	74	EPH
01-S-13	8	8	6	6	6	12	13	4	4	5	5	4	4	85	EPH
01-S-14	8	8	6	6	6	12	13	4	4	5	5	3	3	83	EPH
01-S-15	7	7	4	6	4	12	12	5	5	5	5	3	5	80	EPH
01-S-16	4	4	4	8	6	15	12	4	4	5	5	8	8	87	EPH
01-S-17	8	4	4	8	7	13	8	7	7	6	6	5	5	88	EPH
01-S-18	8	4	4	8	7	13	6	7	7	6	6	5	5	86	EPH
01-S-19	16	13	16	14	9	13	13	7	7	8	8	4	4	132	PER
01-S-20	12	4	4	8	6	13	6	7	7	6	6	5	5	89	EPH
01-S-21	11	5	5	8	8	13	8	7	7	6	7	4	5	94	INT
01-S-21	10	6	5	8	6	7	4	4	2	1	1	1	1	56	INT
01-S-22	10	4	4	6	3	14	13	2	2	3	3	1	1	66	EPH
01-S-23	6	3	6	2	6	4	6	5	5	4	4	1	1	53	EPH
01-S-24	9	2	8	2	3	6	6	2	2	1	1	1	1	44	INT
01-S-25	1	4	5	4	2	7	5	1	1	1	1	0	0	32	EPH
01-S-26	12	5	2	6	9	13	9	6	6	5	5	4	4	86	EPH
01-S-27	12	5	2	6	9	13	9	6	6	5	5	4	4	86	EPH
01-S-28	12	6	2	6	8	12	6	3	3	2	2	1	1	64	EPH
01-S-29	5	6	3	2	1	5	2	2	2	1	1	0	0	30	EPH
01-S-30	6	4	2	3	1	6	2	2	2	2	1	1	1	33	EPH
01-S-31	6	4	2	3	1	6	2	2	2	2	1	1	1	33	EPH
01-S-32	5	6	3	2	1	4	2	2	2	1	1	0	0	29	EPH
01-S-33	5	5	4	3	2	5	2	2	1	1	1	0	0	31	EPH
01-S-34	4	7	2	3	1	3	5	2	2	2	2	1	1	35	EPH
01-S-35	4	7	2	3	2	3	5	2	2	2	2	1	1	36	EPH
01-S-36	5	6	4	5	1	5	1	6	6	5	5	3	3	55	EPH
01-S-37	8	9	7	8	4	7	6	5	5	4	4	2	3	72	INT
01-S-38	4	7	2	3	2	3	5	2	2	2	2	1	1	36	EPH
01-S-39	4	6	2	4	2	3	5	2	2	2	2	1	1	36	EPH
01-S-40	5	5	3	4	2	3	5	2	2	2	2	1	1	37	EPH
01-S-41	4	5	2	3	2	4	5	2	3	2	2	1	1	36	EPH
01-S-42	4	7	4	3	3	4	5	4	5	2	3	1	1	46	EPH

Reach Name	Epifaunal Substrate	Embeddedness	Velocity/Depth Regime	Sediment Deposition	Flow Status	Alteration	Riffles/Bends	Left Stability	Right Stability	Left Veg	Right Veg	Rip Left	Rip Right	Total	Flow Regime
01-S-43	4	7	5	2	2	3	5	3	2	2	2	1	1	39	EPH
01-S-44	4	5	2	3	2	4	2	2	2	1	1	0	0	28	INT
01-S-45	5	6	4	5	4	3	2	3	3	2	2	1	1	41	EPH
01-S-46	11	12	9	10	10	9	10	2	2	3	1	2	0	81	INT
01-S-47	8	9	7	8	4	7	6	5	5	5	4	4	4	76	EPH
01-S-48	4	7	4	3	3	4	5	4	4	5	5	2	2	52	EPH
01-S-49	5	12	9	8	9	14	8	8	8	4	4	4	4	97	INT
01-S-50	15	15	9	11	8	14	12	7	7	5	6	5	5	119	INT
01-S-51	9	6	6	4	2	14	3	5	5	4	4	4	4	70	EPH
01-S-52	9	6	6	5	3	14	4	5	5	5	5	4	4	75	EPH
01-S-53	16	16	12	12	8	14	12	10	9	6	5	6	6	132	PER
01-S-54	7	7	5	5	1	15	10	6	6	4	4	3	3	76	EPH
01-S-55	7	7	5	6	1	15	9	6	6	5	5	5	5	82	EPH
01-S-56	13	6	6	9	5	16	11	6	6	7	4	8	8	105	INT
01-S-56	8	6	5	6	3	14	10	5	5	6	3	8	8	87	EPH
01-S-57	7	9	3	7	3	14	6	7	7	9	9	8	8	97	EPH
01-S-58	7	9	3	7	3	14	6	6	6	9	9	8	8	95	EPH
01-S-59	7	7	4	7	4	14	5	5	5	9	9	8	8	92	EPH
01-S-59	7	7	5	8	5	14	5	5	5	9	9	8	0	87	INT
01-S-60	6	8	5	8	5	14	4	4	4	6	6	8	8	86	EPH
01-S-61	9	6	5	10	9	14	5	5	5	4	4	8	8	92	INT
01-S-62	6	8	3	7	3	14	3	5	5	6	6	8	8	82	EPH
01-S-63	13	9	13	10	13	15	9	4	4	5	5	8	8	116	INT
01-S-64	4	6	4	5	1	6	5	5	5	2	2	2	2	49	EPH
01-S-65	5	6	4	5	1	6	5	5	5	2	2	2	2	50	EPH
01-S-66	7	7	5	5	3	10	7	7	7	5	5	5	5	78	EPH
01-S-67	10	9	8	7	8	13	9	8	8	5	5	5	5	100	INT
01-S-68	10	9	8	6	4	13	9	8	7	5	5	5	5	94	INT
01-S-69	11	8	13	10	12	13	9	4	4	5	5	8	8	110	INT
01-S-70	6	6	5	9	2	10	6	3	3	5	5	5	5	70	EPH
01-S-71	6	8	8	7	4	13	7	4	4	6	6	9	9	91	INT
01-S-72	16	14	15	10	14	14	12	6	6	5	5	7	4	128	PER
01-S-73	11	8	8	7	7	6	3	4	4	3	3	5	5	74	INT
01-S-74	11	8	8	7	7	6	3	4	4	3	3	5	5	74	INT
01-S-75	13	15	10	9	9	12	10	6	6	5	5	6	6	112	INT
01-S-76	8	7	5	5	2	8	9	3	3	3	3	8	5	69	EPH
01-S-77	5	5	3	3	1	10	3	5	5	5	5	8	7	65	EPH
01-S-78	14	11	11	8	7	11	12	6	5	5	5	5	2	102	INT
01-S-79	6	3	1	2	0	8	5	3	3	2	2	5	5	45	EPH
01-S-80	19	19	10	15	13	14	11	8	8	5	5	9	9	145	PER
01-S-81	7	6	4	3	1	6	4	2	2	1	1	4	4	45	EPH
01-S-82	6	7	4	4	0	12	12	6	6	5	5	3	3	73	EPH
01-S-83	9	10	6	5	6	6	6	4	4	4	4	1	1	66	INT
01-S-84	11	11	8	5	6	6	5	8	8	7	7	2	2	86	INT
01-S-85	5	6	2	3	1	6	6	3	3	3	3	1	1	43	EPH

Reach Name	Epifaunal Substrate	Embeddedness	Velocity/Depth Regime	Sediment Deposition	Flow Status	Alteration	Riffles/Bends	Left Stability	Right Stability	Left Veg	Right Veg	Rip Left	Rip Right	Total	Flow Regime
01-S-86	5	6	2	3	1	6	6	3	3	2	2	1	1	41	EPH
01-S-87	9	11	6	4	4	5	5	4	4	5	5	1	1	64	EPH
01-S-88	17	16	15	13	13	12	11	5	5	5	5	4	4	125	PER
01-S-89	3	6	2	3	1	6	6	3	3	2	2	1	1	39	EPH
01-S-90	5	9	1	5	1	10	5	5	5	3	3	8	8	68	EPH
01-S-91	5	9	2	5	3	10	9	5	5	5	5	8	8	79	EPH
01-S-92	5	9	2	5	2	10	8	5	5	5	5	8	8	77	EPH
01-S-93	5	9	2	4	2	9	7	5	5	5	5	8	8	74	EPH
01-S-94	5	8	1	4	2	10	5	6	6	6	6	8	8	75	EPH
01-S-95	5	8	1	5	1	9	4	7	7	8	8	8	8	79	EPH
01-S-96	5	9	2	4	1	8	3	3	3	3	3	3	3	50	EPH
01-S-97	9	9	7	6	4	8	8	4	4	3	5	2	9	78	INT
01-S-98	4	8	1	4	2	4	2	3	3	3	3	4	3	44	EPH
01-S-99	6	9	4	6	4	8	8	4	4	6	6	2	4	71	EPH
01-S-100	7	8	12	6	10	6	2	3	3	2	5	2	5	71	EPH
01-S-101	6	8	5	6	2	12	5	4	4	5	5	10	5	77	EPH
01-S-102	13	10	10	12	13	11	7	4	4	3	3	6	2	98	INT
01-S-103	7	6	2	6	1	11	8	6	6	6	6	3	8	76	EPH
01-S-104	5	5	1	6	1	4	4	8	8	8	8	2	2	62	EPH
01-S-102	4	4	1	6	1	4	2	6	6	3	3	0	0	40	EPH
01-S-105	6	5	3	7	5	5	9	7	7	4	4	3	3	68	INT
01-S-106	12	8	4	7	12	9	10	6	7	5	5	6	6	97	INT
01-S-107	3	5	2	5	1	55	2	3	3	4	4	2	3	92	EPH
01-S-108	5	8	5	5	1	5	2	5	5	2	2	2	2	49	EPH
01-S-109	5	5	3	5	3	8	4	5	5	2	2	1	1	49	EPH
01-S-110	10	6	8	7	6	10	8	5	5	6	6	6	8	91	EPH
01-S-111	5	4	2	5	1	11	4	6	6	5	6	6	10	71	EPH
01-S-112	12	8	6	7	10	11	12	7	7	6	8	6	10	110	INT
01-S-113	9	6	5	5	3	11	6	3	3	3	3	3	3	63	EPH
01-S-114	5	5	2	4	1	9	2	2	5	2	6	1	5	49	EPH
01-S-115	6	6	4	5	1	5	10	6	5	4	4	4	4	64	EPH
01-S-116	4	9	5	6	2	5	3	7	7	7	7	1	2	65	EPH
01-S-117	2	5	2	4	1	1	1	2	2	1	1	0	0	22	EPH
01-S-118	5	6	4	7	2	6	4	4	4	3	3	2	2	52	EPH
03-S-35	13	7	11	12	7	9	14	7	7	5	5	10	6	113	INT
03-S-36	6	4	3	4	1	10	4	4	4	2	2	5	5	54	EPH
03-S-37	6	5	4	6	2	14	4	4	4	5	5	10	10	79	EPH
03-S-38	4	4	2	6	1	14	4	5	5	6	6	10	10	77	EPH
03-S-39	4	4	3	6	1	9	2	3	3	4	4	6	6	55	EPH
03-S-40	3	5	2	5	1	4	1	3	3	4	4	3	3	41	EPH
03-S-41	4	4	2	6	1	12	5	5	6	6	6	8	8	73	EPH
03-S-42	4	4	2	6	1	12	5	5	6	6	6	6	6	69	EPH
03-S-43	6	7	2	8	1	13	6	5	5	5	5	8	8	79	EPH
03-S-44	8	5	12	7	6	14	15	8	8	7	7	9	9	115	EPH
03-S-45	4	5	6	4	1	10	6	8	8	4	4	6	6	72	EPH

Reach Name	Epifaunal Substrate	Embeddedness	Velocity/Depth Regime	Sediment Deposition	Flow Status	Alteration	Riffles/Bends	Left Stability	Right Stability	Left Veg	Right Veg	Rip Left	Rip Right	Total	Flow Regime
03-S-46	6	5	8	6	1	15	11	8	8	5	5	9	9	96	EPH
03-S-47	5	5	7	6	1	15	9	8	8	5	5	9	9	92	EPH
03-S-48	6	5	8	6	1	15	11	8	8	5	5	9	9	96	EPH
03-S-49	5	5	8	7	1	14	11	6	6	6	6	6	10	91	EPH
03-S-50	4	4	2	6	1	12	5	5	6	6	6	3	3	63	EPH
03-S-51	6	6	6	4	1	12	11	4	4	7	7	8	8	84	EPH
03-S-52	3	6	2	4	1	4	4	3	3	2	2	1	1	36	EPH
03-S-53	3	4	3	4	1	4	3	5	5	1	1	1	1	36	EPH
03-S-54	6	9	8	8	1	12	6	7	7	5	5	5	5	84	EPH
03-S-55	5	10	3	12	1	15	3	7	7	7	7	10	10	97	EPH
03-S-56	8	12	7	12	4	15	6	8	7	7	7	10	9	112	INT
03-S-57	5	7	3	12	1	12	3	6	6	6	6	10	10	87	EPH
03-S-58	5	8	2	11	1	12	3	7	7	7	6	7	7	83	EPH
03-S-59	8	12	7	13	5	14	7	6	7	6	6	10	10	111	INT
03-S-60	6	11	5	12	3	15	6	7	7	6	7	9	9	103	EPH
03-S-61	6	6	4	10	4	15	2	4	3	3	3	10	10	80	EPH
03-S-62	3	10	1	8	1	3	2	3	3	2	2	1	1	40	EPH
02-S-77	4	10	2	8	2	3	2	4	4	2	2	1	1	45	EPH
03-S-63	4	4	1	4	1	2	1	2	2	1	1	1	1	25	EPH
03-S-64	6	6	2	7	1	12	7	6	6	8	8	9	9	87	EPH
03-S-65	6	7	3	7	1	12	8	7	7	8	8	9	9	92	EPH
03-S-66	6	7	4	7	2	11	7	7	7	6	6	7	7	84	EPH
03-S-67	6	14	6	14	5	16	8	8	8	8	8	10	10	121	EPH
03-S-68	6	14	6	14	5	16	8	8	7	7	7	9	10	117	EPH
02-S-01	18	13	18	14	14	18	13	7	7	5	5	5	9	146	PER
02-S-01	10	10	16	9	9	13	9	4	5	2	5	1	3	96	PER
02-S-02	7	4	6	8	2	6	6	4	4	2	2	2	1	54	EPH
02-S-03	2	5	3	6	3	6	3	2	2	1	1	0	0	34	EPH
02-S-02	10	4	12	7	5	6	7	2	2	5	4	0	0	64	INT
02-S-04	1	2	2	4	0	2	2	2	2	4	4	0	0	25	EPH
02-S-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UD
02-S-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UD
02-S-07	10	4	12	7	5	6	7	2	2	5	4	0	0	64	INT
02-S-08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UD
02-S-09	10	4	12	7	5	6	7	2	2	5	4	0	0	64	EPH
02-S-10	4	5	9	12	10	11	9	7	7	8	7	1	1	91	INT
02-S-11	3	3	6	8	6	6	6	5	5	4	4	1	1	58	EPH
02-S-12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UD
02-S-13	2	3	4	6	2	6	3	4	4	2	2	0	0	38	EPH
02-S-14	2	3	4	6	2	6	3	4	3	2	2	4	4	45	EPH
02-S-15	2	3	4	6	2	6	4	4	4	3	3	7	7	55	EPH
02-S-16	4	3	5	6	5	6	3	3	3	3	3	5	6	55	EPH
02-S-17	7	7	7	6	6	7	7	3	3	2	2	5	5	67	INT
02-S-18	3	3	3	4	0	6	7	3	3	2	2	1	1	38	INT
02-S-19	6	6	5	7	5	6	6	2	2	3	2	1	1	52	INT

Reach Name	Epifaunal Substrate	Embeddedness	Velocity/Depth Regime	Sediment Deposition	Flow Status	Alteration	Riffles/Bends	Left Stability	Right Stability	Left Veg	Right Veg	Rip Left	Rip Right	Total	Flow Regime
02-S-20	1	2	1	2	0	6	2	2	2	5	5	0	0	28	EPH
02-S-21	11	13	16	12	15	13	12	6	5	5	5	5	5	123	INT
02-S-22	3	5	11	6	2	10	9	3	3	4	4	5	5	70	EPH
02-S-23	3	3	5	3	1	6	3	1	1	2	2	5	5	40	EPH
02-S-24	6	4	9	4	1	6	3	3	3	3	2	2	2	48	EPH
02-S-25	4	3	6	4	1	6	4	3	4	4	4	2	2	47	EPH
02-S-26	15	14	16	15	14	14	13	7	7	8	7	5	4	139	PER
02-S-27	1	7	2	3	2	6	2	2	2	6	6	0	0	39	EPH
02-S-28	4	3	9	5	3	6	6	3	2	8	7	2	2	60	EPH
02-S-29	1	2	2	3	3	6	3	3	3	4	4	0	0	34	EPH
02-S-30	1	2	2	3	3	6	3	4	3	4	4	0	0	35	EPH
02-S-31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UD
02-S-32	3	4	4	4	9	6	3	5	5	6	6	0	0	55	EPH
02-S-33	3	4	3	4	3	6	2	4	4	6	6	0	0	45	EPH
02-S-34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UD
02-S-35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UD
02-S-36	2	3	2	4	3	6	2	3	3	6	6	0	0	40	EPH
02-S-37	3	3	2	4	3	5	3	2	2	5	5	0	0	37	EPH
02-S-38	1	3	2	3	0	6	4	3	3	6	6	0	0	37	EPH
02-S-39	3	6	4	4	0	8	4	8	8	9	9	6	6	75	EPH
02-S-40	4	6	3	4	3	8	3	9	9	10	10	6	6	81	INT
02-S-41	4	6	3	4	3	8	3	9	9	10	10	6	6	81	INT
02-S-42	3	5	4	3	2	8	3	9	9	10	10	6	6	78	EPH
02-S-43	2	4	3	3	0	6	3	6	6	10	10	7	7	67	EPH
02-S-44	2	4	3	3	0	6	2	6	6	10	10	7	7	66	EPH
02-S-45	0	4	2	3	0	6	2	3	3	8	8	5	5	49	EPH
02-S-46	2	3	3	3	0	6	3	6	5	8	8	4	4	55	EPH
02-S-47	2	3	3	4	0	8	2	3	3	8	8	5	5	54	EPH
02-S-48	4	4	4	5	3	6	3	9	9	8	7	6	6	74	EPH
02-S-49	4	6	4	6	7	9	3	11	11	9	9	8	8	95	INT
02-S-50	3	6	3	4	2	9	3	9	9	10	10	6	6	80	EPH
02-S-52	3	4	4	6	3	9	4	4	3	8	8	3	6	65	INT
02-S-59	4	4	4	5	7	8	4	3	4	8	8	3	3	65	INT
02-S-60	2	3	3	3	3	6	3	6	5	8	8	2	2	54	EPH
02-S-55	9	12	13	11	17	15	11	7	7	6	6	5	3	122	PER
02-S-56	2	2	6	6	1	7	6	7	6	8	8	5	3	67	EPH
02-S-57	1	5	3	4	2	7	3	7	7	7	8	1	1	56	EPH
02-S-59	3	5	2	4	2	7	3	7	7	6	9	3	3	61	EPH
02-S-60	2	3	3	3	1	6	3	4	4	8	7	3	2	49	EPH
02-S-63	1	2	2	2	1	6	3	3	4	8	8	4	4	48	EPH
02-S-65	2	2	3	3	1	6	4	5	5	6	6	5	5	53	EPH
02-S-66	1	2	2	3	0	6	3	5	5	8	8	5	5	53	EPH
02-S-67	4	6	5	6	7	6	5	6	5	8	8	5	2	73	EPH
02-S-69	2	3	3	3	2	6	3	5	5	6	6	6	5	55	EPH
02-S-62	3	3	9	4	5	7	6	7	5	6	5	4	5	69	EPH

Reach Name	Epifaunal Substrate	Embeddedness	Velocity/Depth Regime	Sediment Deposition	Flow Status	Alteration	Riffles/Bends	Left Stability	Right Stability	Left Veg	Right Veg	Rip Left	Rip Right	Total	Flow Regime
02-S-64	2	3	6	5	3	6	4	5	5	6	6	10	7	68	INT
02-S-68	4	5	2	7	5	7	2	9	9	10	10	4	7	81	INT
02-S-51	3	5	2	7	0	10	2	7	6	7	7	8	8	72	EPH
02-S-53	10	8	11	8	6	11	12	6	4	4	4	2	2	88	EPH
02-S-54	0	0	1	5	0	6	3	1	1	5	5	0	0	27	EPH
02-S-56	3	3	2	4	3	6	3	3	2	5	5	2	2	43	EPH
02-S-55	9	13	16	10	11	8	13	6	8	8	7	9	5	123	PER
02-S-08	17	17	18	14	14	15	7	8	8	8	8	5	5	144	PER
02-S-58	2	3	7	6	2	6	4	7	6	6	6	2	2	59	EPH
02-S-71	3	3	8	6	5	12	8	7	9	8	8	8	9	94	EPH
02-S-72	1	3	7	15	0	9	3	8	8	8	8	6	8	84	EPH
02-S-73	2	2	7	6	0	9	10	9	4	5	8	6	9	77	EPH
02-S-74	4	8	10	10	3	14	10	6	4	7	7	8	6	97	EPH
02-S-75	2	3	3	6	0	6	3	5	7	8	8	4	7	62	EPH
02-S-76	1	3	2	6	0	6	3	6	5	6	4	4	4	50	INT
02-S-78	15	14	16	11	14	15	15	7	7	7	7	4	8	140	PER
02-S-79	9	8	13	16	6	11	8	1	1	5	5	6	9	98	EPH
02-S-80	2	5	4	6	6	6	4	4	3	6	6	9	9	70	EPH
02-S-81	2	5	3	6	0	6	3	4	4	2	2	2	2	41	EPH
02-S-82	4	4	10	4	6	8	9	5	4	4	4	3	3	68	EPH
02-S-83	3	2	2	9	3	6	6	2	2	7	7	5	5	59	EPH

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Dallard Sampling Date: 2-20-23  
 Applicant/Owner: Clearway State: KY Sampling Point: OWW-01  
 Investigator(s): Shankley, Chris Knobel Section, Township, Range: Paducah  
 Landform (hillslope, terrace, etc.): Ditch Local relief (concave, convex, none): Concave Slope (%): 2  
 Subregion (LRR or MLRA): LRR P Lat: 37.079364 Long: -86.981956 Datum: NAD83  
 Soil Map Unit Name: Gsc3 NWI Classification: PubHh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (if no, explain in Remarks.)  
 Are Vegetation  Soil  or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil  or Hydrology  naturally problematic? (if needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center"><i>Wetland point associated w/ OWW-01</i></p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>8-126</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0-13</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0-13</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-01AS-01

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Sapling Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Herb Stratum (Plot size: <u>5ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Echinochloa crus-galli</u>	<u>90</u>	<u>X</u>	<u>FACW</u>
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = \_\_\_\_\_

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is ≤3.0<sup>1</sup>
  - Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No

Remarks. (If observed, list morphological adaptations below).  
Vegetation altered due to Ag Field usage

**SOIL**

Sampling Point: 01-W-01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 5/3	85	7.5YR 4/6	10	C	M		
6-12	10YR 5/2	70	7.5YR 4/6	30	C	M		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coastal Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Sony Sparrow Solar City/County: Ballard Sampling Date: 7-20-23  
 Applicant/Owner: Clearway State: ky Sampling Point: 01-WB-02  
 Investigator(s): Shirley Kelly Chris Knobl Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): hill slope Local relief (concave, convex, none): concave Slope (%): 5  
 Subregion (LRR or MLRA): LRRP Lat: 37.0295278 Long: -88.88189444 Datum: NAD83 Ky Az  
 Soil Map Unit Name: G2C3 NWI classification: puB1h

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:  <p align="center"><i>uptake points associated w/ OHW-01</i></p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-1A5-02

**Tree Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Shrub Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5 ft )

	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>5</u>		<u>UPL</u>
2.	<u>3</u>		<u>UPL</u>
3.	<u>42</u>	<u>X</u>	<u>FACW</u>
4.	<u>10</u>		<u>FAC</u>
5.			
6.			
7.			
8.			
9.			
10.			
11.			

\_\_\_\_\_ = Total Cover  
50% of total cover: 50 20% of total cover: 20

**Woody Vine Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Remarks: (If observed, list morphological adaptations below).

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species	x 1 = _____
FACW species	x 2 = _____
FAC species	x 3 = _____
FACU species	x 4 = _____
UPL species	x 5 = _____
Column Totals:	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is  $\geq 3.0^1$
  - Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No X

**SOIL**

Sampling Point: 01-WA5-07

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 5/4	100						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)	
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)		
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)		
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)		
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)		
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)			

Restrictive Layer (if observed):		Hydric Soil Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Type: _____	Depth (inches): _____	

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Sony Sp... & Solar City/County: Bellevue, LA Sampling Date: 2-20-23  
 Applicant/Owner: Clearway State: KY Sampling Point: 01-WHS-03  
 Investigator(s): Shirley Christman Section, Township, Range: paducah  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0  
 Subregion (LRR or MLRA): LRRP Lat: 37 07 46.33 Long: -88.880750 Datum: NAD83 KYR17  
 Soil Map Unit Name: Fa NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em; color: blue;">Wetland point for 01-W-02</p>	

**HYDROLOGY**

<b>Welland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (Inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WAG 03

Tree Stratum (Plot size: <u>30 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Celtis occidentalis</u>	<u>60</u>	<u>X</u>	<u>FAC</u>
2. <u>Celtis laevigata</u>	<u>20</u>	<u>X</u>	<u>FACW</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____

\_\_\_\_\_ = Total Cover  
50% of total cover: 40    20% of total cover: 10

**Sapling Stratum** (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_    20% of total cover: \_\_\_\_\_

**Shrub Stratum** (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_    20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_    20% of total cover: \_\_\_\_\_

**Woody Vine Stratum** (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_    20% of total cover: \_\_\_\_\_

Remarks: (if observed, list morphological adaptations below).

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC:	<u>2</u>	(A)
Total Number of Dominant Species Across All Strata:	<u>2</u>	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100</u>	(A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____
Prevalence Index = B/A = _____	

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is  $\leq 3.0^1$
- \_\_\_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?**    Yes     No \_\_\_\_\_

**SOIL**

Sampling Point: 01-WAS 03

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR 4/2	90	7.5YR 4/6	10	C	M	S.H. clay	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A8) (LRR O)   |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)  |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)                            | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)   |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input checked="" type="checkbox"/> Redox Depressions (F8)                          | <input type="checkbox"/> Other (Explain in Remarks)   |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  |   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbic Surface (F13) (LRR P, T, U)                          | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |   |

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Sony Sparrow Salver City/County: Bellwood Sampling Date: 2-20-23  
 Applicant/Owner: Clearing State: KY Sampling Point: 01-WHS-04  
 Investigator(s): SK, CK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 3  
 Subregion (LRR or MLRA): LRRP Lat: 37.026575 Long: -88.820780 Datum: NAD83  
 Soil Map Unit Name: En NWI classification: NA  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em; margin-top: 10px;">upland point for 01W-02</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WAS-04

**Tree Stratum** (Plot size: 30 ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Fagus grandifolia</u>	<u>20</u>	<u>X</u>	<u>FACU</u>
2. <u>Thuja occidentalis</u>	<u>15</u>	<u>X</u>	<u>UPL</u>
3. <u>Ulmus americana</u>	<u>20</u>	<u>X</u>	<u>FAC</u>
4. <u>Prunus serotina</u>	<u>5</u>		<u>FACU</u>
5. _____			
6. _____			

60 = Total Cover  
50% of total cover: 30 20% of total cover: 12

**Sapling Stratum** (Plot size: 15)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ulmus americana</u>	<u>5</u>	<u>X</u>	<u>FAC</u>
2. <u>Hamamelis virginiana</u>	<u>5</u>	<u>X</u>	<u>UPL</u>
3. _____			
4. _____			
5. _____			
6. _____			

10 = Total Cover  
50% of total cover: 5 20% of total cover: 2

**Shrub Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5 ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Daucus carota</u>	<u>15</u>		<u>UPL</u>
2. <u>Achyranthes yuponica</u>	<u>20</u>	<u>X</u>	<u>UPL</u>
3. <u>Symphoricarpos orbiculatus</u>	<u>30</u>	<u>X</u>	<u>FACU</u>
4. <u>Samolus purpureum</u>	<u>15</u>		<u>UPL</u>
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			

50 = Total Cover  
50% of total cover: 40 20% of total cover: 10

**Woody Vine Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Remarks: (If observed, list morphological adaptations below).

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 28 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is ≤3.0<sup>1</sup>
- Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes \_\_\_\_\_ No X

**SOIL**

Sampling Point 01-WKS-04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-17	10YR 5/3	100						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)                         |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)                        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)     |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                                       | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)                      |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)               |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Other (Explain in Remarks)                     |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  |   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Della Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |   |

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Sony Sparrow Solar City/County: Bellair Sampling Date: 2-20-23  
 Applicant/Owner: Clearway State: Ky Sampling Point: 01-WAS-05  
 Investigator(s): SK, CK Section, Township, Range: 11E  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0  
 Subregion (LRR or MLRA): LRRP Lat: 37.075547 Long: -88.881773 Datum: NA083  
 Soil Map Unit Name: Fa NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Wetland point P0 01-W-03 PFO</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required, check all that apply) <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input checked="" type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: DLWAY 05

Tree Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Salix nigra</u>	<u>30</u>	<u>X</u>	<u>OBL</u>
2. <u>Platanus occidentalis</u>	<u>20</u>	<u>X</u>	<u>FACU</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____

50% of total cover: 25 50 = Total Cover  
 20% of total cover: 10

Sapling Stratum (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Shrub Stratum (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Herb Stratum (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Woody Vine Stratum (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Remarks: (If observed, list morphological adaptations below).

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = \_\_\_\_\_

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is ≤3.0<sup>1</sup>
- Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No

**SOIL**

Sampling Point: 01-whs-05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10YR 2/1	100					Clay	
2-10	10YR 6/2	90	7.5 YR 4/6	10	C	M	Clay	
10-18	10YR 5/3	90	7.5 YR 4/6	10	C	M	Clay	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)   |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)  |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)                            | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)   |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input checked="" type="checkbox"/> Redox Depressions (F8)                          | <input type="checkbox"/> Other (Explain in Remarks)   |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |   |

Restrictive Layer (if observed):

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Sater City/County: B. Howard Sampling Date: 02-20-23  
 Applicant/Owner: Clearway State: KY Sampling Point: 01WAS-06  
 Investigator(s): SK, CK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): h. slope Local relief (concave, convex, none): Concave Slope (%): 3  
 Subregion (LRR or MLRA): LRRD Lat: 37 025472 Long: -88. 880142 Datum: NAD83  
 Soil Map Unit Name: Gsc3 NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: <p align="center"><u>upland point associated w/ 01-W-03</u></p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1)                      ___ Aquatic Fauna (B13) ___ High Water Table (A2)                 ___ Marl Deposits (B15) (LRR U) ___ Saturation (A3)                            ___ Hydrogen Sulfide Odor (C1) ___ Water Marks (B1)                         ___ Oxidized Rhizospheres along Living Roots (C3) ___ Sediment Deposits (B2)                 ___ Presence of Reduced Iron (C4) ___ Drift Deposits (B3)                        ___ Recent Iron Reduction in Tilled Soils (C6) ___ Algal Mat or Crust (B4)                   ___ Thin Muck Surface (C7) ___ Iron Deposits (B5)                         ___ Other (Explain in Remarks) ___ Inundation Visible on Aerial Imagery (B7) ___ Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Sparsely Vegetated Concave Surface (B8) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ FAC-Neutral Test (D5) ___ Sphagnum moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-LW13-06

Tree Stratum (Plot size: <u>30 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Celtis occidentalis</u>	<u>5</u>	<u>X</u>	<u>FACW</u>
2. <u>Platanus occidentalis</u>	<u>20</u>	<u>X</u>	<u>FACW</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)  
 Total Number of Dominant Species Across All Strata: 4 (B)  
 Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B)

25 = Total Cover  
 50% of total cover: 12.5 20% of total cover: 5

**Prevalence Index worksheet:**

Total % Cover of	Multiply by
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

Sapling Stratum (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

**Hydrophytic Vegetation Indicators:**

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0
- Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Shrub Stratum (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Herb Stratum (Plot size: 5 ft)

1. <u>Andropogon virginicus</u>	<u>20</u>	<u>X</u>	<u>FAC</u>
2. <u>Sorghum halepense</u>	<u>40</u>	<u>X</u>	<u>FACU</u>
3. <u>Daucus carota</u>	<u>5</u>		<u>UPL</u>
4. <u>Camium purpureum</u>	<u>5</u>		<u>UPL</u>
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			

\_\_\_\_\_ = Total Cover  
 50% of total cover: 35 20% of total cover: 14

Woody Vine Stratum (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Hydrophytic Vegetation Present? Yes X No \_\_\_\_\_

Remarks: (If observed, list morphological adaptations below).



**SOIL**

Sampling Point 01-LWS-06

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type	Loc <sup>2</sup>		
0-18	10Y2.5/3	60					Silt clay	

- <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.
- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**
- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)   |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)  |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                                       | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)   |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Other (Explain in Remarks)   |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |   |

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Bellard Sampling Date: 02-21-23  
 Applicant/Owner: Clearway State: Ky Sampling Point: 01-WAS-07  
 Investigator(s): CK, SK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): CONCAVE Slope (%): 2  
 Subregion (LRR or MLRA): LRRP Lat: 37.079744 Long: 88.886918 Datum: NAD83 Ky FIPS  
 Soil Map Unit Name: GSC3, U6 NWI classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:  <div style="font-size: 1.2em; text-align: center;">                     Wetland point for 01-W-04                      PEM/PEO                 </div>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C5) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>12</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-VAS-07

**Tree Stratum** (Plot size: 30ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Salix nigra</u>	<u>30</u>	<u>X</u>	<u>OBL</u>
2.			
3.			
4.			
5.			
6.			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

50% of total cover: 15 20% of total cover: 6

**Sapling Stratum** (Plot size: 15ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Fraxinus pennsylvanica</u>	<u>30</u>	<u>X</u>	<u>FACW</u>
2. <u>Celtis laevigata</u>	<u>10</u>	<u>X</u>	<u>FACW</u>
3.			
4.			
5.			
6.			

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

50% of total cover: 20 20% of total cover: 8

**Shrub Stratum** (Plot size: \_\_\_\_\_)

1.			
2.			
3.			
4.			
5.			
6.			

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is  $\leq 3.0^1$

Problematic Hydrophytic Vegetation? (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5ft)

1. <u>Cyperus strigosus</u>	<u>30</u>	<u>X</u>	<u>FACW</u>
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

\_\_\_\_\_ = Total Cover

50% of total cover: 40 20% of total cover: 16

**Woody Vine Stratum** (Plot size: \_\_\_\_\_)

1.			
2.			
3.			
4.			
5.			

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (If observed, list morphological adaptations below)

**SOIL**

Sampling Point: 01-WP-07

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 5/3	90	7.5YR 4/6	10	C	M	Clay	
4-18	10YR 5/2	60	7.5YR 4/6	10	C	M	Clay	
	10YR 4/2	30						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)   |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)  |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)                            | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)   |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Other (Explain in Remarks)   |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |   |

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Spiny Sparrow Saline City/County: Ballard Sampling Date: 2-21-23  
 Applicant/Owner: Clearway State: Ky Sampling Point: 01-WA2-03  
 Investigator(s): SK, CK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Concave Slope (%): 3  
 Subregion (LRR or MLRA): LRRP Lat: 37.029764 Long: -88.887011 Datum: NAD83 Kyr  
 Soil Map Unit Name: GSC3 NWI classification: NH  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_ Soil \_\_\_\_\_ or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_ Soil \_\_\_\_\_ or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks:  <p align="center" style="font-size: 1.2em;">upland point for 01-03-04</p>	

**HYDROLOGY**

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
<b>Primary Indicators (minimum of one is required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes _____ No <u>X</u> Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WAS-08

**Tree Stratum** (Plot size: 30 )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling Stratum** (Plot size: \_\_\_\_\_ )

1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Shrub Stratum** (Plot size: \_\_\_\_\_ )

1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5ft )

	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>70</u>	<u>X</u>	<u>FACW</u>
2.	<u>10</u>		<u>OBL</u>
3.	<u>10</u>		<u>FACU</u>
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			

60 = Total Cover

50% of total cover: 45 20% of total cover: 16

**Woody Vine Stratum** (Plot size: \_\_\_\_\_ )

1.			
2.			
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 10% (A/B)

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_

FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_

FAC species \_\_\_\_\_ x 3 = \_\_\_\_\_

FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_

JPL species \_\_\_\_\_ x 5 = \_\_\_\_\_

Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0

Problematic Hydrophytic Vegetation (Explain)

Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (If observed, list morphological adaptations below)

**SOIL**

Sampling Point: 01-WMS-08

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10YR 4/3	90	10YR 5/6	3	C	M	Silty clay	
	10YR 4/2	7						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)                         |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)                        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)     |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                                       | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)                      |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)               |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Other (Explain in Remarks)                     |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  |   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |   |

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

**Remarks:**

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Subur City/County: Ballwin Sampling Date: 7-21-23  
 Applicant/Owner: Olewinway State: Ky Sampling Point: 01-WAB-09  
 Investigator(s): CKSK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): CONCAVE Slope (%): 2  
 Subregion (LRR or MLRA): LRRP Lat: 37.027215 Long: -88.889135 Datum: NAD83, Ky, Air  
 Soil Map Unit Name: CSC3 NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Wetland point for 01-WAB</p> <p align="center" style="font-size: 1.5em;">PEM</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input checked="" type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>    </u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WAS-09

**Tree Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Shrub Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Cyperus strigosus</u> 40	X	FACW
2.	<u>Zea mays</u> 25	X	UPL
3.	<u>Carex vulpinoidea</u> 25	X	FACW
4.	<u>Rumex sp</u> 5		-
5.			
6.			
7.			
8.			
9.			
10.			
11.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Woody Vine Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.6 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiplied by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (If observed, list morphological adaptations below)

**SOIL**

Sampling Point: 01-WAS-04

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 5/2	85	10YR 6/6	5	C	M	SC	
	10YR 5/3	10						
4-18	10YR 5/2	75	5YR 5/6	25	C	M	SC	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<b>(MLRA 153B)</b>
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic
<input type="checkbox"/> Coastal Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)		

Restrictive Layer (if observed):  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Subur City/County: Ballard Sampling Date: 2-21-23  
 Applicant/Owner: Clearway State: KY Sampling Point: 01-WAS-10  
 Investigator(s): CK SK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): hill slope Local relief (concave, convex, none): concave Slope (%): 2  
 Subregion (LRR or MLRA): LRRP Lat: 37.027772 Long: -86.889152 Datum: NAD83 Ky ft  
 Soil Map Unit Name: GSC3 NWI classification: NA  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks:  <p align="center" style="font-size: 1.2em;">upland point for 01-W-05</p>	

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> ___ Surface Water (A1)      ___ Aquatic Fauna (B13) ___ High Water Table (A2)    ___ Marl Deposits (B15) (LRR U) ___ Saturation (A3)            ___ Hydrogen Sulfide Odor (C1) ___ Water Marks (B1)         ___ Oxidized Rhizospheres along Living Roots (C3) ___ Sediment Deposits (B2)    ___ Presence of Reduced Iron (C4) ___ Drift Deposits (B3)        ___ Recent Iron Reduction in Tilled Soils (C6) ___ Algal Mat or Crust (B4)     ___ Thin Muck Surface (C7) ___ Iron Deposits (B5)         ___ Other (Explain in Remarks) ___ Inundation Visible on Aerial Imagery (B7) ___ Water-Stained Leaves (B9)	<p><u>Secondary Indicators (minimum of two required)</u></p> ___ Surface Soil Cracks (B6) ___ Sparsely Vegetated Concave Surface (B8) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ FAC-Neutral Test (D5) ___ Sphagnum moss (D8) (LRR T, U)
<p><b>Field Observations:</b></p> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WAS-10

**Tree Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Shrub Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5ft )

	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>00</u>	<u>x</u>	<u>UPL</u>
2.	<u>20</u>	<u>x</u>	<u>UPL</u>
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Woody Vine Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Remarks: (If observed, list morphological adaptations below).

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiplied by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No X



**SOIL**

Sampling Point: 01-WKS-10

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 5/4	100					SC	

- <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.
- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**
- Histosol (A1)
  - Histic Epipedon (A2)
  - Black Histic (A3)
  - Hydrogen Sulfide (A4)
  - Stratified Layers (A5)
  - Organic Bodies (A6) (LRR P, T, U)
  - 5 cm Mucky Mineral (A7) (LRR P, T, U)
  - Muck Presence (A8) (LRR U)
  - 1 cm Muck (A9) (LRR P, T)
  - Depleted Below Dark Surface (A11)
  - Thick Dark Surface (A12)
  - Coast Prairie Redox (A16) (MLRA 150A)
  - Sandy Mucky Mineral (S1) (LRR O, S)
  - Sandy Gleyed Matrix (S4)
  - Sandy Redox (S5)
  - Stripped Matrix (S6)
  - Dark Surface (S7) (LRR P, S, T, U)
  - Polyvalue Below Surface (S8) (LRR S, T, U)
  - Thin Dark Surface (S9) (LRR S, T, U)
  - Loamy Mucky Mineral (F1) (LRR O)
  - Loamy Gleyed Matrix (F2)
  - Depleted Matrix (F3)
  - Redox Dark Surface (F6)
  - Depleted Dark Surface (F7)
  - Redox Depressions (F8)
  - Marl (F10) (LRR U)
  - Depleted Ochric (F11) (MLRA 151)
  - Iron-Manganese Masses (F12) (LRR O, P, T)
  - Umbric Surface (F13) (LRR P, T, U)
  - Delta Ochric (F17) (MLRA 151)
  - Reduced Vertic (F18) (MLRA 150A, 150B)
  - Piedmont Floodplain Soils (F19) (MLRA 149A)
  - Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
- Indicators for Problematic Hydric Soils<sup>3</sup>:**
- 1 cm Muck (A9) (LRR O)
  - 2 cm Muck (A10) (LRR S)
  - Reduced Vertic (F18) (outside MLRA 150A,B)
  - Piedmont Floodplain Soils (F19) (LRR P, S, T)
  - Anomalous Bright Loamy Soils (F20) (MLRA 153B)
  - Red Parent Material (TF2)
  - Very Shallow Dark Surface (TF12)
  - Other (Explain in Remarks)
- <sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No 2X

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Sony Sparrow Solar City/County: Bellwood Sampling Date: 2-21-23  
 Applicant/Owner: Clearway State: Ky Sampling Point: 01-WAS-11  
 Investigator(s): SK CK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): Toe Slope Local relief (concave, convex, none): CONCAVE Slope (%): 2  
 Subregion (LRR or MLRA): LRRP Lat: 37.076948 Long: -88.812824 Datum: NAD83 (KYP)  
 Soil Map Unit Name: LpD3 NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:  <p align="center" style="font-size: 1.2em;">Wetland point for 01-W-006 PEM</p>	

**HYDROLOGY**

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
<b>Primary Indicators (minimum of one is required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>6</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: D1-WMS-11

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Sapling Stratum (Plot size: <u>15 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Salix nigra</u>	<u>15</u>	<u>X</u>	<u>OBL</u>
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			

15 = Total Cover

50% of total cover: 7.5 20% of total cover: 3

Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Herb Stratum (Plot size: <u>5 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Veronica gigantea</u>	<u>30</u>	<u>X</u>	<u>FAC</u>
2. <u>Carex vulpinoidea</u>	<u>30</u>	<u>X</u>	<u>FACW</u>
3. <u>Agrostis stolonifera</u>	<u>30</u>	<u>X</u>	<u>FACW</u>
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			

90 = Total Cover

50% of total cover: 45 20% of total cover: 18

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

   1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

   3 - Prevalence Index is  $\leq 3.0^1$

   Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes X No \_\_\_\_\_

Remarks: (if observed, list morphological adaptations below).

SOIL

Sampling Point: 01-WA211

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of Indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 5/2	90	10YR 1/4	10	C	M	SC	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)
<input type="checkbox"/> Coast Prairie Redox (A15) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Sony Sparrow Solar City/County: Baltimore Sampling Date: 2-21-23  
 Applicant/Owner: Clearway State: Ky Sampling Point: 01-1-145-17  
 Investigator(s): SK, CK Section, Township, Range: PA  
 Landform (hillslope, terrace, etc.): LRRP Local relief (concave, convex, none): Concave Slope (%): 3  
 Subregion (LRR or MLRA): concave Lat: 37.02109810 Long: 88.853010 Datum: NAD83 kyllp  
 Soil Map Unit Name: LpD3 NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (if no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (if needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:  <p align="center"><i>upland point for 01-1-145-17</i></p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WAS-12

**Tree Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Shrub Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5ft )

	Absolute % Cover	Dominant Species?	Indicator Status
1.	15	X	FACU
2.	10	X	FAC
3.	25	X	UPL
4.	10	X	FACU
5.	10	X	UPL
6.	10	X	UPL
7.			
8.			
9.			
10.			
11.			

\_\_\_\_\_ = Total Cover

50% of total cover: 40 20% of total cover: 10

**Woody Vine Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.14 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No X

Remarks: (If observed, list morphological adaptations below)

**SOIL**

Sampling Point: 01-WAS-12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 5/4	100					silt/clay	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)   |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)  |
| <input type="checkbox"/> Bleck Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                                       | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)   |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Other (Explain in Remarks)   |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  | <sup>3</sup> Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |   |

Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Bellair Sampling Date: 02-21-23  
 Applicant/Owner: Clearway State: KY Sampling Point: 01-WAS-13  
 Investigator(s): SK CIC Section, Township, Range: N#  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0  
 Subregion (LRR or MLRA): LRRP Lat: 37.023505 Long: 88.294210 Datum: NAD83 WGS84  
 Soil Map Unit Name: LpD3 NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">wetland point for Seep wetland</p> <p align="right" style="font-size: 1.2em;">01-W-07 PFO</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input checked="" type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
S

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WRS-13

Tree Stratum (Plot size: <u>30 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acer rubrum</u>	<u>20</u>	<u>X</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

50% of total cover: 10 20% of total cover: 2

20 = Total Cover

Sapling Stratum (Plot size: <u>15 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Celtis laevigata</u>	<u>20</u>	<u>X</u>	<u>FACW</u>
2. <u>Fraxinus pennsylvanica</u>	<u>25</u>	<u>X</u>	<u>FACW</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

50% of total cover: 22.5 20% of total cover: 9

45 = Total Cover

Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is  $\geq 3.0^1$

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

\_\_\_\_\_ = Total Cover

Herb Stratum (Plot size: <u>5 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ranunculus hispidus</u>	<u>5</u>	<u>X</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____

50% of total cover: 25 20% of total cover: \_\_\_\_\_

5 = Total Cover

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

\_\_\_\_\_ = Total Cover

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____

**Hydrophytic Vegetation Present?** Yes  No \_\_\_\_\_

Remarks: (if observed, list morphological adaptations below)

**SOIL**

Sampling Point: 01-LWS-12

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR 4/2	40	10.5YR 4/6	10	C	M	SC	
3-18	10YR 4/2	85	7.5YR 4/6	15	C	M	SC	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix

- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**
- Histosol (A1)
  - Histic Epipedon (A2)
  - Black Histic (A3)
  - Hydrogen Sulfide (A4)
  - Stratified Layers (A5)
  - Organic Bodies (A6) (LRR P, T, U)
  - 5 cm Mucky Mineral (A7) (LRR P, T, U)
  - Muck Presence (A8) (LRR U)
  - 1 cm Muck (A9) (LRR P, T)
  - Depleted Below Dark Surface (A11)
  - Thick Dark Surface (A12)
  - Coast Prairie Redox (A16) (MLRA 150A)
  - Sandy Mucky Mineral (S1) (LRR O, S)
  - Sandy Gleyed Matrix (S4)
  - Sandy Redox (S5)
  - Stripped Matrix (S6)
  - Dark Surface (S7) (LRR P, S, T, U)
  - Polyvalue Below Surface (S8) (LRR S, T, U)
  - Thin Dark Surface (S9) (LRR S, T, U)
  - Loamy Mucky Mineral (F1) (LRR O)
  - Loamy Gleyed Matrix (F2)
  - Depleted Matrix (F3)
  - Redox Dark Surface (F6)
  - Depleted Dark Surface (F7)
  - Redox Depressions (F8)
  - Marl (F10) (LRR U)
  - Depleted Ochric (F11) (MLRA 151)
  - Iron-Manganese Masses (F12) (LRR O, P, T)
  - Umbric Surface (F13) (LRR P, T, U)
  - Delta Ochric (F17) (MLRA 151)
  - Reduced Vertic (F18) (MLRA 150A, 150B)
  - Piedmont Floodplain Soils (F19) (MLRA 149A)
  - Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
- Indicators for Problematic Hydric Soils<sup>3</sup>:**
- 1 cm Muck (A9) (LRR O)
  - 2 cm Muck (A10) (LRR S)
  - Reduced Vertic (F18) (outside MLRA 150A,B)
  - Piedmont Floodplain Soils (F19) (LRR P, S, T)
  - Anomalous Bright Loamy Soils (F20) (MLRA 153B)
  - Red Parent Material (TF2)
  - Very Shallow Dark Surface (TF12)
  - Other (Explain in Remarks)
- <sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Ballard Sampling Date: 01-21-23  
 Applicant/Owner: Clearway State: KY Sampling Point: 01-WHS-14  
 Investigator(s): SK CK Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Concave Slope (%): 3  
 Subregion (LRR or MLRA): LRRP Lat: 37.623454 Long: 88.814328 Datum: NAD83 KyFWS  
 Soil Map Unit Name: U6 NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">upland point for 01-W-07</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.	
Remarks:	

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-W45-14

Tree Stratum (Plot size: <u>30 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Pinus taeda</u>	<u>30</u>	<u>X</u>	<u>UPL</u>
2. <u>Prunus serotina</u>	<u>5</u>		<u>FACU</u>
3. <u>Acer rubrum</u>	<u>20</u>	<u>X</u>	<u>FAC</u>
4. <u>Fagus grandifolia</u>	<u>15</u>	<u>X</u>	<u>FACIA</u>
5. _____			
6. _____			

70 = Total Cover  
50% of total cover: 35    20% of total cover: 14

Sapling Stratum (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_    20% of total cover: \_\_\_\_\_

Shrub Stratum (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_    20% of total cover: \_\_\_\_\_

Herb Stratum (Plot size: 5 ft)

1. <u>Ranunculus nigriculus</u>	<u>10</u>	<u>X</u>	<u>FAL</u>
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			

10 = Total Cover  
50% of total cover: 5    20% of total cover: 2

Woody Vine Stratum (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_    20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species <u>30</u>	x 3 = <u>90</u>
FACU species <u>20</u>	x 4 = <u>80</u>
UPL species <u>30</u>	x 5 = <u>150</u>
Column Totals: <u>80</u> (A)	<u>320</u> (B)

Prevalence Index = B/A = .25

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is ≤3.0<sup>1</sup>
- Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?**    Yes     No

Remarks: (If observed, list morphological adaptations below)



**SOIL**

Sampling Point: A-whs-14

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 5/3	100						
6-18	10YR 4/3	100						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)	
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)		
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)		
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)		
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)		
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)		
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)			

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Ballant Sampling Date: 2-21-23  
 Applicant/Owner: Clearway State: KY Sampling Point: 01-WAS-15  
 Investigator(s): CK SK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0  
 Subregion (LRR or MLRA): LRRP Lat: 37.022943 Long: -86.893930 Datum: NAD83  
 Soil Map Unit Name: LpC3 NWI classification: PUBHh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:  <p align="center" style="font-size: 1.2em;">Wetland point for Wetland - 01-w-08 FEM - PFU</p>	

**HYDROLOGY**

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
<b>Primary Indicators (minimum of one is required; check all that apply)</b> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input checked="" type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input checked="" type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)

<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WAS-15

Tree Stratum (Plot size: <u>30 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Salix nigra</u>	<u>40</u>	<u>X</u>	<u>OBL</u>
2. <u>Fraxinus pennsylvanica</u>	<u>40</u>	<u>X</u>	<u>FACW</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____

80 = Total Cover

50% of total cover: 40 20% of total cover: 16

Sapling Stratum (Plot size: <u>15 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Fraxinus pennsylvanica</u>	<u>20</u>	<u>X</u>	<u>FACW</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____

20 = Total Cover

50% of total cover: 10 20% of total cover: 4

Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_

FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_

FAC species \_\_\_\_\_ x 3 = \_\_\_\_\_

FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_

UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_

Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0

Problematic Hydrophytic Vegetation (Explain)

Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

Hydrophytic Vegetation Present?

Yes  No \_\_\_\_\_

Remarks: (If observed, list morphological adaptations below).

**SOIL**

Sampling Point: 01-WAS-16

**Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 5/2	80	10YR 6/6	10	C	M	S.C	
	10YR 5/3	10						

- <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.
- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**
- Histosol (A1)
  - Histic Epipedon (A2)
  - Black Histic (A3)
  - Hydrogen Sulfide (A4)
  - Stratified Layers (A5)
  - Organic Bodies (A6) (LRR P, T, U)
  - 5 cm Mucky Mineral (A7) (LRR P, T, U)
  - Muck Presence (A8) (LRR U)
  - 1 cm Muck (A9) (LRR P, T)
  - Depleted Below Dark Surface (A11)
  - Thick Dark Surface (A12)
  - Coast Prairie Redox (A16) (MLRA 150A)
  - Sandy Mucky Mineral (S1) (LRR O, S)
  - Sandy Gleyed Matrix (S4)
  - Sandy Redox (S5)
  - Stripped Matrix (S6)
  - Dark Surface (S7) (LRR P, S, T, U)
- Indicators for Problematic Hydric Soils<sup>3</sup>:**
- Polyvalue Below Surface (S8) (LRR S, T, U)
  - Thin Dark Surface (S9) (LRR S, T, U)
  - Loamy Mucky Mineral (F1) (LRR O)
  - Loamy Gleyed Matrix (F2)
  - Depleted Matrix (F3)
  - Redox Dark Surface (F6)
  - Depleted Dark Surface (F7)
  - Redox Depressions (F8)
  - Mart (F10) (LRR U)
  - Depleted Ochric (F11) (MLRA 151)
  - Iron-Manganese Masses (F12) (LRR O, P, T)
  - Umbric Surface (F13) (LRR P, T, U)
  - Delta Ochric (F17) (MLRA 151)
  - Reduced Vertic (F18) (MLRA 150A, 150B)
  - Piedmont Floodplain Soils (F19) (MLRA 149A)
  - Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
- Indicators for Problematic Hydric Soils<sup>3</sup>:**
- 1 cm Muck (A9) (LRR O)
  - 2 cm Muck (A10) (LRR S)
  - Reduced Vertic (F18) (outside MLRA 150A,B)
  - Piedmont Floodplain Soils (F19) (LRR P, S, T)
  - Anomalous Bright Loamy Soils (F20) (MLRA 153B)
  - Red Parent Material (TF2)
  - Very Shallow Dark Surface (TF12)
  - Other (Explain in Remarks)
- <sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Lake City/County: Ballard Sampling Date: 2-21-23  
 Applicant/Owner: Cleanway State: KY Sampling Point: 01-WAS-10  
 Investigator(s): REK SK Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): CONCAVE Slope (%): 4  
 Subregion (LRR or MLRA): LRRP Lat: 37.022723 Long: -88.293448 Datum: NAD83  
 Soil Map Unit Name: LpC3 NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:  <p align="center" style="font-size: 1.2em;">upland point for wetland - 01-W-08</p>	

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<p><u>Secondary Indicators (minimum of two required)</u></p> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<p><b>Field Observations:</b></p> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WAS-16

**Tree Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Shrub Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 50+)

	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>60</u>	<u>X</u>	<u>UPL</u>
2.	<u>15</u>		<u>LPL</u>
3.	<u>10</u>		<u>FAC</u>
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			

\_\_\_\_\_ = Total Cover  
50% of total cover: 42.5 20% of total cover: 17

**Woody Vine Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test Is >50%

3 - Prevalence Index is  $\leq 3.0^1$

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No X

Remarks: (If observed, list morphological adaptations below).



SOIL

Sampling Point: 01-WAS-16

**Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type	Loc <sup>2</sup>		
0-18	10Y <sup>2</sup> 5/4	100					S.L	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

**Restrictive Layer (if observed):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: SonySpecious Solar City/County: Ballant Sampling Date: 02-21-23  
 Applicant/Owner: Cleerway State: KY Sampling Point: 01-WAS-17  
 Investigator(s): SK CK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): low slope Local relief (concave, convex, none): CONCAVE Slope (%): 2  
 Subregion (LRR or MLRA): CR2P Lat: 37.022972 Long: -83.842733 Datum: NAD83 K, F, S  
 Soil Map Unit Name: LpC3 NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (if no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (if needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:  <p align="center" style="font-size: 1.2em;">Wetland point for 01-W-09</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WAS-17

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Sapling Stratum (Plot size: <u>15</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Fraxinus pennsylvanica</u>	<u>20</u>	<u>X</u>	<u>FACW</u>
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			

\_\_\_\_\_ = Total Cover  
50% of total cover: 10 20% of total cover: 4

Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Herb Stratum (Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Andropogon virginicus</u>	<u>20</u>	<u>X</u>	<u>FAC</u>
2. <u>Bahama cylindrica</u>	<u>40</u>	<u>X</u>	<u>FACW</u>
3. <u>Lindwigia palustris</u>	<u>40</u>	<u>X</u>	<u>OBL</u>
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			

\_\_\_\_\_ = Total Cover  
50% of total cover: 100 20% of total cover: 20

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is >3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No \_\_\_\_\_

Remarks: (If observed, list morphological adaptations below)

**SOIL**

Sampling Point: 01-W45-17

**Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 5/2	60	10YR 6/6	20	C	M	S.C.	
	10YR 5/3	20						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

**Remarks:**



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrows Solar City/County: Ballard Sampling Date: 1-21-23  
 Applicant/Owner: Clearway State: Ky Sampling Point: 01-WAS-18  
 Investigator(s): CK SK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): hill slope Local relief (concave, convex, none): concave Slope (%): 3  
 Subregion (LRR or MLRA): LRRP Lat: 37.072984 Long: -88.892843 Datum: NAD83 K/P.12  
 Soil Map Unit Name: LpC3 NWI classification: Nh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">original point for 01-21-09</p>	

**HYDROLOGY**

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
<b>Primary Indicators (minimum of one is required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: OLWAS-18

Tree Stratum (Plot size: <u>30 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Fraxinus pennsylvanica</u>	<u>15</u>		<u>FACW</u>
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			

\_\_\_\_\_ = Total Cover  
 50% of total cover: 7.5 20% of total cover: 3

Sapling Stratum (Plot size: _____)
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Shrub Stratum (Plot size: _____)
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Herb Stratum (Plot size: <u>5 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rubus arvensis</u>	<u>40</u>	<u>x</u>	<u>FAC</u>
2. <u>Andropogon virginicus</u>	<u>20</u>	<u>*</u>	<u>FAC</u>
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			

\_\_\_\_\_ = Total Cover  
 50% of total cover: 30 20% of total cover: 12

Woody Vine Stratum (Plot size: _____)
1. _____
2. _____
3. _____
4. _____
5. _____

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Remarks: (If observed, list morphological adaptations below).

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No \_\_\_\_\_



**SOIL**

Sampling Point: 01-WHS-18

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 5/3	60					SC	
	10YR 5/4	40						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (Inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Bellair Sampling Date: 2-22-23  
 Applicant/Owner: Clearway State: KY Sampling Point: 01-W-10  
 Investigator(s): SKCK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0  
 Subregion (LRR or MLRA): LRRP Lat: 37.022022 Long: -88.891019 Datum: NAD83  
 Soil Map Unit Name: L0BZ NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation  Soil  or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil  or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Wetland point for - 01-W-10 PFO</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WHS-149

Tree Stratum (Plot size: <u>30 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Salix nigra</u>	<u>60</u>	<u>X</u>	<u>OBL</u>
2. <u>Spartina patens</u>	<u>20</u>	<u>X</u>	<u>FACU</u>
3. <u>Celtis laevigata</u>	<u>15</u>		<u>FACW</u>
4. _____			
5. _____			
6. _____			
<u>95</u> = Total Cover			
50% of total cover: <u>47.5</u> 20% of total cover: <u>19</u>			

**Sapling Stratum** (Plot size: \_\_\_\_\_)

1. _____	
2. _____	
3. _____	
4. _____	
5. _____	
6. _____	
_____ = Total Cover	
50% of total cover: _____ 20% of total cover: _____	

**Shrub Stratum** (Plot size: \_\_\_\_\_)

1. _____	
2. _____	
3. _____	
4. _____	
5. _____	
6. _____	
_____ = Total Cover	
50% of total cover: _____ 20% of total cover: _____	

**Herb Stratum** (Plot size: \_\_\_\_\_)

1. _____	
2. _____	
3. _____	
4. _____	
5. _____	
6. _____	
7. _____	
8. _____	
9. _____	
10. _____	
11. _____	
_____ = Total Cover	
50% of total cover: _____ 20% of total cover: _____	

**Woody Vine Stratum** (Plot size: \_\_\_\_\_)

1. _____	
2. _____	
3. _____	
4. _____	
5. _____	
_____ = Total Cover	
50% of total cover: _____ 20% of total cover: _____	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____
Prevalence Index = B/A = _____	

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≥3.0

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (If observed, list morphological adaptations below).

**SOIL**

Sampling Point: 01-WAS-19

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10YR 3/1	100					S.C.	organic
2-18	10YR 5/2	85	7.5YR 5/6	15			S.C.	

- <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.
- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**
- Histosol (A1)
  - Histic Epipedon (A2)
  - Black Histic (A3)
  - Hydrogen Sulfide (A4)
  - Stratified Layers (A5)
  - Organic Bodies (A6) (LRR P, T, U)
  - 5 cm Mucky Mineral (A7) (LRR P, T, U)
  - Muck Presence (A8) (LRR U)
  - 1 cm Muck (A9) (LRR P, T)
  - Depleted Below Dark Surface (A11)
  - Thick Dark Surface (A12)
  - Coast Prairie Redox (A16) (MLRA 150A)
  - Sandy Mucky Mineral (S1) (LRR O, S)
  - Sandy Gleyed Matrix (S4)
  - Sandy Redox (S5)
  - Stripped Matrix (S6)
  - Dark Surface (S7) (LRR P, S, T, U)
  - Polyvalue Below Surface (S8) (LRR S, T, U)
  - Thin Dark Surface (S9) (LRR S, T, U)
  - Loamy Mucky Mineral (F1) (LRR O)
  - Loamy Gleyed Matrix (F2)
  - Depleted Matrix (F3)
  - Redox Dark Surface (F6)
  - Depleted Dark Surface (F7)
  - Redox Depressions (F8)
  - Marl (F10) (LRR U)
  - Depleted Ochric (F11) (MLRA 151)
  - Iron-Manganese Masses (F12) (LRR O, P, T)
  - Umbric Surface (F13) (LRR P, T, U)
  - Delta Ochric (F17) (MLRA 151)
  - Reduced Vertic (F18) (MLRA 150A, 150B)
  - Piedmont Floodplain Soils (F19) (MLRA 149A)
  - Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
- Indicators for Problematic Hydric Soils<sup>3</sup>:**
- 1 cm Muck (A9) (LRR O)
  - 2 cm Muck (A10) (LRR S)
  - Reduced Vertic (F18) (outside MLRA 150A,B)
  - Piedmont Floodplain Soils (F19) (LRR P, S, T)
  - Anomalous Bright Loamy Soils (F20) (MLRA 153B)
  - Red Parent Material (TF2)
  - Very Shallow Dark Surface (TF12)
  - Other (Explain in Remarks)
- <sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Bullard Sampling Date: 01-22-23  
 Applicant/Owner: Clearway State: Ky Sampling Point: 01-W-20  
 Investigator(s): SK CK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): \_\_\_\_\_  
 Subregion (LRR or MLRA): LRR P Lat: 37.077067 Long: -98.891000 Datum: NAD83 K, fips  
 Soil Map Unit Name: L062 NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (if no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks:  <p align="center" style="font-size: 1.2em;">Upland point for 01-WAS-10</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1)      ___ Aquatic Fauna (B13) ___ High Water Table (A2)    ___ Marl Deposits (B15) (LRR U) ___ Saturation (A3)            ___ Hydrogen Sulfide Odor (C1) ___ Water Marks (B1)          ___ Oxidized Rhizospheres along Living Roots (C3) ___ Sediment Deposits (B2)    ___ Presence of Reduced Iron (C4) ___ Drift Deposits (B3)        ___ Recent Iron Reduction in Tilled Soils (C6) ___ Algal Mat or Crust (B4)     ___ Thin Muck Surface (C7) ___ Iron Deposits (B5)         ___ Other (Explain in Remarks) ___ Inundation Visible on Aerial Imagery (B7) ___ Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Sparsely Vegetated Concave Surface (B8) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Geomorphic Position (D2) ___ Shallow Aquifer (D3) ___ FAC-Neutral Test (D5) ___ Sphagnum moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-UMS-2c

Tree Stratum (Plot size: <u>30 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Celtis laevigata</u>	<u>70</u>	<u>✓</u>	<u>FACW</u>
2. <u>Quercus palustris</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>
3. <u>Ulmus americana</u>	<u>10</u>	<u>✓</u>	<u>FAC</u>
4. _____			
5. _____			
6. _____			

100 = Total Cover

50% of total cover: 75 20% of total cover: 10

Sapling Stratum (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Shrub Stratum (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Herb Stratum (Plot size: 5 ft)

1. <u>Stellaria media</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>
2. <u>Lonicera japonica</u>	<u>20</u>	<u>×</u>	<u>FACU</u>
3. <u>Allium vineale</u>	<u>5</u>	<u>-</u>	<u>FACU</u>
4. <u>Achyranthes japonica</u>	<u>20</u>	<u>×</u>	<u>UPL</u>
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			

65 = Total Cover

50% of total cover: 39.5 20% of total cover: 13

Woody Vine Stratum (Plot size: \_\_\_\_\_)

1. _____
2. _____
3. _____
4. _____
5. _____

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Remarks: (if observed, list morphological adaptations below).

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 60 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

**Prevalence Index worksheet:**

Total % Cover of	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is ≤3.0<sup>1</sup>
  - Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No ✓



**SOIL**

Sampling Point: 01-WAS-2

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type	Loc <sup>2</sup>		
0-2	10YR 3/3	100					S.L	
2-12	10YR 5/1	100					SC	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A15) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Sony Sparrow Solar City/County: Ballard Sampling Date: 2-22-23  
 Applicant/Owner: Clarway State: Ky Sampling Point: 01-W-11  
 Investigator(s): SK CK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): Linear Local relief (concave, convex, none): concave Slope (%): 0  
 Subregion (LRR or MLRA): LR2P Lat: 37.023548 Long: -79.812129 Datum: NAD83  
 Soil Map Unit Name: LpD3 NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:  <p align="center" style="font-size: 1.2em;">Wetland points for 01-W-11 PFO</p>	

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input checked="" type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input checked="" type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<p><u>Secondary Indicators (minimum of two required)</u></p> <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
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<p><b>Field Observations:</b></p> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>?</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.

Remarks:



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: OHWAS-21

**Tree Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Shrub Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5 ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1.	20	x	OBL
2.	10		FAC
3.	15	x	OBL
4.	10		FACW
5.	10		FAC
6.			
7.			
8.			
9.			
10.			
11.			

65 = Total Cover

50% of total cover: 32.5 20% of total cover: 13

**Woody Vine Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species	x 1 = _____
FACW species	x 2 = _____
FAC species	x 3 = _____
FACU species	x 4 = _____
UPL species	x 5 = _____
Column Totals:	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is <3.0

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (If observed, list morphological adaptations below.)

Sparsely veg

**SOIL**

Sampling Point: 01-WAS-21

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type	Loc <sup>2</sup>		
0-6	2.5Y 4/2	90	5YR 3/4	10	C	M	SC	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**
- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)   |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)  |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)                            | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)   |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Other (Explain in Remarks)   |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbic Surface (F13) (LRR P, T, U)                          |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |   |

**Restrictive Layer (if observed):**

Type: gravel  
 Depth (inches): 8

Hydric Soil Present? Yes  No

**Remarks:**



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Sony Sparrow Solar City/County: Ballard Sampling Date: 2-22-23  
 Applicant/Owner: Clearway State: KY Sampling Point: 01-W-22  
 Investigator(s): CK SK Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Concave Slope (%): 5  
 Subregion (LRR or MLRA): LRRP Lat: 37.023525 Long: -88.892921 Datum: NAD83 *km f15*  
 Soil Map Unit Name: LpD3 NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: <div style="text-align: center; font-size: 1.2em; font-family: cursive;">                     upland point Ar - <span style="margin-left: 200px;">01-W-11</span> </div>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: OHWAS22

**Tree Stratum** (Plot size: 30 Ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Betula nigra L.</u>	<u>20</u>	<u>X</u>	<u>FACW</u>
2. <u>Prunus serotina</u>	<u>15</u>	<u>X</u>	<u>FACU</u>
3. <u>Acer rubrum</u>	<u>30</u>	<u>X</u>	<u>FACU</u>
4. _____	<u>5</u>		
5. _____			
6. _____			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 37 (A/B)

**Sapling Stratum** (Plot size: 15 Ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>F. grandifolia</u>	<u>10</u>	<u>X</u>	<u>FACU</u>
2. <u>C. tomentosus</u>	<u>5</u>	<u>X</u>	<u>FACW</u>
3. _____			
4. _____			
5. _____			
6. _____			

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_

FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_

FAC species \_\_\_\_\_ x 3 = \_\_\_\_\_

FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_

UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_

Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Shrub Stratum** (Plot size: \_\_\_\_\_)

50% of total cover: 7.5 20% of total cover: 3

15 = Total Cover

	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is  $\leq 3.0$ <sup>1</sup>
  - Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Herb Stratum** (Plot size: 5 Ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Stellaria media</u>	<u>30</u>	<u>X</u>	<u>UPL</u>
2. <u>Andropogon virginicus</u>	<u>20</u>	<u>X</u>	<u>FAC</u>
3. <u>Lonicera japonica</u>	<u>15</u>	<u>X</u>	<u>FACU</u>
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Woody Vine Stratum** (Plot size: \_\_\_\_\_)

50% of total cover: 37.5 20% of total cover: 13

65 = Total Cover

	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No X

Remarks: (If observed, list morphological adaptations below).



SOIL

Sampling Point: 01-WAS-21

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	7.5YR 3/2	100					S.C	
2-18	10YR 6/2	10	5YR 5/8	10	C	M	C	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Sular City/County: Ballard Sampling Date: 2-22-23  
 Applicant/Owner: Clearway State: Ky Sampling Point: 01-WAS-23  
 Investigator(s): CK SK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): Tc. Slope Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR or MLRA): LRRP Lat: 37.021545 Long: -88.901785 Datum: NAD83 KyFIPS  
 Soil Map Unit Name: LpDS NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <div style="text-align: center; font-size: 1.2em; font-family: cursive;">                     Wetland point for - 01-W-12 PFO                 </div>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B15) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>2</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: OHWAS-23

Tree Stratum (Plot size: <u>30 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Platanus occidentalis</u>	<u>50</u>	<u>X</u>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. <u>Acer rubrum</u>	<u>45</u>	<u>X</u>	<u>FAC</u>	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. <u>Celtis laevigata</u>	<u>5</u>		<u>FACW</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75</u> (A/B)
4. _____				Prevalence Index worksheet:
5. _____				
6. _____				OBL species _____ x 1 = _____
100 = Total Cover				FACW species _____ x 2 = _____
50% of total cover: <u>50</u>	20% of total cover: <u>20</u>			
Sapling Stratum (Plot size: _____)				FAC species _____ x 3 = _____
1. _____				FACU species _____ x 4 = _____
2. _____				UPL species _____ x 5 = _____
3. _____				Column Totals: _____ (A) _____ (B)
4. _____				Prevalence Index = B/A = _____
5. _____				Hydrophytic Vegetation Indicators:
6. _____				
_____ = Total Cover				<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
50% of total cover: _____	20% of total cover: _____	3 - Prevalence Index is $\leq 3.0$ <sup>1</sup>		
Shrub Stratum (Plot size: _____)				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____				
3. _____				Definitions of Five Vegetation Strata:
4. _____				
5. _____				<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
6. _____				<b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
7. _____				<b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
8. _____				<b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
9. _____				<b>Woody vine</b> – All woody vines, regardless of height.
10. _____				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
11. _____				
_____ = Total Cover				
50% of total cover: <u>125</u>	20% of total cover: <u>5</u>			
Herb Stratum (Plot size: <u>5 ft</u> )				
1. <u>Elymus viduaris</u>	<u>20</u>	<u>X</u>	<u>FACW</u>	
2. <u>Allium vineale</u>	<u>5</u>	<u>X</u>	<u>FACW</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
_____ = Total Cover				
50% of total cover: _____	20% of total cover: _____			
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
50% of total cover: _____	20% of total cover: _____			

Remarks: (If observed, list morphological adaptations below).

**SOIL**

Sampling Point: 01-LMS-23

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type	Loc		
0-2	10YR 3/1	100						Organic
2-12	10YR 5/2	90	7.5 4/6	10	C	M		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)   |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)  |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)                            | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)   |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Other (Explain in Remarks)   |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |   |

Restrictive Layer (if observed):

Type: Tree Roots  
 Depth (inches): 12 inch

Hydric Soil Present? Yes  No

Remarks:



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Sal-v City/County: Ballard Sampling Date: 02-22-23  
 Applicant/Owner: Clawson State: Ky Sampling Point: 01-wks-24  
 Investigator(s): CK SK Section, Township, Range: NH  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Concave Slope (%): 3  
 Subregion (LRR or MLRA): LRAP Lat: 37.021503 Long: -88.901586 Datum: NAD83  
 Soil Map Unit Name: Lpd3 NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:  <p style="font-size: 1.2em; font-family: cursive;">upland prairie for 01-w-12</p>	

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<p><u>Secondary Indicators (minimum of two required)</u></p> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<p><b>Field Observations:</b></p> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks:	

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WAS-24

Tree Stratum (Plot size: <u>30tr</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Prunus serotina</u>	<u>20</u>	<u>X</u>	<u>FACU</u>
2. <u>Fagus grandifolia</u>	<u>5</u>		<u>FACU</u>
3. <u>Acer rubrum</u>	<u>10</u>	<u>X</u>	<u>FAC</u>
4.			
5.			
6.			

35 = Total Cover  
50% of total cover: 17.5 20% of total cover: 7

Sapling Stratum (Plot size: \_\_\_\_\_)

1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Shrub Stratum (Plot size: \_\_\_\_\_)

1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Herb Stratum (Plot size: 3ft)

1. <u>Zea mays</u>	<u>40</u>	<u>X</u>	<u>UPL</u>
2. <u>Stellaria media</u>	<u>5</u>		<u>FACU</u>
3. <u>Rubus arvensis</u>	<u>5</u>		<u>FAC</u>
4. <u>Alliaria vinealis</u>	<u>15</u>	<u>X</u>	<u>FACU</u>
5. <u>Lamium purpureum</u>	<u>10</u>		<u>UPL</u>
6.			
7.			
8.			
9.			
10.			
11.			

75 = Total Cover  
50% of total cover: 37.5 20% of total cover: 15

Woody Vine Stratum (Plot size: \_\_\_\_\_)

1.			
2.			
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Remarks: (If observed, list morphological adaptations below).

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC:	<u>1</u>	(A)
Total Number of Dominant Species Across All Strata:	<u>4</u>	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>25</u>	(A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

- Hydrophytic Vegetation Indicators:**
- \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation
  - \_\_\_ 2 - Dominance Test is >50%
  - \_\_\_ 3 - Prevalence Index is  $\leq 3.0$ <sup>1</sup>
  - \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes \_\_\_\_\_ No X



SOIL

Sampling Point: 01-WHS-24

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 5/4	15B				S	SC	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

- |  |  |  |
|--|--|--|
| <p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Histosol (A1)</li> <li><input type="checkbox"/> Histic Epipedon (A2)</li> <li><input type="checkbox"/> Black Histic (A3)</li> <li><input type="checkbox"/> Hydrogen Sulfide (A4)</li> <li><input type="checkbox"/> Stratified Layers (A5)</li> <li><input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)</li> <li><input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)</li> <li><input type="checkbox"/> Muck Presence (A8) (LRR U)</li> <li><input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)</li> <li><input type="checkbox"/> Depleted Below Dark Surface (A11)</li> <li><input type="checkbox"/> Thick Dark Surface (A12)</li> <li><input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)</li> <li><input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)</li> <li><input type="checkbox"/> Sandy Gleyed Matrix (S4)</li> <li><input type="checkbox"/> Sandy Redox (S5)</li> <li><input type="checkbox"/> Stripped Matrix (S6)</li> <li><input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)</li> <li><input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)</li> <li><input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)</li> <li><input type="checkbox"/> Loamy Gleyed Matrix (F2)</li> <li><input type="checkbox"/> Depleted Matrix (F3)</li> <li><input type="checkbox"/> Redox Dark Surface (F5)</li> <li><input type="checkbox"/> Depleted Dark Surface (F7)</li> <li><input type="checkbox"/> Redox Depressions (F8)</li> <li><input type="checkbox"/> Marl (F10) (LRR U)</li> <li><input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)</li> <li><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)</li> <li><input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)</li> <li><input type="checkbox"/> Delta Ochric (F17) (MLRA 151)</li> <li><input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)</li> <li><input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)</li> <li><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)</li> </ul> | <p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> 1 cm Muck (A9) (LRR O)</li> <li><input type="checkbox"/> 2 cm Muck (A10) (LRR S)</li> <li><input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)</li> <li><input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)</li> <li><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)</li> <li><input type="checkbox"/> Red Parent Material (TF2)</li> <li><input type="checkbox"/> Very Shallow Dark Surface (TF12)</li> <li><input type="checkbox"/> Other (Explain in Remarks)</li> </ul> |
|--|--|--|

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Sony Spillway Solar City/County: Bullard Sampling Date: 2-22-23  
 Applicant/Owner: Clearway State: TX Sampling Point: 01-WAS-25  
 Investigator(s): OK SK Section, Township, Range: N14  
 Landform (hillslope, terrace, etc.): foe slope Local relief (concave, convex, none): CONCAVE Slope (%): 1  
 Subregion (LRR or MLRA): LRRP Lat: 37.021820 Long: 29.99546 Datum: NAD83 Ky RPT  
 Soil Map Unit Name: LpD3 NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Wetland point for 01-W-13 PEM   PFD</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
--	--

<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-UMS-25

Tree Stratum (Plot size: 30 ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Salix nigra</u>	<u>50</u>	<u>X</u>	<u>OBL</u>
2.			
3.			
4.			
5.			
6.			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Sapling Stratum (Plot size: 15 ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Salix nigra</u>	<u>30</u>	<u>X</u>	<u>OBL</u>
2. <u>Fraxinus pennsylvanica</u>	<u>20</u>	<u>X</u>	<u>FACW</u>
3.			
4.			
5.			
6.			

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals:	(A) (B)

Prevalence Index = B/A =

Shrub Stratum (Plot size: 10)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Herb Stratum (Plot size: 5 ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Juncus acuminatus</u>	<u>25</u>	<u>X</u>	<u>OBL</u>
2. <u>Ambrosia virginiana</u>	<u>15</u>	<u>X</u>	<u>FAC</u>
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

Woody Vine Stratum (Plot size: 5)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (If observed, list morphological adaptations below).

**SOIL**

Sampling Point: 01-WH3-25

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 5/2	85	5YR 4/6	10	C	M	S.C	
			5YR 3/4	5	C	M		

- <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.
- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**
- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)   |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)  |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)   |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)                            | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)  |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)   |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Other (Explain in Remarks)  |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |  |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |  |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |  |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |  |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |  |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |  |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |  |

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Bony Sparrow Solar City/County: Ballard Sampling Date: 7-22-23  
 Applicant/Owner: Clearway State: Ky Sampling Point: 01-WAS-26  
 Investigator(s): CK SK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): CONCAVE Slope (%): 3  
 Subregion (LRR or MLRA): LRRP Lat: 37.021882 Long: 88.895440 Datum: NAD83 Kyr 102  
 Soil Map Unit Name: LpD3 NWI classification: NA  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <u>upland point for 01-W-13</u>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C5) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WKS-20

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____)				
1.				
2.				
3.				
4.				
5.				
6.				
				_____ = Total Cover
50% of total cover: _____				20% of total cover: _____
<b>Sapling Stratum</b> (Plot size: _____)				
1.				
2.				
3.				
4.				
5.				
6.				
				_____ = Total Cover
50% of total cover: _____				20% of total cover: _____
<b>Shrub Stratum</b> (Plot size: _____)				
1.				
2.				
3.				
4.				
5.				
6.				
				_____ = Total Cover
50% of total cover: _____				20% of total cover: _____
<b>Herb Stratum</b> (Plot size: <u>0ft</u> )				
1.	<u>Schelororus arundinaceus</u>	<u>80</u>	<u>X</u>	<u>FAC</u>
2.	<u>Andropogon virginicus</u>	<u>15</u>	<u>X</u>	<u>FAC</u>
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
				<u>95</u> = Total Cover
50% of total cover: <u>47.5</u>				20% of total cover: <u>19</u>
<b>Woody Vine Stratum</b> (Plot size: _____)				
1.				
2.				
3.				
4.				
5.				
				_____ = Total Cover
50% of total cover: _____				20% of total cover: _____
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_

FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_

FAC species \_\_\_\_\_ x 3 = \_\_\_\_\_

FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_

UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_

Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No



**SOIL**

Sampling Point: 01-645-20

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features			Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%					
0-18	10YR 5/3	90	7.5YR 5/0	10		C	M	S.C	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)  |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)   |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)  |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)   |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                                       | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)  |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)   |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Other (Explain in Remarks)  |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |  |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |  |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |  |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |  |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |  |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |  |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |  |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |  |

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Long Spurred Darter City/County: Ballard Sampling Date: 2-23-23  
 Applicant/Owner: Clearway State: KY Sampling Point: 01-WAS-27  
 Investigator(s): SKCK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): Field edge Local relief (concave, convex, none): CONCAVE Slope (%): 2  
 Subregion (LRR or MLRA): LRRP Lat: 37.030481 Long: -83.914804 Datum: NAD83 KY FIPS  
 Soil Map Unit Name: Vb NWI classification: NH

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:  <div style="display: flex; justify-content: space-around; font-size: 1.2em;"> <span>Wetland point Ar</span> <span>01-W-14 PEM</span> </div>	

**HYDROLOGY**

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
<b>Primary Indicators (minimum of one is required; check all that apply)</b> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)

<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>        </u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-VMS-27

**Tree Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_

FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_

FAC species \_\_\_\_\_ x 3 = \_\_\_\_\_

FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_

UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_

Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B)

Prevalence Index = B/A = \_\_\_\_\_

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Shrub Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is  $\leq 3.0^1$

\_\_\_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5 ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>60</u>	<u>X</u>	<u>OBL</u>
2.	<u>10</u>		<u>UPL</u>
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

\_\_\_\_\_ = Total Cover  
50% of total cover: 35 20% of total cover: 14

**Woody Vine Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			

Hydrophytic Vegetation Present? Yes  No \_\_\_\_\_

Remarks: (If observed, list morphological adaptations below)

**SOIL**

Sampling Point: 01-WAS-27

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type	Loc <sup>2</sup>		
0-18	10YR 5/2	75	7.5 YR 4/6	10	C	M/PL	S.C.	
	10YR 5/3	15						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Sony Sp... Saker City/County: Bellair Sampling Date: 2-23-23  
 Applicant/Owner: Clearway State: ky Sampling Point: 01-WAS-28  
 Investigator(s): CK SK Section, Township, Range: AAA  
 Landform (hillslope, terrace, etc.): field edge Local relief (concave, convex, none): concave Slope (%): 2  
 Subregion (LRR or MLRA): LRP Lat: 37.030453 Long: -88.914783 Datum: NAD83 ky DRS  
 Soil Map Unit Name: Vb NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes X No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <u>    </u> No <u>Y</u> Hydric Soil Present? Yes <u>    </u> No <u>X</u> Wetland Hydrology Present? Yes <u>    </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u>    </u> No <u>X</u>
Remarks: <p align="center" style="font-size: 1.2em;">Upland point for <u>01-W-14</u></p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (H1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <u>    </u> No <u>X</u> Depth (inches): <u>    </u> Water Table Present? Yes <u>    </u> No <u>X</u> Depth (inches): <u>    </u> Saturation Present? Yes <u>    </u> No <u>X</u> Depth (inches): <u>    </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>    </u> No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WAS-28

**Tree Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Shrub Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5 ft )

	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>50</u>	<u>X</u>	<u>LPL</u>
2.	<u>15</u>		<u>LPL</u>
3.	<u>15</u>		<u>LPL</u>
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			

\_\_\_\_\_ = Total Cover  
50% of total cover: 40 20% of total cover: 16

**Woody Vine Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (AB)

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_

FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_

FAC species \_\_\_\_\_ x 3 = \_\_\_\_\_

FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_

UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_

Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B)

Prevalence Index = B/A = \_\_\_\_\_

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is  $\leq 3.0^1$
  - Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No X

Remarks: (If observed, list morphological adaptations below).

**SOIL**

Sampling Point: 01-WAS-28

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10Yk 5/4	100					S.C.	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)   |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)  |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                                       | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20)   |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <b>(MLRA 153B)</b>  |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   | <input type="checkbox"/> Other (Explain in Remarks)   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |   |

Restrictive Layer (if observed):

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Ballard Sampling Date: 2-23-23  
 Applicant/Owner: Clewing State: KY Sampling Point: 01-WAS-04  
 Investigator(s): CK SK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): foe slope Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR or MLRA): LRR P Lat: 37.020334 Long: -88.910352 Datum: NAD83 KY AP  
 Soil Map Unit Name: GSB3 NWI classification: NA  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Wetland point for 01-W-15 PEM</p>	

**HYDROLOGY**

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
<b>Primary Indicators (minimum of one is required; check all that apply)</b> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (E1) <input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)

<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WAS-29

**Tree Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Shrub Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>30</u>	<u>X</u>	<u>FAC</u>
2.	<u>30</u>	<u>X</u>	<u>FAC</u>
3.	<u>10</u>		<u>UPL</u>
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			

\_\_\_\_\_ = Total Cover  
50% of total cover: 35 20% of total cover: 14

**Woody Vine Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_

FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_

FAC species \_\_\_\_\_ x 3 = \_\_\_\_\_

FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_

UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_

Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (If observed, list morphological adaptations below)

**SOIL**

Sampling Point: 01-WAS-29

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 5/2	70	7.5YR 4/6	15	C	M/PL	S.C.	
	10YR 5/4	15						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)   |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)  |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)                            | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)   |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Other (Explain in Remarks)   |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Mart (F10) (LRR U)   |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |   |

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Bellard Sampling Date: 2-23-23  
 Applicant/Owner: Clearway State: Ky Sampling Point: 01-WMS-30  
 Investigator(s): \_\_\_\_\_ Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR or MLRA): LRRP Lat: 37.020347 Long: -88.910405 Datum: NAD83 Ky AP2  
 Soil Map Unit Name: GsB3 NWI classification: NA  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">upland point for 01-W-15</p>	

**HYDROLOGY**

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
<b>Primary Indicators (minimum of one is required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)

<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WAs-30

**Tree Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Shrub Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 3 ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>40</u>	<u>X</u>	<u>UPL</u>
2.	<u>9</u>		<u>FACW</u>
3.	<u>15</u>		<u>UPL</u>
4.	<u>20</u>	<u>X</u>	<u>FACW</u>
5.			
6.			
7.			
8.			
9.			
10.			
11.			

90 = Total Cover

50% of total cover: 40 20% of total cover: 18

**Woody Vine Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is ≤3.0<sup>1</sup>
  - Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No X

Remarks: (If observed, list morphological adaptations below).

**SOIL**

Sampling Point: 01-WH3-30

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 5/4	16D					S.C.	

- <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.
- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**
- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)   |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)  |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                                       | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)   |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Other (Explain in Remarks)   |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |   |

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Sony Sparrow Solar City/County: Ballard Sampling Date: 2-23-23  
 Applicant/Owner: Clearway State: Ky Sampling Point: 01-W-31  
 Investigator(s): CK SK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): footslope Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR or MLRA): LRRP Lat: 37.021314 Long: -88.908261 Datum: NAD83 Ky for  
 Soil Map Unit Name: U6 NW classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:  <p align="center" style="font-size: 1.2em;">wetland point for 01-w-14 PEM-PSS</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input checked="" type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)

<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WA3-31

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>184</u>				Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)	
2. _____				Total Number of Dominant Species Across All Strata: <u>3</u> (B)	
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)	
4. _____				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____	
5. _____					
6. _____					
_____ = Total Cover					
50% of total cover: _____ 20% of total cover: _____					
Sapling Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:	
1. <u>Frax. hirs. pennsylv. Varica</u>	<u>25</u>	<u>X</u>	<u>FACW</u>	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
2. _____				<input checked="" type="checkbox"/> 2 - Dominance Test is >50%	
3. _____				<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
4. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
5. _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
6. _____				<b>Definitions of Five Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.	
_____ = Total Cover					
50% of total cover: _____ 20% of total cover: _____					
Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status		Definitions of Five Vegetation Strata:
1. _____					<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
_____ = Total Cover					
50% of total cover: _____ 20% of total cover: _____					
Herb Stratum (Plot size: <u>5 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Five Vegetation Strata:	
1. <u>Veronica gigantea</u>	<u>40</u>	<u>Y</u>	<u>FAC</u>	<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.	
2. <u>Andropogon virginicus</u>	<u>20</u>	<u>X</u>	<u>FAC</u>		
3. <u>Elymus riparius</u>	<u>10</u>		<u>FACW</u>		
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
_____ = Total Cover					
50% of total cover: <u>35</u> 20% of total cover: <u>14</u>					
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Five Vegetation Strata:	
1. _____				<b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.	
2. _____					
3. _____					
4. _____					
5. _____					
_____ = Total Cover					
50% of total cover: _____ 20% of total cover: _____					
Hydrophytic Vegetation Present? Yes <u>X</u> No _____					
Remarks: (If observed, list morphological adaptations below).					

**SOIL**

Sampling Point: 01-WAS-31

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 4/2	100						
4-18	10YR 4/2	60	7.5YR 4/6	15	C	M		
	10YR 5/2	25						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Belland Sampling Date: 7-23-23  
 Applicant/Owner: Clewinwy State: Ky Sampling Point: 01-WAS-37  
 Investigator(s): CK SK Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR or MLRA): LRA P Lat: 37.021377 Long: -88.908356 Datum: NAD83  
 Soil Map Unit Name: v16 NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <span style="float: right; font-family: cursive;">upland point for 01-w-16</span>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 01-WAS-32

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____)				
1.				
2.				
3.				
4.				
5.				
6.				
				_____ = Total Cover
50% of total cover: _____				20% of total cover: _____
<b>Sapling Stratum</b> (Plot size: _____)				
1.				
2.				
3.				
4.				
5.				
6.				
				_____ = Total Cover
50% of total cover: _____				20% of total cover: _____
<b>Shrub Stratum</b> (Plot size: _____)				
1.				
2.				
3.				
4.				
5.				
6.				
				_____ = Total Cover
50% of total cover: _____				20% of total cover: _____
<b>Herb Stratum</b> (Plot size: <u>5 ft</u> )				
1.	<u>Glycine max</u>	<u>90</u>	<u>X</u>	<u>UPL</u>
2.	<u>Zea mays</u>	<u>10</u>		<u>UPL</u>
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
				_____ = Total Cover
50% of total cover: <u>5</u>				20% of total cover: <u>25</u>
<b>Woody Vine Stratum</b> (Plot size: _____)				
1.				
2.				
3.				
4.				
5.				
				_____ = Total Cover
50% of total cover: _____				20% of total cover: _____
Remarks: (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_

FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_

FAC species \_\_\_\_\_ x 3 = \_\_\_\_\_

FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_

UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_

Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No



**SOIL**

Sampling Point: 01-WAS-32

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10 Yk 5/4	100					SC	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) <input type="checkbox"/> Muck Presence (A8) (LRR U) <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Marl (F10) (LRR U) <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

<input type="checkbox"/> 1 cm Muck (A9) (LRR O) <input type="checkbox"/> 2 cm Muck (A10) (LRR S) <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B) <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T) <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) <input type="checkbox"/> Other (Explain in Remarks)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
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**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:



**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET - Atlantic and Gulf Coastal Plain Region**  
 See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

OMB Control #: 0710-xxxx, Exp: Pending  
 Requirement Control Symbol EXEMPT:  
 (Authority: AN 335-15, paragraph 5-2a)

Project/Site: Song Sparrow Solar City/County: Keokuk/Ballard County Sampling Date: 7-23-23  
 Applicant/Owner: Cleanway Renewables State: KY Sampling Point: WAK-33  
 Investigator(s): CK SK Section, Township, Range: N/A N  
 Landform (hillside, terrace, etc.): Lowland Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR or MLRA): LRR P Lat: 37 021652 Long: -88.90391 Datum: NAD83 (KYFIPS)  
 Soil Map Unit Name: V6 NWI classification: NA  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)  
 Are Vegetation X, Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes X No       
 Are Vegetation     , Soil     , or Hydrology      naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u>    </u>	Is the Sampled Area within a Wetland?      Yes <u>    </u> No <u>    </u>
Hydric Soil Present?	Yes <u>X</u>	No <u>    </u>	
Wetland Hydrology Present?	Yes <u>X</u>	No <u>    </u>	
Remarks:  <div style="text-align: center; font-size: 1.2em;">                     Wetland point for - 01-W-17                      PEM                 </div>			

**HYDROLOGY**

Primary Indicators (minimum of one is required; check all that apply): <input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) Water Marks (B1) Sediment Deposits (D2) Drift Deposits (D3) Algal Mat or Crust (D4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required): Organic Soil Grades (F1) <input checked="" type="checkbox"/> Organic Vegetated Concave Microtop (U8) <input checked="" type="checkbox"/> Organic Peatline (H10) Moss-rim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (I2) Shallow Aquifer (D3) FAC-N-Neutral Test (I1) Sphagnum Moss (U8) (LRX 7, U)
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Field Observations: Surface Water Present?    Yes <u>X</u> No <u>    </u> Depth (inches): <u>0</u> Water Table Present?      Yes <u>X</u> No <u>    </u> Depth (inches): <u>0</u> Saturation Present?        Yes <u>X</u> No <u>    </u> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present?    Yes <u>X</u> No <u>    </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION (Four Strata) – Use scientific names of plants.**

Sampling Point: 01-WAS-33

**Tree Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

\_\_\_\_\_ = Total Cover

**Sapling/Shrub Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

\_\_\_\_\_ = Total Cover

**Herb Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

\_\_\_\_\_ = Total Cover

**Herb Stratum** (Plot size: 5 ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Glycine max</u>	<u>25</u>	<u>X</u>	<u>LPL</u>
2. <u>Panicum glaberr</u>	<u>25</u>	<u>X</u>	<u>OBL</u>
3.			
4.			
5.			

50 = Total Cover

50% of total cover: 25      20% of total cover: 10

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = <u>75</u>

Column Totals: (A) \_\_\_\_\_ (B) \_\_\_\_\_

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrophytic vegetation present under suitable site conditions

<sup>2</sup>Indicators of hydric soil and wetland hydrophytic vegetation present

**Tree:** Woody plants, including vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/Shrub:** Woody plants, including vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

**Herb:** All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody Vine:** All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No \_\_\_\_\_

Remarks: (If observed, list morphological adaptations below.)

- 100 YR flood plain
- agriculture field usage
- ag field usage has disrupted veg communities



SOIL

Sampling Point: DL-WHS-33

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR 5/2	75	7.5YR 4/6	15	C	M/PL	SC	
	10YR 5/3	10						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Barrier Islands 1 cm Muck (S12) (MLRA 153B, 153D)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Coast Prairie Redox (A16) (outside MLRA 150A)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A, 150B)	
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, T)	
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20) (MLRA 153E)	
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR S, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (F21)	
<input type="checkbox"/> Muck Presence (Ab) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (F22) (outside MLRA 138, 152 in FL, 154)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Barrier Islands Low Conductivity Matrix (S17) (MLRA 153B, 153D)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochre (F11) (MLRA 149A)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR S, T, U)		
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Lignite Surface (F13) (LRR S, T, U)		
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR S, T, U)	<input type="checkbox"/> Ustic Ochre (F17) (MLRA 153E)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150C, 150B)		
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)		
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20) (MLRA 149A, 150C, 153D)		
<input type="checkbox"/> Dark Surface (F7) (LRR P, S, T, U)	<input type="checkbox"/> Very Shallow Dark Surface (F22) (MLRA 138, 152 in FL, 154)		
<input type="checkbox"/> Polyvalue below Surface (S8) (LRR S, T, U)			

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):  
 Type: Rock  
 Depth (Inches): 8

Hydric Soil?  Yes  No

Remarks:



**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region**  
 See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

OMB Control #: 0710-xxxx, Exp: Pending  
 Requirement Control Symbol EXEMPT:  
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Song Sparrow Solar City/County: Kevil/Ballard County Sampling Date: 2-23-23  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 01-WHS-34  
 Investigator(s): CK SK Section, Township, Range: N/A  
 Landform (hillside, terrace, etc.): lowland Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR or MLRA): LRR P Lat: 37.021747 Long: -88.908377 Datum: NAD83 (KYFIPS)  
 Soil Map Unit Name: U6 NWI classification: WA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

Remarks:  
Upland point for 01-WET-17

**HYDROLOGY**

Primary Indicators (minimum of 3 are required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Aquatic Fauna (A1)	<input type="checkbox"/> Surface Soil Cracks (S6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Sparse Vegetation (S7) (see Remarks)
<input type="checkbox"/> Saturation (A5)	<input type="checkbox"/> Drainage Channels (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Muck Trim Lines (D16)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquiclude (D3)
<input type="checkbox"/> Water-Strained Leaves (B9)	<input type="checkbox"/> FAC Neutral Test (D5)
	<input type="checkbox"/> Sphagnum Moss (D8) (L, R, U)

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION (Four Strata)** - Use scientific names of plants.

Sampling Point: 01-WKS-31

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb** 50% of total cover: 4 20% of total cover: \_\_\_\_\_

Woody Vine Stratum (Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>glycine tree</u>	<u>90</u>	<u>X</u>	<u>UPL</u>
2. <u>Scholarium arundinosa</u>	<u>5</u>		<u>FAC</u>
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover

50% of total cover: 47.5 20% of total cover: 19

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)
Prevalence Index = B/A = _____	

**Hydrophytic Vegetation Indicators:**

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is  $\leq 3.0^1$

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

In the absence of hydrophytic soil and wetland hydrology must be present, unless disturbed or problematic.

**Tree** - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/Shrub** - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

**Herb** - All herbaceous (non-woody) plants, regardless of size, and woody vines less than 3.28 ft tall.

**Woody Vine** - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No X

Remarks: (If observed, list morphological adaptations below.)



**SOIL**

Sampling Point: 01-WHS-34

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 5/3	90	7.5YR 4/6	10	C	M	S.C.	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, ME=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :	
<input type="checkbox"/> Histosol (A1)	Thin Dark Surface (SG) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)	
<input type="checkbox"/> Histic Epipedon (A2)	Barrier Islands 1 cm Muck (S12)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)	
<input type="checkbox"/> Black Histic (A3)	(MLRA 153B, 153D)	<input type="checkbox"/> Coast Prairie Redox (A16)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> (outside MLRA 150A)	
<input type="checkbox"/> Stratified Layers (A*)	Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	Depleted Matrix (F3)	<input type="checkbox"/> (outside MLRA 150A, 150B)	
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, T)	
<input type="checkbox"/> Muck Presence (A8) (LRR U)	Depleted Dark Surface (F7)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	Redox Depressions (F8)	<input type="checkbox"/> (MLRA 153B)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	Mud (F13) (LRR U)	<input type="checkbox"/> Red Parent Material (F21)	
<input type="checkbox"/> Thick Dark Surface (A12)	Depleted Gleyed (F11) (MLRA 153)	<input type="checkbox"/> Very Shallow Dark Surface (F22)	
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR P, T)	Iron-Forming Muck Soils (F12) (LRR P, T)	<input type="checkbox"/> (MLRA 153B, 153C, 153D)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR S, T)	Unbric Surface (F13) (LRR P, T, U)	<input type="checkbox"/> (MLRA 153B, 153C, 153D)	
<input type="checkbox"/> Sandy Gleyed Matrix (F4)	Delta Ochric (F17) (MLRA 153A, 153B)	<input type="checkbox"/> (MLRA 153B, 153C, 153D)	
<input type="checkbox"/> Sandy Redox (S6)	Reduced Vertic (F18) (MLRA 153A, 153B)	<input type="checkbox"/> Ether (Explain in Remarks)	
<input type="checkbox"/> Stripped Matrix (SG)	Piedmont Floodplain Soils (F19) (MLRA 149A)		
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)	Anomalous Bright Floodplain Soils (F20)		
<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	(MLRA 149A, 153C, 153D)		
	Very Shallow Dark Surface (F22)		
	(MLRA 153B, 153C, 153D)		

Restrictive Layer (if observed):  
 Type: Rock  
 Depth (inches): 0  
 Hydric Soil Present? Yes  No

Remarks:



**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET - Atlantic and Gulf Coastal Plain Region**  
 See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

OMB Control #: 0710-xxxx, Exp: Pending  
 Requirement Control Symbol EXEMPT:  
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Song Sparrow Solar City/County: Kevil/Ballard County Sampling Date: 2-27-27  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 01-WH2-35  
 Investigator(s): CK, SK Section, Township, Range: N/A  
 Landform (hillside, terrace, etc.): to slope Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR or MLRA): LRR P Lat: 37.020127 Long: -88.906224 Datum: NAD83 (KYFIPS)  
 Soil Map Unit Name: Fa NWI classification: U8

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks:  <p align="center">wetland point for 01-w-18 PEM1 PFO</p>		

**HYDROLOGY**

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply): <input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required): <input type="checkbox"/> Surface Soil Cracks (C1) <input type="checkbox"/> Rotten Wood (C2) <input checked="" type="checkbox"/> Drainage Patterns (C3) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (L5) <input type="checkbox"/> Sphagnum Moss (D8) (L14, T, U)
--	--

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION (Four Strata) – Use scientific names of plants.**

Sampling Point: 01-WA-35

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Herbaceous Stratum (Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>50</u>	<u>X</u>	<u>OBL</u>
2.	<u>5</u>		<u>FACU</u>
3.	<u>5</u>		<u>OBL</u>
4.			
5.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: 30 20% of total cover: 12

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) \_\_\_\_\_

<sup>1</sup> Indicators of hydric soil and wetland hydrology must be followed, unless disturbed or problematic.

<sup>2</sup> Indicator of FAC or FACW.

**Tree** - Woody plants, excluding vines, 3 in. (7.5 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/Shrub** - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

**Herb** - All herbaceous (non-woody) plants, regardless of size and woody plants less than 3.28 ft tall.

**Woody Vine** - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (If observed, list morphological adaptations below.)



SOIL

Sampling Point: OFW175-35

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 5/2	10	7.5YR 4/6	10	C	M	S.C.	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :	
Histosol (A1)	Thin Dark Surface (S9) (LRR S, T, U)	1 cm Muck (A9) (LRR U)	
Histic Epipedon (A2)	Barrier Islands 1 cm Muck (S12)	2 cm Muck (A10) (LRR S)	
Black Histic (A3)	(MLRA 153B, 153D)	Coast Prairie Perlox (A10)	
Hydrogen Sulfide (FA)	Loamy Mucky Mineral (F1) (LRR U)	(outside MLRA 150A, 150B)	
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)	Reduced Vertic (F18)	
Organic Bodion (A6) (LRR P, T, U)	Depleted Matrix (F3)	(outside MLRA 150A, 150B)	
5 cm Mucky Mineral (A7) (LRR P, T, U)	Redox Dark Surface (F6)	Piedmont Floodplain Soil (F19) (LRR P, T)	
Muck Presence (A8) (LRR U)	Depleted Dark Surface (F7)	Anomalous Bright Floodplain Soils (F20)	
1 cm Muck (A9) (LRR P, T)	Redox Depressions (F8)	(MLRA 153B)	
Depleted Below Dark Surface (A11)	Marl (F10) (LRR U)	Red Parent Material (F21)	
Thick Dark Surface (A12)	Depleted Carbon (F11) (MLRA 151)	Very Shallow Dark Surface (F22)	
Coast Prairie Podzol (A13) (LRR S, T, U)	Iron Manganoxy Mineral (F12) (LRR S, T, U)	(outside MLRA 150A, 150B)	
Sandy Mucky Mineral (S1) (LRR S, T, U)	Urnlike Surface (F13) (LRR S, T, U)	Interior Gleyed Matrix (F15)	
Sandy Gleyed Matrix (S4)	Delta Ochric (F17) (MLRA 154)	(MLRA 153C, 153D)	
Sandy Redox (S5)	Reduced Vertic (F18) (MLRA 150A, 150B)	Other (Explain in Remarks)	
Stripped Matrix (S8)	Piedmont Floodplain Soils (F19) (MLRA 149A)		
Dark Surface (S7) (LRR P, S, T, U)	Anomalous Bright Floodplain Soils (F20)		
Polyvalue Below Surface (S9) (LRR S, T, U)	(MLRA 149A, 153C, 153D)		
	Very Shallow Dark Surface (F22)		
	(MLRA 152A, 152B, FL 154)		

Restrictive Layer (if observed):  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_  
 Hydric Soil Present? Yes  No

Remarks:



**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET - Atlantic and Gulf Coastal Plain Region**  
 See ERDC/EI TR-07-24; the proponent agency is CECW-CO-R

OMB Control #: 0710-xxxx, Exp: Pending  
 Requirement Control Symbol EXEMPT:  
 (Authority: AD 335-15, paragraph 5-2a)

Project/Site: Song Sparrow Solar City/County: Kevil/Ballard County Sampling Date: 2-23-23  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 01-WP 36  
 Investigator(s): CK SK Section, Township, Range: N/A  
 Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): convex Slope (%): ?  
 Subregion (LRR or MLRA): LRR P Lat: 37.020231 Long: 88.906269 Datum: NAD83 (KYFIPS)  
 Soil Map Unit Name: FA NWI classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____ No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes _____ No <input checked="" type="checkbox"/>		
Remarks: <p align="center">upland point for 01-W-18 1/2 01-W-19</p>			

**HYDROLOGY**

Primary Indicators (presence of two required): Surface Water (A1) _____ High Water Table (A2) _____ Saturation (A3) _____ Water Marks (B1) _____ Sediment Deposits (B2) _____ Drift Deposits (B3) _____ Algal Mat or Crust (B4) _____ Iron Deposits (B5) _____ Inundation Visible on Aerial Imagery (B7) _____ Water-Stained Leaves (B9) _____	Secondary Indicators (presence of two required): Aquatic Fauna (B13) _____ Muck Deposits (B15) (LRR 1) _____ Hydrogen Sulfide Odor (C1) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Presence of Reduced Iron (C4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Thin Muck Surface (C7) _____ Other (Explain in Remarks) _____	Tertiary Indicators (presence of two required): Riparian Grasses (B10) _____ Sparsely Vegetated Concave Surface (B8) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C5) _____ Saturation Visible on Aerial Imagery (C8) _____ Geomorphic Position (L1) _____ Shallow Aquitard (D3) _____ FAC-Neutral Test (L5) _____ Sphagnum Moss: (L8) (LRR 7, U) _____
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**Field Observations:**

Surface Water Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Water Table Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	

(includes capillary fringe)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION (Four Strata) – Use scientific names of plants.**

Sampling Point: 01-VUHS-34

Tree Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u><i>Platanus occidentalis</i></u>	<u>15</u>	<u>X</u>	<u>FACW</u>
2. <u><i>Platanus</i> →</u>			
3.			
4.			
5.			
6.			
7.			
8.			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

**Herb** 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling/Small Stratum (Plot size: 5 ft)**

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u><i>Cyclopia baccata</i></u>	<u>40</u>	<u>X</u>	<u>FACU</u>
2. <u><i>Copiceva japonica</i></u>	<u>15</u>	<u>X</u>	<u>FACU</u>
3. <u><i>Anthropogon virginicus</i></u>	<u>5</u>		<u>FAC</u>
4.			
5.			
6.			
7.			
8.			

60 = Total Cover

50% of total cover: 30 20% of total cover: 12

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

**Herb Stratum (Plot size: \_\_\_\_\_)**

1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

<sup>1</sup>Indicators of acidic soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Four Vegetation Strata:**

**Tree** – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/Small** – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody Vine** – All woody vines greater than 3.28 ft in height.

**Woody Vine Stratum (Plot size: \_\_\_\_\_)**

1.			
2.			
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No X

Remarks: (If observed, list morphological adaptations below.)



**SOIL**

Sampling Point: DL-WHS-30

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 5/4	100					S.C.	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Barrier Islands 1 cm Muck (S12)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> (MLRA 153F, 153D)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> (outside-MLRA 154A)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> (outside MLRA 150A, 150B)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, Y, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR F, T)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> (MLRA 153F)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Rod Parent Material (F21)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> D. plowed Ochric (F11) (MLRA 151)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Coast Prairie Redox (A13) (LRR P, T, U)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR P, T, U)	<input type="checkbox"/> (outside MLRA 153F, 153D in FL, 154)
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR P, T, U)	<input type="checkbox"/> Ochric Surface (F13) (LRR P, T, U)	<input type="checkbox"/> Barrier Islands Low Luminic Matrix (F19)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	<input type="checkbox"/> (MLRA 153E, 1-3L)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150F)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stripped Matrix (SF)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)	
<input type="checkbox"/> Polyvalent Below Surface (S8)	<input type="checkbox"/> (MLRA 149A, 153C, 153D)	
<input type="checkbox"/> (LRR S, Y, U)	<input type="checkbox"/> Very Shallow Dark Surface (F22)	
	<input type="checkbox"/> (MLRA 138, 153F in FL, 154)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET - Atlantic and Gulf Coastal Plain Region**  
 See ERUC/EL TR-07-24; the proponent agency is CECW-CO-R

OMB Control #: 0710-xxxx, Exp: Pending  
 Requirement Control Symbol EXEMPT:  
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Song Sparrow Solar City/County: Kevil/Ballard County Sampling Date: 7-22-23  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 01-WHS-37  
 Investigator(s): CK SK Section, Township, Range: N/A  
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 2  
 Subregion (LRR or MLRA): LRR P Lat: 37.019401 Long: -88.906401 Datum: NAD83 (KYFIPS)  
 Soil Map Unit Name: CaBz NWI classification: -

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (if needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks: <p align="center">wetland point for 01-WHS-19 PFO</p>			

**HYDROLOGY**

Standard Hydrology Indicators: Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/>	Ancillary Indicators (minimum two required): Aquatic Plant Growth (C1) <input type="checkbox"/> Muck Deposits (C15) (LRR U) <input type="checkbox"/> Hydrogen Sulfide Odor (C2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tillar Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/>	Corroborative Indicators (minimum two required): Spring Pools (D1) <input type="checkbox"/> Sparse Vegetation on Convex Surface (D8) <input type="checkbox"/> Drainage Patterns (D10) <input type="checkbox"/> Moss Trim Lines (D16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C9) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C5) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input checked="" type="checkbox"/> Sphagnum Moss (D8) (LRR U, U) <input type="checkbox"/>
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Field Observations:  
 Surface Water Present? Yes  No  Depth (inches): 0  
 Water Table Present? Yes  No  Depth (inches): 0  
 Saturation Present? Yes  No  Depth (inches): 0  
 (includes capillary fringe)

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Four Strata) - Use scientific names of plants.**

Sampling Point: 01-Wks-37

**Tree Stratum** (Plot size: 30 ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Betula nigra</u>	<u>15</u>	<u>X</u>	<u>FACW</u>
2. <u>Acer rubrum</u>	<u>5</u>	<u>X</u>	<u>EM</u>
3.			
4.			
5.			
6.			
7.			
8.			

20 = Total Cover  
50% of total cover: 10      20% of total cover: 5

**Sapling/Shrub Stratum** (Plot size: 15)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Cephalanthus occidentalis</u>	<u>30</u>	<u>X</u>	<u>OBL</u>
2.			
3.			
4.			
5.			
6.			
7.			
8.			

30 = Total Cover  
50% of total cover: 15      20% of total cover: 6

**Herb Stratum** (Plot size:           )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

           = Total Cover  
50% of total cover:                 20% of total cover:           

**Woody Vine Stratum** (Plot size: 5)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Packeria glabella</u>	<u>10</u>	<u>X</u>	<u>OBL</u>
2.			
3.			
4.			
5.			

10 = Total Cover  
50% of total cover: 5      20% of total cover: 2

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (AB)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>          </u>	x 1 = <u>          </u>
FACW species <u>          </u>	x 2 = <u>          </u>
FAC species <u>          </u>	x 3 = <u>          </u>
FACU species <u>          </u>	x 4 = <u>          </u>
UPL species <u>          </u>	x 5 = <u>          </u>
Column Totals: <u>          </u> (A)	<u>          </u> (B)

Prevalence Index = B/A =           

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

3 - Prevalence Index is >3.0

Problematic Hydrophytic Vegetation? (Explain)

Indicator of hydrophytic soils. Wetland hydrophytic soil present, unless disturbed or problematic.

**Definitions of Four Vegetation Strata:**

**Tree** - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/shrub** - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

**Herb** - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody Vine** - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes X      No           

Remarks: (If observed, list morphological adaptations below.)

**SOIL**

Sampling Point: 01WMS-31

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-19	10YR 5/2	85	7.5YR 4/6	15	C	M	S.C.	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Barrier Islands 1 cm Muck (S12)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> (MLRA 153B, 153D)	<input type="checkbox"/> Coast Prairie Redox (A16)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> (outside MLRA 150A)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> (outside MLRA 150A, 150B)	
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, T)	
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> (MLRA 153B)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Muck (F10) (LRR U)	<input type="checkbox"/> Red Parent Material (F21)	
<input type="checkbox"/> Thick Dark Surface (A14)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 150A)	<input type="checkbox"/> Very Shallow Dark Surface (F22)	
<input type="checkbox"/> Coastal Prairie Redox (A16) (LRR S, T, U)	<input type="checkbox"/> Iron Accumulated Matrix (F12) (LRR O, P, T)	<input type="checkbox"/> (MLRA 150A, 150B, 150C, 150D, 150E, 150F, 150G, 150H, 150I, 150J, 150K, 150L, 150M, 150N, 150O, 150P, 150Q, 150R, 150S, 150T, 150U, 150V, 150W, 150X, 150Y, 150Z)	
<input type="checkbox"/> Sandy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Ustic Surface (E13) (LRR S, T, U)	<input type="checkbox"/> Sandy Mucky Low Chroma Matrix (TS7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 150A)	<input type="checkbox"/> (MLRA 153B, 153D)	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)		
<input type="checkbox"/> Dark Surface (S7) (LRR S, T, U)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)		
<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> (MLRA 149A, 153C, 153D)		
	<input type="checkbox"/> Very-Shallow Dark Surface (F22) (MLRA 138, 152A in FL, 154)		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present?      Yes       No

Remarks:



## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Song Sparrow Solar City/County: Paducah/Ballard Sampling Date: 2-24-23  
 Applicant/Owner: Clearway State: KY Sampling Point: 01-W-95-38  
 Investigator(s): CK, SK Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): Linear Local relief (concave, convex, nons): Concave Slope (%): 2  
 Subregion (LRR or MLRA): LRRP Lat: 37.026758 Long: -98.714745 Datum: NAD 83 (K)  
 Soil Map Unit Name: V6 NWI classification: \_\_\_\_\_  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks:  <div style="text-align: center; font-size: 1.2em;">             wetland point for - 01-W-20              PEM           </div>	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1)      _____ Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2)      _____ Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3)      _____ Hydrogen Sulfide Odor (C1) _____ Water Marks (B1)      _____ Oxidized Rhizospheres along Living Roots (C3) _____ Sediment Deposits (B2)      _____ Presence of Reduced Iron (C4) _____ Drift Deposits (B3)      _____ Recent Iron Reduction in Tilled Soils (C6) <input checked="" type="checkbox"/> Algal Mat or Crust (B4)      _____ Thin Muck Surface (C7) _____ Iron Deposits (B5)      _____ Other (Explain in Remarks) _____ Inundation Visible on Aerial Imagery (B7) _____ Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) _____ Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) _____ Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

**VEGETATION (Four Strata) – Use scientific names of plants.**

Sampling Point: 01-LWS-36

**Tree Stratum** (Plot size: \_\_\_\_\_ )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling/Shrub Stratum** (Plot size: \_\_\_\_\_ )

1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5 ft )

1.	<u>Juncus effusus</u>	<u>20</u>	<u>x</u>	<u>FACW</u>
2.	<u>Typha latifolia</u>	<u>46</u>	<u>x</u>	<u>OBL</u>
3.	<u>Andropogon virginicus</u>	<u>20</u>	<u>x</u>	<u>FAC</u>
4.	<u>Elymus riparius</u>	<u>15</u>		<u>FACW</u>
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

95 = Total Cover  
 50% of total cover: 47.5 20% of total cover: 19

**Woody Vine Stratum** (Plot size: \_\_\_\_\_ )

1.			
2.			
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is  $\leq 3.0^1$

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Four Vegetation Strata:**

**Tree** – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/Shrub** – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody vine** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (If observed, list morphological adaptations below).



**SOIL**

Sampling Point: 01-L-MS-38

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 5/2	70	7.5YR 4/6	10	C	M	SC	
	10YR 5/3	70						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)	
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)	
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)		
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)		
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)		
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)		
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)		
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)			

Restrictive Layer (if observed):  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes + No \_\_\_\_\_

Remarks:

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Song Sparrow Solar City/County: Paducah/Ballard Sampling Date: 2-24-23  
 Applicant/Owner: Cleanway State: KY Sampling Point: 01-WA-31  
 Investigator(s): CK SK Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 2  
 Subregion (LRR or MLRA): LRRP Lat: 37.076713 Long: -86.914703 Datum: NAD 83 (K)  
 Soil Map Unit Name: J6 NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks:  <u>Upland point for 01-W-70</u>	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	



VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: 01-WAS-37

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: _____ )				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
	_____ = Total Cover			
	50% of total cover: _____		20% of total cover: _____	
<b>Sapling/Shrub Stratum</b> (Plot size: _____ )				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
	_____ = Total Cover			
	50% of total cover: _____		20% of total cover: _____	
<b>Herb Stratum</b> (Plot size: <u>5ft</u> )				
1.	<u>Andropogon virginicus</u>	<u>25</u>	<u>X</u>	<u>FAC</u>
2.	<u>Rubus arvensis</u>	<u>15</u>		<u>FAC</u>
3.	<u>Glycerh max</u>	<u>30</u>	<u>X</u>	<u>UPL</u>
4.	<u>Lemnit pharparium</u>	<u>10</u>		<u>UPL</u>
5.	<u>Rumex crispus</u>	<u>5</u>		<u>FAC</u>
6.				
7.				
8.				
9.				
10.				
11.				
12.				
	_____ = Total Cover			
	50% of total cover: <u>42.5</u>		20% of total cover: <u>17</u>	
<b>Woody Vine Stratum</b> (Plot size: _____ )				
1.				
2.				
3.				
4.				
5.				
	_____ = Total Cover			
	50% of total cover: _____		20% of total cover: _____	
<b>Remarks:</b> (If observed, list morphological adaptations below).				

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Four Vegetation Strata:**

**Tree** – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/Shrub** – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody vine** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No X

SOIL

Sampling Point: 01-UH3-31

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 5/4	80	7.5YR 4/6	10	C	M	S.C	
	10YR 0/2	10						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Belland Sampling Date: 2-30-23  
 Applicant/Owner: Cleaving State: Ky Sampling Point: 03-WH5-21  
 Investigator(s): CK HL Section, Township, Range: NH  
 Landform (hillslope, terrace, etc.): Level Local relief (concave, convex, none): Concave Slope (%) 1  
 Subregion (LRR or MLRA): LRRP Lat. 37.026944 Long: -88.923484 Datum: NAD83/115  
 Soil Map Unit Name: Lpc3 NWI classification: NH

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks: <p align="center" style="font-size: 1.2em;">wetland point for 03-W-11 PFO</p>		

**HYDROLOGY**

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input checked="" type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Sphagnum moss (D6) (LRR T, U)

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>5</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

**VEGETATION (Five Strata) – Use scientific names of plants**

Sampling Point: D3-W173-21

**Tree Stratum** (Plot size: 30)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ulmus americana</u>	<u>30</u>	<u>X</u>	<u>FACW</u>
2. <u>Acer negundo</u>	<u>30</u>	<u>X</u>	<u>FAC</u>
3. <u>Celtis laevigata</u>	<u>10</u>		<u>FACW</u>
4.			
5.			
6.			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

70 = Total Cover  
50% of total cover: 35 20% of total cover: 14

**Sapling Stratum** (Plot size: 15)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ulmus americana</u>	<u>10</u>	<u>X</u>	<u>FACW</u>
2. <u>Celtis laevigata</u>	<u>15</u>	<u>X</u>	<u>FACW</u>
3.			
4.			
5.			
6.			

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

25 = Total Cover  
50% of total cover: 12.5 20% of total cover: 5

**Shrub Stratum** (Plot size: \_\_\_\_\_)

1.			
2.			
3.			
4.			
5.			
6.			

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Skullcap media</u>	<u>5</u>	<u>X</u>	<u>FACU</u>
2. <u>Carex vulpocarpa</u>	<u>5</u>	<u>X</u>	<u>FACW</u>
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

10 = Total Cover  
50% of total cover: 5 20% of total cover: 2

**Woody Vine Stratum** (Plot size: \_\_\_\_\_)

1.			
2.			
3.			
4.			
5.			

Hydrophytic Vegetation Present? Yes X No \_\_\_\_\_

Remarks: (If observed, list morphological adaptations below)



SOIL

Sampling Point: 03-WHS-21

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR 5/2	85	5YR 4/6	15	C	M		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>2</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A, B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	<sup>2</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbria Surface (F13) (LRR P, T, U)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)		

Restrictive Layer (if observed):  
 Type: Roots  
 Depth (inches): 12

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site Song Sparrow Solar City/County Ballard Sampling Date 3/2/23  
 Applicant/Owner Classway State ky Sampling Point 03-W-11  
 Investigator(s) CK HL Section, Township, Range NT  
 Landform (hillslope, terrace, etc.) hillslope Local relief (concave, convex, none) concave Slope (%) 2  
 Subregion (LRR or MLRA) LRRP Lat 37.026760 Long -86.923034 Datum NAD83 k, f, p.  
 Soil Map Unit Name LpC3 NWI classification: NT

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation  Soil  or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil  or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:  <p align="center" style="font-size: 1.2em;">upland point for 03-W-11</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required, check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	



**VEGETATION (Five Strata) – Use scientific names of plants**

Sampling Point: 03-v-AS-22

**Tree Stratum** (Plot size: 2\*)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ulmus americana</u>	<u>15</u>	<u>X</u>	<u>FACW</u>
2. <u>Acer rubrum</u>	<u>25</u>	<u>X</u>	<u>FAC</u>
3. <u>Quercus alba</u>	<u>20</u>	<u>X</u>	<u>FACU</u>
4. <u>Celtis occidentalis</u>	<u>10</u>		<u>FACU</u>
5.			
6.			

70 = Total Cover

50% of total cover: 35 20% of total cover: 14

**Sapling Stratum** (Plot size: 15)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ulmus americana</u>	<u>10</u>	<u>X</u>	<u>FACW</u>
2. <u>Acer rubrum</u>	<u>10</u>	<u>X</u>	<u>FAC</u>
3.			
4.			
5.			
6.			

70 = Total Cover

50% of total cover: 10 20% of total cover: 4

**Shrub Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: 5 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Cardamine hirsuta</u>	<u>15</u>	<u>X</u>	<u>FACU</u>
2. <u>Stellaria media</u>	<u>15</u>	<u>X</u>	<u>FACU</u>
3. <u>Conium maculatum</u>	<u>15</u>	<u>X</u>	<u>FACU</u>
4. <u>Allium vineale</u>	<u>15</u>	<u>X</u>	<u>FACU</u>
5.			
6.			
7.			
8.			
9.			
10.			
11.			

60 = Total Cover

50% of total cover: 30 20% of total cover: 12

**Woody Vine Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 9 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 44 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

\_\_\_ 1 - Rapid Test for Hydrophytic Vegetation

\_\_\_ 2 - Dominance Test is >50%

\_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup>

\_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No X

Remarks: (If observed, list morphological adaptations below)

SOIL

Sampling Point: 03-WAS-22

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR5H	100					S.C	
10-18	10YR 5/4	70					S.C	
	10YR 5/3	30						

- <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.
- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)
- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)   |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)  |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                                       | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)   |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Other (Explain in Remarks)   |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |   |

Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site Song Sparrow Saline City/County Ballard Sampling Date: 3-2-23  
 Applicant/Owner: Clearing State: KY Sampling Point: 03-W195-23  
 Investigator(s): CK UL Section, Township, Range: NH  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Concave Slope (%): 3  
 Subregion (LRR or MLRA): LRRP Lat: 37.029387 Long: -85.925209 Datum: NAD83  
 Soil Map Unit Name: LpD3 NWI classification: NH

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Remarks:  
 upland point for 03-W-12

**HYDROLOGY**

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)
		<input type="checkbox"/> Sphagnum moss (D6) (LRR T, U)

Field Observations:  
 Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes  No  Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



VEGETATION (Five Strata) – Use scientific names of plants

Sampling Point: 03-WAS-23

**Tree Stratum** (Plot size: 30)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ulmus americana</u>	<u>30</u>	<u>X</u>	<u>FAC</u>
2. <u>Platanus occidentalis</u>	<u>20</u>	<u>X</u>	<u>FACW</u>
3. <u>Acer rubrum</u>	<u>30</u>	<u>X</u>	<u>FAC</u>
4.			
5.			
6.			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 87 (A/B)

50% of total cover: 40 20% of total cover: 10

**Sapling Stratum** (Plot size: 15)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Fragaria pennsylvanica</u>	<u>20</u>	<u>X</u>	<u>FACW</u>
2. <u>Ulmus americana</u>	<u>15</u>	<u>X</u>	<u>FAC</u>
3.			
4.			
5.			
6.			

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_

FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_

FAC species \_\_\_\_\_ x 3 = \_\_\_\_\_

FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_

UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_

Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B)

Prevalence Index = B/A = \_\_\_\_\_

50% of total cover: 17.5 20% of total cover: 7

**Shrub Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Lonicera japonica</u>	<u>15</u>	<u>X</u>	<u>FACU</u>
2. <u>Andropogon virginicus</u>	<u>5</u>	<u>X</u>	<u>FAC</u>
3. <u>Toxicodendron radicans</u>	<u>5</u>	<u>X</u>	<u>FAC</u>
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

\_\_\_\_\_ = Total Cover

50% of total cover: 12.5 20% of total cover: 5

**Woody Vine Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			

Hydrophytic Vegetation Present? Yes X No \_\_\_\_\_

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: 03-WHS-23

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR5/2	90	5Y2/6	10	C	M	S-C	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Della Ochric (F17) (MLRA 151)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Sony Sparrow Sater City/County: Bullard Sampling Date: 3-2-23  
 Applicant/Owner: Clearyway State: Ky Sampling Point: 03-WAS-24  
 Investigator(s): CK HL Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): Linear / face slope Local relief (concave, convex, none): CONCAVE Slope (%): 1  
 Subregion (LRR or MLRA): LRRP Lat: 37.029427 Long: -88.925336 Datum: NAD83  
 Soil Map Unit Name: LpD3 NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation  Soil  or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil  or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks: <p align="center" style="font-size: 1.2em;">Wetland points for 03-W-12 PFO</p>			

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p><u>Primary Indicators (minimum of one is required, check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)      <input type="checkbox"/> Aquatic Fauna (B13)  <input type="checkbox"/> High Water Table (A2)      <input type="checkbox"/> Marl Deposits (B15) (LRR U)  <input checked="" type="checkbox"/> Saturation (A3)      <input type="checkbox"/> Hydrogen Sulfide Odor (C1)  <input type="checkbox"/> Water Marks (B1)      <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)  <input type="checkbox"/> Sediment Deposits (B2)      <input type="checkbox"/> Presence of Reduced Iron (C4)  <input type="checkbox"/> Drift Deposits (B3)      <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)  <input type="checkbox"/> Algal Mat or Crust (B4)      <input type="checkbox"/> Thin Muck Surface (C7)  <input type="checkbox"/> Iron Deposits (B5)      <input type="checkbox"/> Other (Explain in Remarks)  <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)  <input checked="" type="checkbox"/> Water-Stained Leaves (B9)</p>	<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input type="checkbox"/> Surface Soil Cracks (B6)  <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)  <input checked="" type="checkbox"/> Drainage Patterns (B10)  <input type="checkbox"/> Moss Trim Lines (B16)  <input type="checkbox"/> Dry-Season Water Table (C2)  <input type="checkbox"/> Crayfish Burrows (C8)  <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)  <input checked="" type="checkbox"/> Geomorphic Position (D2)  <input type="checkbox"/> Shallow Aquitard (D3)  <input checked="" type="checkbox"/> FAC-Neutral Test (D5)  <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)</p>
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<p><b>Field Observations:</b></p> <p>Surface Water Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____          Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____          Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>5</u>          (includes capillary fringe)</p>	<p>Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Five Strata) – Use scientific names of plants**

Sampling Point: 63-1015 24

**Tree Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Alnus incana</u>	<u>10</u>		<u>FAC</u>
2. <u>Prunus serotina</u>	<u>15</u>	<u>X</u>	<u>FACU</u>
3. <u>Quercus glabra</u>	<u>10</u>		<u>FACU</u>
4. <u>Quercus falcata</u>	<u>20</u>	<u>X</u>	<u>FACU</u>
5. <u>Carya glabra</u>	<u>20</u>	<u>X</u>	<u>FACU</u>
6. _____			

75 = Total Cover  
50% of total cover: 37.5 20% of total cover: 15

**Sapling Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Quercus falcata</u>	<u>10</u>	<u>X</u>	<u>FACU</u>
2. <u>Celtis occidentalis</u>	<u>10</u>	<u>X</u>	<u>FACW</u>
3. <u>Acer rubrum</u>	<u>20</u>	<u>X</u>	<u>FAC</u>
4. <u>Prunus serotina</u>	<u>10</u>	<u>X</u>	<u>FACU</u>
5. _____			
6. _____			

50 = Total Cover  
50% of total cover: 25 20% of total cover: 10

**Shrub Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Lonicera japonica</u>	<u>30</u>	<u>X</u>	<u>FAC</u>
2. <u>Cardinalis maritima</u>	<u>5</u>		<u>FACU</u>
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			

35 = Total Cover  
50% of total cover: 17.5 20% of total cover: 7

**Woody Vine Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 37 (AVB)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is  $\leq 3.0^1$
- Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No X

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: 03-WHS-24

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type	Loc		
0-18	10YR 4/3	160					Sandy Clay loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A, B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)		

Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Keokuk / Ballard Sampling Date: 02/20/23  
 Applicant/Owner: Clearway Renewables State: IA Sampling Point: 02-W-01  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): dip Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR or MLRA): LRR Lat: 37.018962 Long: -88.864397 Datum: NAD83(NAVFIPS)  
 Soil Map Unit Name: GsB3 NWI classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <u>Wetland point paired with 02-W-01</u>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>3</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	



VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: OZ-WAS-01

Tree Stratum (Plot size: <u>30 ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____				
3. <u>N/A</u>				
4. _____				
5. _____				
6. _____				
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
50% of total cover: _____		20% of total cover: _____		
Sapling Stratum (Plot size: <u>15 ft</u> )				
1. _____				
2. _____				
3. <u>N/A</u>				
4. _____				
5. _____				
6. _____				
_____ = Total Cover				Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is $\leq 3.0$ <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: _____		20% of total cover: _____		
Shrub Stratum (Plot size: <u>15 ft</u> )				
1. _____				
2. _____				
3. <u>N/A</u>				
4. _____				
5. _____				
6. _____				
_____ = Total Cover				Definitions of Five Vegetation Strata:  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.
50% of total cover: _____		20% of total cover: _____		
Herb Stratum (Plot size: <u>5 ft</u> )				
1. <u>Panicum dichotomiflorum</u>	<u>60</u>	<u>Y</u>	<u>FACW</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
_____ = Total Cover				
50% of total cover: <u>30</u>		20% of total cover: <u>17.0</u>		
Woody Vine Stratum (Plot size: <u>20 ft</u> )				
1. _____				
2. _____				
3. <u>N/A</u>				
4. _____				
5. _____				
_____ = Total Cover				
50% of total cover: _____		20% of total cover: _____		
Remarks: (If observed, list morphological adaptations below).				
			Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	

**SOIL**

Sampling Point: 02-WAS-01

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10 YR 5/2	90	5 2.5Y 5/8	8	C	M	S.C	
			10 YR 2/1	2	C	M	S.C	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12) (LRR T, U)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: N/A  
 Depth (inches): N/A

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Hevil/Ballard Sampling Date: 02/20/23  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 02-WAS-02  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): irisc Local relief (concave, convex, none): convex Slope (%): 1  
 Subregion (LRR or MLRA): LRRP Lat: 37.08940 Long: -88.864362 Datum: NAD83/FIT  
 Soil Map Unit Name: G3B3 NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Upland point paired with 02-w-01</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Four Strata) – Use scientific names of plants.**

Sampling Point: OZ-WAS-02

**Tree Stratum** (Plot size: 30ft )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>15ft</u>		
4.			
5.			
6.			
7.			
8.			

=Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling/Shrub Stratum** (Plot size: 15ft )

1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
6.			
7.			
8.			

=Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5 )

1.	<u>Rumex crispus</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
2.	<u>Lamium amplexicaule</u>	<u>10</u>	<input type="checkbox"/>	<u>UPL</u>
3.	<u>Allium vineale</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FAUC</u>
4.	<u>N/A</u>			
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

=Total Cover 35

50% of total cover: 22.5 20% of total cover: 9.0

**Woody Vine Stratum** (Plot size: 30ft )

1.			
2.			
3.	<u>N/A</u>		
4.			
5.			

=Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

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**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>70</u>	x 3 = <u>60</u>
FACU species <u>15</u>	x 4 = <u>60</u>
UPL species <u>10</u>	x 5 = <u>50</u>
Column Totals: <u>45</u> (A)	<u>170</u> (B)
Prevalence Index = B/A = <u>3.7</u>	

**Hydrophytic Vegetation Indicators:**

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

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<sup>1</sup>Indicators of toxic soil and sediment hydrology must be present, unless disturbed or prohibitive.

**Definitions of Four Vegetation Strata:**

**Tree** – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/Shrub** – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody Vine** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No

Remarks: (If observed, list morphological adaptations below.)



**SOIL**

Sampling Point: OZ-WAS-02

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10 YR 4/4	100					Sic	
4-12	10 YR 5/3	95	10 YR 6/1	5	C	M	Sic	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12) (LRR T, U)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: compacted  
 Depth (inches): 12

Hydric Soil Present? Yes  No

**Remarks:**

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Kevil / Ballard Sampling Date: 02/20/23  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 02-WAS-03  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): dip Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR or MLRA): LRRN Lat: 37.019623 Long: -88.868185 Datum: NAD83(KYFIP)  
 Soil Map Unit Name: G5B3 NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Wetland point paired with 02-W-02</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
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<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>2</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>3</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>4</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION – Use scientific names of plants.**

Sampling Point: 02-16-03

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>30ft</u> )				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B) $\frac{2}{100}$  Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
1.				
2.				
3.				
4.				
5.				
6.				
<b>Sapling Stratum</b> (Plot size: <u>15ft</u> )				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
1.				
2.				
3.				
4.				
5.				
6.				
<b>Shrub Stratum</b> (Plot size: <u>15ft</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1.	<u>60</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
2.				
3.				
4.				
5.				
6.				
<b>Herb Stratum</b> (Plot size: <u>30ft</u> )				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.
1.	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
<b>Woody Vine Stratum</b> (Plot size: <u>30ft</u> )				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
1.				
2.				
3.				
4.				
_____ = Total Cover				
_____ = Total Cover				
Remarks: (If observed, list morphological adaptations below).				

**SOIL**

Sampling Point: 02-WAS-03

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR 5/2	90	7.5 YR 5/8	10	C	M	S:L	
8-18	10YR 5/2	90	7.5 YR 5/8	7	C	M	S:C	
		3	10YR 2/1	3	C	M	S:C	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

- |  |   |
|--|---|
| <b>Hydric Soil Indicators:</b>   | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>   |
| <input type="checkbox"/> Histosol (A1)<br><input type="checkbox"/> Histic Epipedon (A2)<br><input type="checkbox"/> Black Histic (A3)<br><input type="checkbox"/> Hydrogen Sulfide (A4)<br><input type="checkbox"/> Stratified Layers (A5)<br><input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)<br><input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)<br><input type="checkbox"/> Muck Presence (A8) (LRR U)<br><input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)<br><input type="checkbox"/> Depleted Below Dark Surface (A11)<br><input type="checkbox"/> Thick Dark Surface (A12)<br><input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)<br><input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)<br><input type="checkbox"/> Sandy Gleyed Matrix (S4)<br><input type="checkbox"/> Sandy Redox (S5)<br><input type="checkbox"/> Stripped Matrix (S6)<br><input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)<br><input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)<br><input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)<br><input checked="" type="checkbox"/> Loamy Gleyed Matrix (F2)<br><input type="checkbox"/> Depleted Matrix (F3)<br><input type="checkbox"/> Redox Dark Surface (F6)<br><input type="checkbox"/> Depleted Dark Surface (F7)<br><input type="checkbox"/> Redox Depressions (F8)<br><input type="checkbox"/> Marl (F10) (LRR U)<br><input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)<br><input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)<br><input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)<br><input type="checkbox"/> Delta Ochric (F17) (MLRA 151)<br><input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)<br><input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)<br><input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12) (LRR T, U)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): N/A

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Naval/Ballard Sampling Date: 02/20/23  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 02-WAS-04  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): rise Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR or MLRA): LRR P Lat: 37.019597 Long: -80.868170 Datum: WAD83 (NAD83)  
 Soil Map Unit Name: GsB3 NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">upland point paired with 02-W-02</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 02-WAS-04

**Tree Stratum** (Plot size: 30)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>NA</u>		
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling Stratum** (Plot size: 15)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>NA</u>		
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Shrub Stratum** (Plot size: 15)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>NA</u>		
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5)

	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>5</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
2.	<u>70</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
3.	<u>10</u>		<u>FACU</u>
4.	<u>5</u>		<u>UPL</u>
5.			
6.			
7.			
8.			
9.			
10.			
11.			

\_\_\_\_\_ = Total Cover  
50% of total cover: 45 20% of total cover: 18

**Woody Vine Stratum** (Plot size: \_\_\_\_\_)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.	<u>N/A</u>		
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_

FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_

FAC species \_\_\_\_\_ x 3 = \_\_\_\_\_

FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_

UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_

Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No

Remarks: (If observed, list morphological adaptations below).

**SOIL**

Sampling Point: 02-WAS-04

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR4/4	100					S: C	
4-16	10YR4/2	95	10YR5/6	5	C	M	S: C	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)                         |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)                        |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)     |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input checked="" type="checkbox"/> Loamy Gleyed Matrix (F2)                        | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                                       | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B) |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)                      |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)               |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Other (Explain in Remarks)                     |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  |   |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |   |

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: Compacted  
 Depth (inches): 16

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Keuil/Ballard Sampling Date: 02/01/23  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 02-WAS-05  
 Investigator(s): M. Johnson Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): dip Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR or MLRA): LRRP Lat: 37.019684 Long: 88.870297 Datum: NAD83/USFEPS  
 Soil Map Unit Name: G5B3 NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Wetland point paired with 02-W-03</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input checked="" type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>2</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>3</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>3</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: OZ-WAS-05

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>30 ft</u> )				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1.				
2.				
3.				
4.				
5.				
6.				
_____ = Total Cover				
50% of total cover: _____		20% of total cover: _____		
<b>Sapling Stratum</b> (Plot size: <u>15 ft</u> )				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
1.				
2.				
3.				
4.				
5.				
6.				
_____ = Total Cover				
50% of total cover: _____		20% of total cover: _____		
<b>Shrub Stratum</b> (Plot size: <u>15 ft</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1.				
2.				
3.				
4.				
5.				
6.				
_____ = Total Cover				
50% of total cover: _____		20% of total cover: _____		
<b>Herb Stratum</b> (Plot size: <u>5 ft</u> )				<b>Definitions of Five Vegetation Strata:</b>  <b>Tree</b> -- Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> -- Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> -- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> -- All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> -- All woody vines, regardless of height.
1.	<u>Agrostis stolonifera</u>	<u>60</u>	<input checked="" type="checkbox"/> <u>FACW</u>	
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
_____ = Total Cover				
50% of total cover: _____		20% of total cover: _____		
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft</u> )				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1.				
2.				
3.				
4.				
5.				
_____ = Total Cover				
50% of total cover: _____		20% of total cover: _____		
Remarks: (If observed, list morphological adaptations below).				

**SOIL**

Sampling Point: 02-WA3-05

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-15	10 YR 5/2	90	10 YR 4/8	8	C	M	Silt	
		C 2	10 YR 2/1					

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)   |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)  |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                | <input checked="" type="checkbox"/> Depleted Matrix (F3)                            | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)   |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Other (Explain in Remarks)   |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |   |

**Restrictive Layer (if observed):**

Type: Compacted  
 Depth (inches): 15

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Field Sparrow City/County: Hevil / Ballard Sampling Date: 02/20/23  
 Applicant/Owner: Clearway Rene State: KY Sampling Point: 02-WAS-06  
 Investigator(s): M. Johnson, M Angel Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): none Slope (%): 2  
 Subregion (LRR or MLRA): LRRP Lat: 37.019665 Long: 88.970336 Datum: \_\_\_\_\_  
 Soil Map Unit Name: G5B3 NWI classification: U/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Upland point paired with 02-w-03</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1)                      ___ Water-Stained Leaves (B9) ___ High Water Table (A2)                      ___ Aquatic Fauna (B13) ___ Saturation (A3)                              ___ Marl Deposits (B15) (LRR U) ___ Water Marks (B1)                            ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2)                      ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3)                            ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4)                        ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5)                            ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7)    ___ Other (Explain in Remarks)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Sparsely Vegetated Concave Surface (B8) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ FAC-Neutral Test (D5)
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<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION** – Use scientific names of plants.

Sampling Point: 02-1015-06

Tree Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
6.			
7.			

Sapling Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
6.			
7.			

Shrub Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
6.			
7.			

Herb Stratum (Plot size: <u>5ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Woody Vine Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			

Remarks: (If observed, list morphological adaptations below).

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No

**SOIL**

Sampling Point: 02-WAS-06

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR 5/4	100	<u>—————</u>				6:1C	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.     <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12) (LRR T, U)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: compacted  
 Depth (inches): 14

Hydric Soil Present?    Yes \_\_\_\_\_    No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Kezil/Ballard Sampling Date: 02/20/23  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 02-WA907  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): dis Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR or MLRA): LRBP Lat: 37.019445 Long: -88.871347 Datum: NAD83(WA42RS)  
 Soil Map Unit Name: FA NWI classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Wetland point paired with 02-W-04</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required: check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1 in</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 02-WAS-07

Tree Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Sapling Stratum (Plot size: <u>15</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.	<u>N/A</u>		
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Shrub Stratum (Plot size: <u>15</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.	<u>N/A</u>		
5.			
6.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Herb Stratum (Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Panicum dichotomiflorum</u>	<u>BS</u>	<u>✓ FACW</u>
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Woody Vine Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Remarks: (If observed, list morphological adaptations below).

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = \_\_\_\_\_

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is ≤3.0<sup>1</sup>
- Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No

**SOIL**

Sampling Point: 02-WAS-07

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 4/1	95	10YR 5/1A	5	C	PL	SiC	
4-10	10YR 5/1	90	10YR 5/5	10	C	M	SC	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)		

**Restrictive Layer (if observed):**  
 Type: hard pan  
 Depth (inches): 10

Hydric Soil Present?    Yes     No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Kevil/Ballard Sampling Date: 02-20-23  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 02-WAS-08  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): Rise Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR or MLRA): LRRP Lat: 37.019444 Long: -88.871318 Datum: NAD83(NAEPS)  
 Soil Map Unit Name: Fa NWI classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <u>Upland point paired with 01-WAS-04</u>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required: check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 02-WAS-08

**Tree Stratum** (Plot size: 30)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling Stratum** (Plot size: 15)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Shrub Stratum** (Plot size: 15)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: 35 20% of total cover: 140

**Woody Vine Stratum** (Plot size: 30)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			

Remarks: (If observed, list morphological adaptations below).

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = \_\_\_\_\_

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is ≤3.0<sup>1</sup>
  - Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No

**SOIL**

Sampling Point: 02-WAS-08

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR 4/3	100					Bic	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)		

**Restrictive Layer (if observed):**  
 Type: compacted  
 Depth (inches): 10

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Keokuk/Ballard Sampling Date: 02-21-23  
 Applicant/Owner: Clearway Renewables State: IA Sampling Point: 02-WAS-09  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: 111A  
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR or MLRA): LRR Lat: 37.018425 Long: -88.871297 Datum: NAD83(NAIP)  
 Soil Map Unit Name: Fa NWI classification: U1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em; color: blue;">Wetland point paired with 02-WET-05</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
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<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
possible sinkhole wetland



**VEGETATION** – Use scientific names of plants.

Sampling Point: 02-VAS-01

Tree Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1.				
2.				
3.				
4.				
5.				
6.				
7.				
= Total Cover				
Sapling Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1.				
2.				
3.				
4.				
5.				
6.				
7.				
= Total Cover				
Shrub Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1.				
2.				
3.				
4.				
5.				
6.				
7.				
= Total Cover				
Herb Stratum (Plot size: <u>5ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
= Total Cover				
Woody Vine Stratum (Plot size: <u>30ft</u> )				
1.				
2.				
3.				
4.				
5.				
= Total Cover				

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of: \_\_\_\_\_ Multiply by: \_\_\_\_\_

OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_

FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_

FAC species \_\_\_\_\_ x 3 = \_\_\_\_\_

FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_

UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_

Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (If observed, list morphological adaptations below).



**SOIL**

Sampling Point: 02-WAS-09

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-5	2.5Y 5/2	95	2.5Y 6/6	5	C	M	S.C	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12) (LRR T, U)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: Gravel  
 Depth (inches): 5

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Kent/Ballard Sampling Date: 02-21-23  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 02-WAS-10  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): dep Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR or MLRA): Depression Lat: 37.018448 Long: -88.871346 Datum: NAD83(WLIFIP)  
 Soil Map Unit Name: Fa NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Upland point paired with 02-W-05</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required: check all that apply)	<b>Secondary Indicators (minimum of two required)</b>
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION – Use scientific names of plants.**

Sampling Point: 02-WAS-10

Tree Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
_____ = Total Cover			
Sapling Stratum (Plot size: <u>15</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
_____ = Total Cover			
Shrub Stratum (Plot size: <u>15</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
_____ = Total Cover			
Herb Stratum (Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
_____ = Total Cover			
Woody Vine Stratum (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
_____ = Total Cover			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

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**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = \_\_\_\_\_

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**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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**Definitions of Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

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**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No

Remarks: (If observed, list morphological adaptations below).

**SOIL**

Sampling Point: 02-WA9-10

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	2.5 Y R	100	<del>_____</del>				S, C	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: Compacted

Depth (inches): 10

Hydric Soil Present?    Yes \_\_\_\_\_    No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Kevin/ Ballard Sampling Date: 02-21-23  
 Applicant/Owner: Clearway Renewables State: VA Sampling Point: 02-WAS-11  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): toe slope Local relief (concave, convex, none): concave Slope (%): 2  
 Subregion (LRR or MLRA): LRRP Lat: 37.013091 Long: -88.873248 Datum: WADSWORTH (1983)  
 Soil Map Unit Name: Fa NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em; color: blue;">Wetland point paired with 02-w-07</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required: check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>10 in</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>3 in</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION – Use scientific names of plants.**

Sampling Point: OZ-WAS-11

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>30ft</u> )				
1.				
2.				
3.	<u>N/A</u>			
4.				
5.				
6.				
7.				
				_____ = Total Cover
<b>Sapling Stratum</b> (Plot size: <u>15ft</u> )				
1.				
2.				
3.	<u>N/A</u>			
4.				
5.				
6.				
7.				
				_____ = Total Cover
<b>Shrub Stratum</b> (Plot size: <u>15ft</u> )				
1.	<u>15</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	<u><i>Salix nigra</i></u>
2.				
3.				
4.				
5.				
6.				
7.				
				_____ = Total Cover
<b>Herb Stratum</b> (Plot size: <u>5ft</u> )				
1.	<u>15</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	<u><i>Ludwigia alternifolia</i></u>
2.	<u>5</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	<u><i>Carex frankii</i></u>
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
				_____ = Total Cover
<b>Woody Vine Stratum</b> (Plot size: <u>30ft</u> )				
1.				
2.				
3.	<u>N/A</u>			
4.				
5.				
				_____ = Total Cover

50% 10 20% 4.0

**Remarks:** (If observed, list morphological adaptations below).

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No

**SOIL**

Sampling Point: 02-095-11

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-1	10YR 4/3	100					S:C	
1-18	10YR 5/1	85	7.5YR 3/6	10	C	M	S:C	
			7.5YR 2.5/2	5	C	C	S:C	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: N/A

Depth (inches): N/A

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: SONG SPARROW SOLAR City/County: BALLARD COUNTY Sampling Date: 2/21/23  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 02-WAS-13  
 Investigator(s): M JOHNSON, M. ANGEL Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): FLOODPLAIN Local relief (concave, convex, none): CONCAVE Slope (%): 3  
 Subregion (LRR or MLRA): LRR 1 Lat: 37.016900 Long: -88.875235 Datum: KY FIPS  
 Soil Map Unit Name: Fa NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are: Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">wetland point paired with 02-W-06</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>9</u> Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  

AREA RECENTLY BURNED, FARMING  
ACTIVITIES ONGOING



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 02-VAS-13

Tree Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>SALIX NIGRA</u>	<u>10</u>	<u>YES</u>	<u>OBL</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____

10 = Total Cover  
 50% of total cover: 5 20% of total cover: 2

Sapling Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>CELTIS LEAVAGATA</u>	<u>10</u>	<u>✓</u>	<u>FACW</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____

10 = Total Cover  
 50% of total cover: 5 20% of total cover: 2.0

Shrub Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. <u>N/A</u>	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Herb Stratum (Plot size: <u>5ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. <u>N/A</u>	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Woody Vine Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. <u>N/A</u>	_____	_____	_____
5. _____	_____	_____	_____

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = \_\_\_\_\_

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is ≤3.0<sup>1</sup>
  - Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (If observed, list morphological adaptations below).  
area recently burned

**SOIL**

Sampling Point: 02-WAS-13

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	6/3 10YR	80	4/8 2.5YR	20			SIL	
2-10	6/2 10YR	80	4/8 2.5YR	20			SIL	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

- |  |   |   |
|--|---|---|
| <b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b> |   | <b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>   |
| <input type="checkbox"/> Histosol (A1)   | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)   |
| <input type="checkbox"/> Histic Epipedon (A2)                                    | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)  |
| <input type="checkbox"/> Black Histic (A3)                                       | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                                   | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                                  | <input checked="" type="checkbox"/> Depleted Matrix (F3)                            | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)   |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)                       | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)                   | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)                              | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Other (Explain in Remarks)   |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)                               | <input type="checkbox"/> Marl (F10) (LRR U)   |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)                       | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)                                | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)                   | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)                     | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)                                | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)  | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                                    | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)                      |   |   |

**Restrictive Layer (if observed):**

Type: gravel

Depth (inches): 10

Hydric Soil Present?    Yes     No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Hevil/Ballard Sampling Date: 02-21-23  
 Applicant/Owner: Clearway Renewables State: V.Y Sampling Point: 02-WA-12  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: U/A  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): convex Slope (%): 1  
 Subregion (LRR or MLRA): LRRP Lat: 37.016249 Long: -88.875340 Datum: NAD83(NAIP)  
 Soil Map Unit Name: Fa NWI classification: U/A

Are climatic / hydrology conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Upland point paired with 02-WA-07</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <table style="width:100%; border: none;"> <tr> <td><input type="checkbox"/> Surface Water (A1)</td> <td><input type="checkbox"/> Water-Stained Leaves (B9)</td> </tr> <tr> <td><input type="checkbox"/> High Water Table (A2)</td> <td><input type="checkbox"/> Aquatic Fauna (B13)</td> </tr> <tr> <td><input type="checkbox"/> Saturation (A3)</td> <td><input type="checkbox"/> Marl Deposits (B15) (LRR U)</td> </tr> <tr> <td><input type="checkbox"/> Water Marks (B1)</td> <td><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</td> </tr> <tr> <td><input type="checkbox"/> Sediment Deposits (B2)</td> <td><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</td> </tr> <tr> <td><input type="checkbox"/> Drift Deposits (B3)</td> <td><input type="checkbox"/> Presence of Reduced Iron (C4)</td> </tr> <tr> <td><input type="checkbox"/> Algal Mat or Crust (B4)</td> <td><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</td> </tr> <tr> <td><input type="checkbox"/> Iron Deposits (B5)</td> <td><input type="checkbox"/> Thin Muck Surface (C7)</td> </tr> <tr> <td><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</td> <td><input type="checkbox"/> Other (Explain in Remarks)</td> </tr> </table>	<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<b>Secondary Indicators (minimum of two required)</b> <table style="width:100%; border: none;"> <tr><td><input type="checkbox"/> Surface Soil Cracks (B6)</td></tr> <tr><td><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</td></tr> <tr><td><input type="checkbox"/> Drainage Patterns (B10)</td></tr> <tr><td><input type="checkbox"/> Moss Trim Lines (B16)</td></tr> <tr><td><input type="checkbox"/> Dry-Season Water Table (C2)</td></tr> <tr><td><input type="checkbox"/> Crayfish Burrows (C8)</td></tr> <tr><td><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</td></tr> <tr><td><input type="checkbox"/> Geomorphic Position (D2)</td></tr> <tr><td><input type="checkbox"/> Shallow Aquitard (D3)</td></tr> <tr><td><input type="checkbox"/> FAC-Neutral Test (D5)</td></tr> </table>	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Moss Trim Lines (B16)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Crayfish Burrows (C8)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Geomorphic Position (D2)	<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)																												
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)																												
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)																												
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)																												
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)																												
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)																												
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)																												
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)																												
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)																												
<input type="checkbox"/> Surface Soil Cracks (B6)																													
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)																													
<input type="checkbox"/> Drainage Patterns (B10)																													
<input type="checkbox"/> Moss Trim Lines (B16)																													
<input type="checkbox"/> Dry-Season Water Table (C2)																													
<input type="checkbox"/> Crayfish Burrows (C8)																													
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)																													
<input type="checkbox"/> Geomorphic Position (D2)																													
<input type="checkbox"/> Shallow Aquitard (D3)																													
<input type="checkbox"/> FAC-Neutral Test (D5)																													

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION** – Use scientific names of plants.

Sampling Point: 02-VHS-12

Tree Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2. <u>N/A</u>			
3.			
4.			
5.			
6.			
7.			
_____ = Total Cover			
Sapling Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2. <u>N/A</u>			
3.			
4.			
5.			
6.			
7.			
_____ = Total Cover			
Shrub Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2. <u>N/A</u>			
3.			
4.			
5.			
6.			
7.			
_____ = Total Cover			
Herb Stratum (Plot size: <u>5ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Poa pratensis</u>	<u>90</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
_____ = Total Cover			
Woody Vine Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2. <u>N/A</u>			
3.			
4.			
5.			
_____ = Total Cover			

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: C (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)
Prevalence Index = B/A = _____	

**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No

Remarks: (If observed, list morphological adaptations below).

**SOIL**

Sampling Point: 02-WA9-12

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR5/2	90	10YR5/8	10	C	M	S.C	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12) (LRR T, U)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: Compacted  
 Depth (inches): 10

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Hevil/Ballard Sampling Date: 02-21-23  
 Applicant/Owner: Clearway Renewables State: VA Sampling Point: 02-W-06  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 3  
 Subregion (LRR or MLRA): LRRP Lat: 37.016849 Long: -88.875340 Datum: NAD83 (K4 FIP)  
 Soil Map Unit Name: Fa NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <u>Upland point paired with 02-W-06</u>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required: check all that apply)	<b>Secondary Indicators (minimum of two required)</b>
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION** – Use scientific names of plants.

Sampling Point: 02-L-14

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>30ft</u> )				
1.				
2.				
3.				
4.				N/A
5.				
6.				
7.				
				_____ = Total Cover
<b>Sapling Stratum</b> (Plot size: <u>15ft</u> )				
1.				
2.				
3.				
4.				N/A
5.				
6.				
7.				
				_____ = Total Cover
<b>Shrub Stratum</b> (Plot size: <u>15ft</u> )				
1.				
2.				
3.				
4.				N/A
5.				
6.				
7.				
				_____ = Total Cover
<b>Herb Stratum</b> (Plot size: _____)				
1.	<u>30</u>	<u>✓</u>	<u>FACU</u>	
2.	<u>10</u>	<u>✓</u>	<u>FACU</u>	
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
	<u>40</u>			= Total Cover
<b>Woody Vine Stratum</b> (Plot size: <u>30ft</u> )				
1.				
2.				
3.				N/A
4.				
5.				
	<u>20</u>		<u>20ft</u>	= Total Cover

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

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**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)
Prevalence Index = B/A = _____	

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**Hydrophytic Vegetation Indicators:**

Dominance Test is >50%

Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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**Definitions of Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No

Remarks: (If observed, list morphological adaptations below).

**SOIL**

Sampling Point: 02-0-14

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR5/3	75	10YR6/8	35	C	M	S.C.	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12) (LRR T, U)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: Gravel  
 Depth (inches): 10

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Keuil/Ballard Sampling Date: 02/23/23  
 Applicant/Owner: Clearway Renewables State: VA Sampling Point: 02-WA-15  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: 1/1A  
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 2  
 Subregion (LRR or MLRA): LRR P Lat: 37.037094 Long: 88.907444 Datum: NAD83/NTF1983  
 Soil Map Unit Name: LpD 3 NWI classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Wetland point paired with 02-W-08</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other: (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>2</u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 02-WAS-15

Tree Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Sapling Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Shrub Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.	<u>N/A</u>		
5.			
6.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Herb Stratum (Plot size: <u>6ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Pardnera gallbela</u>	<input checked="" type="checkbox"/>	<u>60</u> <u>OBL</u>
2.	<u>Agrostis stolonifera</u>	<input checked="" type="checkbox"/>	<u>20</u> <u>FACW</u>
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: 40 20% of total cover: 16.0

Woody Vine Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.	<u>N/A</u>		
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = \_\_\_\_\_

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is ≤3.0<sup>1</sup>
- Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (If observed, list morphological adaptations below).

**SOIL**

Sampling Point: 02-WAS-15

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-9	10YR 5/2	90	10YR 6/3	10	C	M	S.L	
9-11	2.5YR 5/2	85	7.5YR 3/3	15	C	M	S.L	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: compacted  
 Depth (inches): 11

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Kevil/Ballard Sampling Date: 02-23-23  
 Applicant/Owner: Clearway Renewables State: VA Sampling Point: 02-1215-16  
 Investigator(s): M. Johnson, M Angel Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 2  
 Subregion (LRR or MLRA): LRRP Lat: 37.037081 Long: -88.907474 Datum: NAD83 WYFITS  
 Soil Map Unit Name: LpD3 NWI classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">upland point paired with 02-w-08</p>	

**HYDROLOGY**

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
<b>Primary Indicators (minimum of one is required; check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 02-WA5-16

**Tree Stratum** (Plot size: 30ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling Stratum** (Plot size: 15ft)

1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Shrub Stratum** (Plot size: 15ft)

1.			
2.			
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5ft)

	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>50</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
2.	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
3.	<u>10</u>		<u>FACW</u>
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			

\_\_\_\_\_ = Total Cover  
50% of total cover: 40 20% of total cover: 16.8

**Woody Vine Stratum** (Plot size: 30ft)

1.			
2.			
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover  
50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Remarks: (If observed, list morphological adaptations below).

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Keokuk / Ballard Sampling Date: 02-23-23  
 Applicant/Owner: Clearway Renewables State: IA Sampling Point: 02-WAS-17  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR or MLRA): LRRP Lat: 37.032020 Long: -98.912846 Datum: NAD83 K4ETPS  
 Soil Map Unit Name: Fa NWI classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Wetland point paired with 02-WAS 02-W-09</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required: check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<b>Secondary Indicators (minimum of two required)</b> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>3</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>3</u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 02-VAS-17

Tree Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
6.			
	_____ = Total Cover		
	50% of total cover: _____	20% of total cover: _____	

Sapling Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
6.			
	_____ = Total Cover		
	50% of total cover: _____	20% of total cover: _____	

Shrub Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
6.			
	_____ = Total Cover		
	50% of total cover: _____	20% of total cover: _____	

Herb Stratum (Plot size: <u>5ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Panicum dichotimflorum</u>	<u>90</u>	<u>✓ FACW</u>
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	_____ = Total Cover		
	50% of total cover: _____	20% of total cover: _____	

Woody Vine Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.	<u>N/A</u>		
3.			
4.			
5.			
	_____ = Total Cover		
	50% of total cover: _____	20% of total cover: _____	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = \_\_\_\_\_

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is ≤3.0<sup>1</sup>
- Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (If observed, list morphological adaptations below).



**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Keokuk/Ballard Sampling Date: 02-23-23  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 03-WA578  
 Investigator(s): M. Johnson, M. Angles Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): Field Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR or MLRA): LRRP Lat: 37.032002 Long: -88.912797 Datum: NAD83 KY FIPS  
 Soil Map Unit Name: Fa NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <u>upland point paired with 02-W-09</u>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 02-WAS-18

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>30ft</u> )				
1.				
2.				
3.				<u>N/A</u>
4.				
5.				
6.				
				_____ = Total Cover
				50% of total cover: _____ 20% of total cover: _____
<b>Sapling Stratum</b> (Plot size: <u>15ft</u> )				
1.				
2.				<u>N/A</u>
3.				
4.				
5.				
6.				
				_____ = Total Cover
				50% of total cover: _____ 20% of total cover: _____
<b>Shrub Stratum</b> (Plot size: <u>15ft</u> )				
1.				
2.				
3.				<u>N/A</u>
4.				
5.				
6.				
				_____ = Total Cover
				50% of total cover: _____ 20% of total cover: _____
<b>Herb Stratum</b> (Plot size: <u>5ft</u> )				
1.	<u>5</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	<u>Stellaria media</u>
2.	<u>10</u>	<input checked="" type="checkbox"/>	<u>UPL</u>	<u>Zea mays</u>
3.	<u>5</u>	<input checked="" type="checkbox"/>	<u>UPL</u>	<u>Laminum amplexicaule</u>
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
				_____ = Total Cover
				50% of total cover: <u>10</u> 20% of total cover: <u>4.0</u>
<b>Woody Vine Stratum</b> (Plot size: <u>30ft</u> )				
1.				
2.				
3.				<u>N/A</u>
4.				
5.				
				_____ = Total Cover
				50% of total cover: _____ 20% of total cover: _____

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No

Remarks: (If observed, list morphological adaptations below).

**SOIL**

Sampling Point: 02-WAS-18

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR 5/3	100					SIC	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Histosol (A1)                         | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)                 | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)   |
| <input type="checkbox"/> Histic Epipedon (A2)                  | <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)                       | <input type="checkbox"/> 2 cm Muck (A10) (LRR S)  |
| <input type="checkbox"/> Black Histic (A3)                     | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)                           | <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)   |
| <input type="checkbox"/> Hydrogen Sulfide (A4)                 | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                                   | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)  |
| <input type="checkbox"/> Stratified Layers (A5)                | <input type="checkbox"/> Depleted Matrix (F3)                                       | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B)   |
| <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)     | <input type="checkbox"/> Redox Dark Surface (F6)                                    | <input type="checkbox"/> Red Parent Material (TF2)  |
| <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) | <input type="checkbox"/> Depleted Dark Surface (F7)                                 | <input type="checkbox"/> Very Shallow Dark Surface (TF12)   |
| <input type="checkbox"/> Muck Presence (A8) (LRR U)            | <input type="checkbox"/> Redox Depressions (F8)                                     | <input type="checkbox"/> Other (Explain in Remarks)   |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)             | <input type="checkbox"/> Marl (F10) (LRR U)   |   |
| <input type="checkbox"/> Depleted Below Dark Surface (A11)     | <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)                           |   |
| <input type="checkbox"/> Thick Dark Surface (A12)              | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)                  | <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) | <input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)                         |   |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)   | <input type="checkbox"/> Delta Ochric (F17) (MLRA 151)                              |   |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)              | <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)                     |   |
| <input type="checkbox"/> Sandy Redox (S5)                      | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)                |   |
| <input type="checkbox"/> Stripped Matrix (S6)                  | <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |   |
| <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)    |   |   |

**Restrictive Layer (if observed):**

Type: compacted  
 Depth (inches): 14

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Keuil / Ballard Sampling Date: 02-24-23  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 02-WAS-21  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: NA  
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR or MLRA): LRRP Lat: 37.037726 Long: -88.902122 Datum: NAD83 K11FTS  
 Soil Map Unit Name: LoC3 NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Wetland point paired with 02-W-013</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required: check all that apply) <table style="width:100%; border: none;"> <tr> <td><input type="checkbox"/> Surface Water (A1)</td> <td><input type="checkbox"/> Aquatic Fauna (B13)</td> </tr> <tr> <td><input type="checkbox"/> High Water Table (A2)</td> <td><input type="checkbox"/> Marl Deposits (B15) (LRR U)</td> </tr> <tr> <td><input type="checkbox"/> Saturation (A3)</td> <td><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</td> </tr> <tr> <td><input type="checkbox"/> Water Marks (B1)</td> <td><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</td> </tr> <tr> <td><input type="checkbox"/> Sediment Deposits (B2)</td> <td><input type="checkbox"/> Presence of Reduced Iron (C4)</td> </tr> <tr> <td><input type="checkbox"/> Drift Deposits (B3)</td> <td><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</td> </tr> <tr> <td><input type="checkbox"/> Algal Mat or Crust (B4)</td> <td><input type="checkbox"/> Thin Muck Surface (C7)</td> </tr> <tr> <td><input type="checkbox"/> Iron Deposits (B5)</td> <td><input type="checkbox"/> Other (Explain in Remarks)</td> </tr> <tr> <td><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Water-Stained Leaves (B9)</td> <td></td> </tr> </table>	<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Water-Stained Leaves (B9)		<b>Secondary Indicators (minimum of two required)</b> <table style="width:100%; border: none;"> <tr><td><input type="checkbox"/> Surface Soil Cracks (B6)</td></tr> <tr><td><input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</td></tr> <tr><td><input checked="" type="checkbox"/> Drainage Patterns (B10)</td></tr> <tr><td><input type="checkbox"/> Moss Trim Lines (B16)</td></tr> <tr><td><input type="checkbox"/> Dry-Season Water Table (C2)</td></tr> <tr><td><input type="checkbox"/> Crayfish Burrows (C8)</td></tr> <tr><td><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</td></tr> <tr><td><input checked="" type="checkbox"/> Geomorphic Position (D2)</td></tr> <tr><td><input checked="" type="checkbox"/> Shallow Aquitard (D3)</td></tr> <tr><td><input checked="" type="checkbox"/> FAC-Neutral Test (D5)</td></tr> <tr><td><input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)</td></tr> </table>	<input type="checkbox"/> Surface Soil Cracks (B6)	<input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Moss Trim Lines (B16)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Crayfish Burrows (C8)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	<input checked="" type="checkbox"/> Shallow Aquitard (D3)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 02-WA5-21

Tree Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Acer negundo</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. <u>Acer saccharum</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
3. _____				
4. _____				
5. _____				
6. _____				
<u>25</u> = Total Cover 50% of total cover: <u>12.5</u> 20% of total cover: <u>5.0</u>				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
<b>Sapling Stratum (Plot size: <u>15ft</u>)</b>				
1. _____				
2. _____				
3. <u>N/A</u>				
4. _____				
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____				
<b>Shrub Stratum (Plot size: <u>15ft</u>)</b>				
1. _____				
2. _____				
3. <u>N/A</u>				
4. _____				
5. _____				
6. _____				
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
<b>Herb Stratum (Plot size: <u>5ft</u>)</b>				
1. <u>Salix riparius</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	
2. <u>Carex frankii</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
3. _____				
4. _____				
<u>15</u> = Total Cover 50% of total cover: <u>7.5</u> 20% of total cover: <u>3.0</u>				
<b>Woody Vine Stratum (Plot size: <u>30ft</u>)</b>				
1. _____				
2. _____				
3. <u>N/A</u>				
4. _____				
5. _____				
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No _____
Remarks: (If observed, list morphological adaptations below).				

**SOIL**

Sampling Point: 02-WAS-21

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR 5/2	90	10YR 6/10		C	M	S.C.	
8-18	10YR 4/2	90	10YR 6/8	8	C	M	S.C.	
			3/10YR 2/2	2	C	M	S.C.	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**
- Histosol (A1)
  - Histic Epipedon (A2)
  - Black Histic (A3)
  - Hydrogen Sulfide (A4)
  - Stratified Layers (A5)
  - Organic Bodies (A6) (LRR P, T, U)
  - 5 cm Mucky Mineral (A7) (LRR P, T, U)
  - Muck Presence (A8) (LRR U)
  - 1 cm Muck (A9) (LRR P, T)
  - Depleted Below Dark Surface (A11)
  - Thick Dark Surface (A12)
  - Coast Prairie Redox (A16) (MLRA 150A)
  - Sandy Mucky Mineral (S1) (LRR O, S)
  - Sandy Gleyed Matrix (S4)
  - Sandy Redox (S5)
  - Stripped Matrix (S6)
  - Dark Surface (S7) (LRR P, S, T, U)
  - Polyvalue Below Surface (S8) (LRR S, T, U)
  - Thin Dark Surface (S9) (LRR S, T, U)
  - Loamy Mucky Mineral (F1) (LRR O)
  - Loamy Gleyed Matrix (F2)
  - Depleted Matrix (F3)
  - Redox Dark Surface (F6)
  - Depleted Dark Surface (F7)
  - Redox Depressions (F8)
  - Marl (F10) (LRR U)
  - Depleted Ochric (F11) (MLRA 151)
  - Iron-Manganese Masses (F12) (LRR O, P, T)
  - Umbric Surface (F13) (LRR P, T, U)
  - Delta Ochric (F17) (MLRA 151)
  - Reduced Vertic (F18) (MLRA 150A, 150B)
  - Piedmont Floodplain Soils (F19) (MLRA 149A)
  - Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
- Indicators for Problematic Hydric Soils<sup>3</sup>:**
- 1 cm Muck (A9) (LRR O)
  - 2 cm Muck (A10) (LRR S)
  - Reduced Vertic (F18) (outside MLRA 150A,B)
  - Piedmont Floodplain Soils (F19) (LRR P, S, T)
  - Anomalous Bright Loamy Soils (F20) (MLRA 153B)
  - Red Parent Material (TF2)
  - Very Shallow Dark Surface (TF12)
  - Other (Explain in Remarks)
- <sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: N/A

Depth (inches): N/A

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Keokuk/Ballard Sampling Date: 02-24-23  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 02-WAS-22  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 1  
 Subregion (LRR or MLRA): LRRP Lat: 37.037682 Long: -88.902013 Datum: NA083411528  
 Soil Map Unit Name: LoC3 NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Upland point paired with 02-W-013</p>	

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <table style="width:100%; border: none;"> <tr> <td><input type="checkbox"/> Surface Water (A1)</td> <td><input type="checkbox"/> Water-Stained Leaves (B9)</td> </tr> <tr> <td><input type="checkbox"/> High Water Table (A2)</td> <td><input type="checkbox"/> Aquatic Fauna (B13)</td> </tr> <tr> <td><input type="checkbox"/> Saturation (A3)</td> <td><input type="checkbox"/> Marl Deposits (B15) (LRR U)</td> </tr> <tr> <td><input type="checkbox"/> Water Marks (B1)</td> <td><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</td> </tr> <tr> <td><input type="checkbox"/> Sediment Deposits (B2)</td> <td><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</td> </tr> <tr> <td><input type="checkbox"/> Drift Deposits (B3)</td> <td><input type="checkbox"/> Presence of Reduced Iron (C4)</td> </tr> <tr> <td><input type="checkbox"/> Algal Mat or Crust (B4)</td> <td><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</td> </tr> <tr> <td><input type="checkbox"/> Iron Deposits (B5)</td> <td><input type="checkbox"/> Thin Muck Surface (C7)</td> </tr> <tr> <td><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</td> <td><input type="checkbox"/> Other (Explain in Remarks)</td> </tr> </table>	<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<p><u>Secondary Indicators (minimum of two required)</u></p> <table style="width:100%; border: none;"> <tr><td><input type="checkbox"/> Surface Soil Cracks (B6)</td></tr> <tr><td><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</td></tr> <tr><td><input type="checkbox"/> Drainage Patterns (B10)</td></tr> <tr><td><input type="checkbox"/> Moss Trim Lines (B16)</td></tr> <tr><td><input type="checkbox"/> Dry-Season Water Table (C2)</td></tr> <tr><td><input type="checkbox"/> Crayfish Burrows (C8)</td></tr> <tr><td><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</td></tr> <tr><td><input type="checkbox"/> Geomorphic Position (D2)</td></tr> <tr><td><input type="checkbox"/> Shallow Aquitard (D3)</td></tr> <tr><td><input type="checkbox"/> FAC-Neutral Test (D5)</td></tr> </table>	<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Moss Trim Lines (B16)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Crayfish Burrows (C8)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Geomorphic Position (D2)	<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> FAC-Neutral Test (D5)
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<p><b>Field Observations:</b></p> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																												
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:																													
Remarks:																													



**VEGETATION – Use scientific names of plants.**

Sampling Point: 07-445-22

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>30ft</u> )				
1. <u>Prunus Serotina</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>UPL</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. <u>Acer rubrum</u>	<u>5</u>		<u>FAC</u>	
3. <u>Quercus falcata</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	
4. _____				
5. _____				
6. _____				
7. _____				
<b>Sapling Stratum</b> (Plot size: <u>15ft</u> ) <span style="float:right"><u>30</u> = Total Cover</span>				
1. _____	<u>50%</u>	<u>15</u>	<u>20%</u>	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
2. _____				
3. <u>N/A</u>				
4. _____				
5. _____				
6. _____				
7. _____				
<b>Shrub Stratum</b> (Plot size: <u>15ft</u> ) <span style="float:right">_____ = Total Cover</span>				
1. <u>Rosa multiflora</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
<b>Herb Stratum</b> (Plot size: <u>5ft</u> ) <span style="float:right"><u>10</u> = Total Cover</span>				
1. <u>Rosa multiflora</u>	<u>2</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
<b>Woody Vine Stratum</b> (Plot size: <u>30ft</u> ) <span style="float:right"><u>5</u> = Total Cover</span>				
1. _____				<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>
2. _____				
3. <u>N/A</u>				
4. _____				
5. _____				
_____ = Total Cover				
Remarks: (If observed, list morphological adaptations below).				

**SOIL**

Sampling Point: 02-WAS-22

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR5/3	90	10YR5/3	10	C	M	S.C	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12) (LRR T, U)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: NA  
 Depth (inches): NA

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Keokuk/Ballard Sampling Date: 02-24-23  
 Applicant/Owner: Clearway Renewables State: IA Sampling Point: 02-WAS-23  
 Investigator(s): Morgan Johnson, M. Angel Section, Township, Range: N/A  
 Landform (hillslope, terrace, etc.): linear depression Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR or MLRA): LRRP Lat: 37.033821 Long: -88.914125 Datum: NAD 83 NAD 83 FIPS  
 Soil Map Unit Name: Vb NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <u>Wetland point paired with 02-W-14</u>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>8</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>3</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	



**VEGETATION (Five Strata) – Use scientific names of plants.**

Sampling Point: 62-WAS-23

**Tree Stratum** (Plot size: 30ft )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Sapling Stratum** (Plot size: 15ft )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Shrub Stratum** (Plot size: 15ft )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.	<u>N/A</u>		
3.			
4.			
5.			
6.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Herb Stratum** (Plot size: 5ft )

	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Panicum michotomifolium</u>	<u>60</u>	<u>✓ FACW</u>
2.	<u>Pachira glauca</u>	<u>10</u>	<u>OBL</u>
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			

\_\_\_\_\_ = Total Cover

50% of total cover: 35 20% of total cover: 140

**Woody Vine Stratum** (Plot size: 30ft )

	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.	<u>N/A</u>		
3.			
4.			
5.			

\_\_\_\_\_ = Total Cover

50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 160 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = \_\_\_\_\_

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Five Vegetation Strata:**

**Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

**Woody vine** – All woody vines, regardless of height.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (If observed, list morphological adaptations below).

**SOIL**

Sampling Point: 02-WAS-23

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10YR5/3	100					Sic	
2-9	10YR2.6/1	90	7.5YR 5/6	10	C	M	Sic	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Stratified Layers (A5)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<b>(MLRA 153B)</b>
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)		

<b>Restrictive Layer (if observed):</b> Type: <u>compacted</u> Depth (inches): <u>9</u>	Hydric Soil Present?    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:

**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET - Atlantic and Gulf Coastal Plain Region**  
 See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

OMB Control #: 0710-xxxx, Exp: Pending  
 Requirement Control Symbol EXEMPT:  
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Song Sparrow Solar City/County: Kevill/Ballard County Sampling Date: 02-24-23  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 02-W-145-24  
 Investigator(s): U. Johnson, M. Angel Section, Township, Range: N/A  
 Landform (hillside, terrace, etc.): Field Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR or MLRA): LRR P Lat: 37.033784 Long: -88.914101 Datum: NAD83 (KYFIPS)  
 Soil Map Unit Name: Vb NWI classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Remarks: <u>Upland point paired with 02-W-14</u>			

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply): <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (C15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required): <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparcely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: 02-WAS-24

Tree Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
6.			
7.			
8.			
		=Total Cover	
	50% of total cover: _____	20% of total cover: _____	

Sapling/Shrub Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
6.			
7.			
8.			
		=Total Cover	
	50% of total cover: _____	20% of total cover: _____	

Herb Stratum (Plot size: <u>5ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>40</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
2.	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
3.	<u>N/A</u>		
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	<u>50</u> =Total Cover		
	50% of total cover: <u>25</u>	20% of total cover: <u>10.0</u>	

Woody Vine Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
		=Total Cover	
	50% of total cover: _____	20% of total cover: _____	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)
Prevalence Index = B/A = _____	

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is ≤3.0<sup>1</sup>
- Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

- Definition of Four Vegetation Strata:**
- Tree** – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
  - Sapling/Shrub** – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
  - Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
  - Woody Vine** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No

Remarks: (If observed, list morphological adaptations below.)

**SOIL**

Sampling Point: 02-WAS-24

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR5/3	97	10YR5/8	3	C	M	S.C	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR F, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A13) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S2)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)
- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Barrier Islands 1 cm Muck (S12) (MLRA 153B, 153D)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LPR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Mosaic (F12) (LRR P, T)
- Fabric Surface (F13) (LRR F, T, U)
- Delta Ochric (F17) (MLRA 154)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Floodplain Soils (F20) (MLRA 149A, 153C, 153D)
- Very Shallow Dark Surface (F22) (MLRA 138, 152A in FL, 154)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Coast Prairie Redox (A16) (outside MLRA 150A)
- Reduced Vertic (F18) (outside MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (LRR P, T)
- Anomalous Bright Floodplain Soils (F20) (MLPA 153S)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22) (MLRA 138, 152A in FL, 154)
- Barrier Islands Low Chroma Matrix (TS7) (MLRA 153B, 153D)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Compacted  
 Depth (inches): 12

Hydric Soil Present? Yes  No

Remarks:

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Song Sparrow Solar City/County: Kevin/Ballard Sampling Date: 02-24-22  
 Applicant/Owner: Clearway Renewables State: VA Sampling Point: 02-WAS-26  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: U/A  
 Landform (hillslope, terrace, etc.): Field Local relief (concave, convex, none): none Slope (%): 1  
 Subregion (LRR or MLRA): LRRP Lat: 37.03753 Long: -88.910837 Datum: \_\_\_\_\_  
 Soil Map Unit Name: Fa NWI classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Upland point paired with wetland 02-w-14</p>	

**HYDROLOGY**

<p><b>Wetland Hydrology Indicators:</b></p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> ___ Surface Water (A1)      ___ Aquatic Fauna (B13) ___ High Water Table (A2)      ___ Marl Deposits (B15) (LRR U) ___ Saturation (A3)      ___ Hydrogen Sulfide Odor (C1) ___ Water Marks (B1)      ___ Oxidized Rhizospheres along Living Roots (C3) ___ Sediment Deposits (B2)      ___ Presence of Reduced Iron (C4) ___ Drift Deposits (B3)      ___ Recent Iron Reduction in Tilled Soils (C6) ___ Algal Mat or Crust (B4)      ___ Thin Muck Surface (C7) ___ Iron Deposits (B5)      ___ Other (Explain in Remarks) ___ Inundation Visible on Aerial Imagery (B7) ___ Water-Stained Leaves (B9)	<p><u>Secondary Indicators (minimum of two required)</u></p> ___ Surface Soil Cracks (B6) ___ Sparsely Vegetated Concave Surface (B8) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ FAC-Neutral Test (D5) ___ Sphagnum moss (D8) (LRR T, U)
<p><b>Field Observations:</b></p> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	





VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: 02-2A5-26

Tree Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____				Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3. <u>N/A</u>				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3</u> (A/B)
4. _____				
5. _____				
6. _____				
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Sapling Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____				Total % Cover of: _____ Multiply by: _____
2. _____				OBL species _____ x 1 = _____
3. <u>N/A</u>				FACW species _____ x 2 = _____
4. _____				FAC species _____ x 3 = _____
5. _____				FACU species _____ x 4 = _____
6. _____				UPL species _____ x 5 = _____
_____ = Total Cover				Column Totals: _____ (A) _____ (B)
50% of total cover: _____ 20% of total cover: _____				Prevalence Index = B/A = _____
Shrub Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. _____				<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
2. _____				<input type="checkbox"/> 2 - Dominance Test is >50%
3. <u>N/A</u>				<input type="checkbox"/> 3 - Prevalence Index is ≤3.0'
4. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. _____				
6. _____				
_____ = Total Cover				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
50% of total cover: _____ 20% of total cover: _____				Definitions of Five Vegetation Strata:
Herb Stratum (Plot size: <u>5ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).
1. <u>Agrostis obliquifolia</u>	<u>10</u>	<u>✓</u>	<u>FACW</u>	Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.
2. <u>Stellaria media</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>	
3. <u>Zinnia</u>	<u>10</u>	<u>✓</u>	<u>UPL</u>	Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
4. _____				Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.
5. _____				Woody vine – All woody vines, regardless of height.
6. _____				
_____ = Total Cover				
50% of total cover: <u>15</u> 20% of total cover: <u>6.0</u>				
Woody Vine Stratum (Plot size: <u>20ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present?
1. _____				Yes _____ No <input checked="" type="checkbox"/>
2. _____				
3. <u>N/A</u>				
4. _____				
5. _____				
_____ = Total Cover				
50% of total cover: _____ 20% of total cover: _____				
Remarks: (If observed, list morphological adaptations below).				

**SOIL**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR 5/2	90	10YR 5/3	10	C	M	Sic	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

- Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)
- Histosol (A1)
  - Histic Epipedon (A2)
  - Black Histic (A3)
  - Hydrogen Sulfide (A4)
  - Stratified Layers (A5)
  - Organic Bodies (A6) (LRR P, T, U)
  - 5 cm Mucky Mineral (A7) (LRR P, T, U)
  - Muck Presence (A8) (LRR U)
  - 1 cm Muck (A9) (LRR P, T)
  - Depleted Below Dark Surface (A11)
  - Thick Dark Surface (A12)
  - Coast Prairie Redox (A16) (MLRA 150A)
  - Sandy Mucky Mineral (S1) (LRR O, S)
  - Sandy Gleyed Matrix (S4)
  - Sandy Redox (S5)
  - Stripped Matrix (S6)
  - Dark Surface (S7) (LRR P, S, T, U)
  - Polyvalue Below Surface (S8) (LRR S, T, U)
  - Thin Dark Surface (S9) (LRR S, T, U)
  - Loamy Mucky Mineral (F1) (LRR O)
  - Loamy Gleyed Matrix (F2)
  - Depleted Matrix (F3)
  - Redox Dark Surface (F6)
  - Depleted Dark Surface (F7)
  - Redox Depressions (F8)
  - Marl (F10) (LRR U)
  - Depleted Ochric (F11) (MLRA 151)
  - Iron-Manganese Masses (F12) (LRR O, P, T)
  - Umbric Surface (F13) (LRR P, T, U)
  - Delta Ochric (F17) (MLRA 151)
  - Reduced Vertic (F18) (MLRA 150A, 150B)
  - Piedmont Floodplain Soils (F19) (MLRA 149A)
  - Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
- Indicators for Problematic Hydric Soils<sup>3</sup>:
- 1 cm Muck (A9) (LRR O)
  - 2 cm Muck (A10) (LRR S)
  - Reduced Vertic (F18) (outside MLRA 150A,B)
  - Piedmont Floodplain Soils (F19) (LRR P, S, T)
  - Anomalous Bright Loamy Soils (F20) (MLRA 153B)
  - Red Parent Material (TF2)
  - Very Shallow Dark Surface (TF12)
  - Other (Explain in Remarks)
- <sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):  
 Type: compacted  
 Depth (inches): 10

Hydric Soil Present? Yes  No

Remarks:





<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region</b> See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: Song Sparrow Solar City/County: Kevil/Ballard County Sampling Date: 02-28-22  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 02-WAS-27  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: N/A  
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR or MLRA): LRR P Lat: 37.03338 Long: -88.913328 Datum: NAD83 (KYFIPS)  
 Soil Map Unit Name: Fa NWI classification: 1A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <div style="text-align: center; font-family: cursive; font-size: 1.2em;">Wetland point paired with 02-W-15</div>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T, U)
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>2</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>6</u> Saturation Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	



**VEGETATION (Four Strata) – Use scientific names of plants.**

Sampling Point: 07-12AS-27

Tree Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
6.			
7.			
8.			
		<u>        </u> = Total Cover	
	50% of total cover: <u>        </u>	20% of total cover: <u>        </u>	

Sapling/Shrub Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
6.			
7.			
8.			
		<u>        </u> = Total Cover	
	50% of total cover: <u>        </u>	20% of total cover: <u>        </u>	

Herb Stratum (Plot size: <u>5ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Xanthium strumarium</u>	<u>70/30</u>	<u>✓</u> <u>FAC</u>
2.	<u>Panicum dichotomifolium</u>	<u>30/40</u>	<u>✓</u> <u>FACW</u>
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		<u>70</u> = Total Cover	
	50% of total cover: <u>35</u>	20% of total cover: <u>140</u>	

Woody Vine Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.	<u>N/A</u>		
4.			
5.			
		<u>        </u> = Total Cover	
	50% of total cover: <u>        </u>	20% of total cover: <u>        </u>	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>        </u>	x 1 = <u>        </u>
FACW species <u>        </u>	x 2 = <u>        </u>
FAC species <u>        </u>	x 3 = <u>        </u>
FACU species <u>        </u>	x 4 = <u>        </u>
UPL species <u>        </u>	x 5 = <u>        </u>
Column Totals: <u>        </u> (A)	<u>        </u> (B)
Prevalence Index = B/A = <u>        </u>	

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

✓ - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

         Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Four Vegetation Strata:**

**Tree** – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/Shrub** – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody Vine** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ✓ No         

Remarks: (If observed, list morphological adaptations below.)

**SOIL**

Sampling Point: 02-WAS-27

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR5/2	90	5YR2/4B	10	C	M	Sic	
6-15	10YR5/2	90	10YR6/3	10	C	M	Sic	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Barrier Islands 1 cm Muck (S12)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Black Histic (A3)	<b>(MLRA 153B, 153D)</b>	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<b>(outside MLRA 150A)</b>
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<b>(outside MLRA 150A, 150B)</b>
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, T)
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Redox Depressions (F8)	<b>(MLRA 153B)</b>
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	<b>(outside MLRA 138, 152A in FL, 154)</b>
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	<input type="checkbox"/> Barrier Islands Low Chroma Matrix (TS7)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	<b>(MLRA 153B, 153D)</b>
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)	
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)	
<input type="checkbox"/> Polyvalue Below Surface (S8)	<b>(MLRA 149A, 153C, 153D)</b>	
<input type="checkbox"/> (LRR S, T, U)	<input type="checkbox"/> Very Shallow Dark Surface (F22)	
	<b>(MLRA 138, 152A in FL, 154)</b>	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: Compacted

Depth (inches): 15

Hydric Soil Present?    Yes     No

Remarks:

**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET – Atlantic and Gulf Coastal Plain Region**  
 See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

OMB Control #: 0710-xxxx, Exp: Pending  
 Requirement Control Symbol EXEMPT:  
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Song Sparrow Solar City/County: Kevil/Ballard County Sampling Date: 02-28-28  
 Applicant/Owner: Clearway Renewables State: KY Sampling Point: 02-WAS-30  
 Investigator(s): M. Johnson, M. Angel Section, Township, Range: N/A  
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): concave Slope (%): 1  
 Subregion (LRR or MLRA): LRR P Lat: 37.035359 Long: -88.914382 Datum: NAD83 (KYFIPS)  
 Soil Map Unit Name: Fa NWI classification: N/A  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <p align="center" style="font-size: 1.2em;">Wetland point paired with 02-w-17</p>	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input checked="" type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum Moss (D8) (LRR T, U)
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<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>3</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>3</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>6</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



**VEGETATION (Four Strata) – Use scientific names of plants.**

Sampling Point: 02-WAS-30

Tree Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Taxodium distichum</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>OBL</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Sapling/Shrub Stratum (Plot size: <u>15ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Taxodium distichum</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>OBL</u>
2. <u>Acro negundo</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____

\_\_\_\_\_ = Total Cover  
 50% of total cover: 7.5 20% of total cover: 30

Herb Stratum (Plot size: <u>5ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. <u>N/A</u>	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____

\_\_\_\_\_ = Total Cover  
 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_\_

Woody Vine Stratum (Plot size: <u>30ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. <u>N/A</u>	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)
Prevalence Index = B/A = _____	

- Hydrophytic Vegetation Indicators:**
- \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation
  - \_\_\_ 2 - Dominance Test is >50%
  - \_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup>
  - \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Four Vegetation Strata:**

**Tree** – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/Shrub** – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody Vine** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes  No \_\_\_\_\_

Remarks: (If observed, list morphological adaptations below.)

**SOIL**

Sampling Point: 02-WAS-30

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR5/2	85	10YR 5/6	15	C	M	Sic	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)	<input type="checkbox"/> 1 cm Muck (A9) (LRR O)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Barrier Islands 1 cm Muck (S12)	<input type="checkbox"/> 2 cm Muck (A10) (LRR S)	
<input type="checkbox"/> Black Histic (A3)	<b>(MLRA 153B, 153D)</b>	<input type="checkbox"/> Coast Prairie Redox (A16)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)	<b>(outside MLRA 150A)</b>	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	<b>(outside MLRA 150A, 150B)</b>	
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, T)	
<input type="checkbox"/> Muck Presence (A8) (LRR U)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)	<input type="checkbox"/> Redox Depressions (F8)	<b>(MLRA 153B)</b>	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Marl (F10) (LRR U)	<input type="checkbox"/> Red Parent Material (F21)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)	<input type="checkbox"/> Very Shallow Dark Surface (F22)	
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)	<b>(outside MLRA 138, 152A in FL, 154)</b>	
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)	<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)	<input type="checkbox"/> Barrier Islands Low Chroma Matrix (TS7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)	<b>(MLRA 153B, 153D)</b>	
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)		
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)	<input type="checkbox"/> Anomalous Bright Floodplain Soils (F20)		
<input type="checkbox"/> Polyvalue Below Surface (S8)	<b>(MLRA 149A, 153C, 153D)</b>		
<b>(LRR S, T, U)</b>	<input type="checkbox"/> Very Shallow Dark Surface (F22)		
	<b>(MLRA 138, 152A in FL, 154)</b>		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**  
 Type: N/A  
 Depth (inches): N/A

**Hydric Soil Present?**    Yes     No

Remarks:

## Appendix C TABLES

**Table 1. Soil Types Known to Occur within the Song Sparrow Solar Project, Ballard County, Kentucky**

Map Unit Symbol	Map Unit Name	Hydric (Yes/No)	Acres in AOI	Percent of AOI
GrB2	Grenada silt loam, 2 to 6 percent slopes, eroded	No	211.6	15.1%
GsC3	Grenada-Purchase complex, 6 to 12 percent slopes, severely eroded	No	201.3	14.4%
Fa	Falaya-Collins complex, 0 to 2 percent slopes, occasionally flooded	Yes	191.5	13.7%
Vb	Vicksburg silt loam, 0 to 2 percent slopes, occasionally flooded	Yes	151.6	10.8%
LpC3	Loring-Purchase complex, 6 to 12 percent slopes, severely eroded	No	149.3	10.6%
LpD3	Loring-Purchase complex, 12 to 20 percent slopes, severely eroded	No	141.0	10.0%
GsB3	Grenada-Purchase complex, 4 to 6 percent slopes, severely eroded	No	91.0	6.5%
LoB2	Loring silt loam, 2 to 6 percent slopes, eroded	No	69.4	4.9%
FeB	Felician silt loam, 2 to 6 percent slopes	No	55.2	3.9%
GrB3	Grenada silt loam, 4 to 6 percent slopes, severely eroded	No	40.1	2.9%
LoC3	Loring silt loam, 6 to 12 percent slopes, severely eroded	No	22.5	1.6%
GrA	Grenada silt loam, 0 to 2 percent slopes	No	21.1	1.5%
RtA	Routon silt loam, 0 to 2 percent slopes	Yes	14.9	1.1%
CaA	Calloway silt loam, 0 to 2 percent slopes	Yes	11.5	0.8%
FeC2	Felician silt loam, 6 to 12 percent slopes, eroded	No	9.6	0.7%
CaB2	Calloway silt loam, 2 to 4 percent slopes, eroded	No	8.6	0.6%
BnD3	Brandon silt loam, 12 to 20 percent slopes, severely eroded	No	4.3	0.3%
LoC2	Loring silt loam, 6 to 12 percent slopes, eroded	No	3.2	0.2%
W	Water	No	3.0	0.2%
KrA	Kurk silt loam, 0 to 2 percent slopes	Yes	1.9	0.1%
Totals for Area of Interest			1,405.2	100.00%



**Table 2. Wetlands Identified at the Song Sparrow Solar Project, Ballard County, Kentucky**

Wetland Name	Latitude	Longitude	Cowardin Classification	Preliminary Jurisdictional Class	Total Area (Acres)
01-W-01	37.029645	-88.881802	PEM	Jurisdictional	0.15
01-W-02	37.026644	-88.880725	PFO	Jurisdictional	0.01
01-W-03	37.025566	-88.881744	PFO	Jurisdictional	0.02
01-W-04	37.029654	-88.886896	PEM/PFO	Jurisdictional	0.06
01-W-05	37.027174	-88.889135	PEM	Jurisdictional	0.08
01-W-06	37.026939	-88.892890	PEM	Jurisdictional	0.05
01-W-07	37.023539	-88.894283	PFO	Jurisdictional	0.04
01-W-08	37.022988	-88.893925	PFO	Non-Jurisdictional	0.17
01-W-09	37.023057	-88.892741	PSS	Jurisdictional	0.08
01-W-10	37.021999	-88.890977	PFO	Non-Jurisdictional	0.04
01-W-11	37.023641	-88.892995	PSS/PFO	Jurisdictional	0.15
01-W-12	37.021545	-88.901840	PFO	Jurisdictional	0.06
01-W-13	37.021786	-88.895451	PSS/PFO	Jurisdictional	0.04
01-W-14a	37.030499	-88.915365	PEM	Jurisdictional	0.14
01-W-14b	37.030248	-88.915219	PEM	Jurisdictional	0.06
01-W-15	37.020315	-88.910354	PEM	Jurisdictional	0.01
01-W-16	37.021224	-88.908059	PSS/PFO	Jurisdictional	0.30
01-W-17	37.021652	-88.908191	PEM	Jurisdictional	0.34
01-W-18	37.019770	-88.906221	PEM/PFO	Jurisdictional	0.58
01-W-19	37.019315	-88.906370	PFO	Non-Jurisdictional	0.06
01-W-20a	37.025722	-88.915101	PEM	Jurisdictional	0.16
01-W-20b	37.023945	-88.915941	PEM	Jurisdictional	0.16
01-W-20c	37.023329	-88.916497	PEM	Jurisdictional	0.07
02-W-01	37.018850	-88.864496	PSS/PEM	Non-Jurisdictional	0.02
02-W-02	37.019618	-88.868213	PSS	Jurisdictional	0.06
02-W-03	37.020035	-88.870100	PEM	Non-Jurisdictional	0.09
02-W-04	37.019410	-88.871477	PEM	Non-Jurisdictional	0.07
02-W-05	37.018399	-88.871291	PEM	Non-Jurisdictional	0.01
02-W-06	37.016950	-88.875239	PFO	Non-Jurisdictional	0.12
02-W-07	37.013205	-88.873495	PSS	Jurisdictional	0.22
02-W-08	37.037098	-88.907449	PEM	Non-Jurisdictional	0.01
02-W-09	37.031985	-88.912892	PSS/PEM	Jurisdictional	0.09
02-W-10	37.031692	-88.912391	PSS/PEM	Jurisdictional	0.19
02-W-11a	37.037686	-88.902200	PSS/PFO	Jurisdictional	0.10
02-W-11b	37.036683	-88.901703	PSS/PFO	Jurisdictional	0.01
02-W-12	37.033839	-88.914110	PSS/PEM	Jurisdictional	0.01
02-W-13	37.033249	-88.913303	PSS/PEM	Non-Jurisdictional	0.10

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Wetland Name	Latitude	Longitude	Cowardin Classification	Preliminary Jurisdictional Class	Total Area (Acres)
02-W-14	37.031758	-88.911301	PSS/PEM	Jurisdictional	0.10
02-W-15a	37.035530	-88.914206	PSS/PFO	Jurisdictional	0.24
02-W-15b	37.036634	-88.914691	PSS/PFO	Jurisdictional	0.21
02-W-16	37.037642	-88.914470	PSS/PFO	Jurisdictional	0.12
02-W-17	37.027782	-88.922074	PEM	Non-Jurisdictional	0.08
03-W-11	37.026939	-88.923448	PFO	Jurisdictional	0.02
03-W-12	37.029502	-88.925240	PFO	Jurisdictional	0.11

<sup>1</sup> Pending official determination by the USACE

**Table 3. Streams Identified at the Song Sparrow Solar Project, Ballard County, Kentucky**

Stream Name	Latitude	Longitude	Flow Class	Preliminary Jurisdictional Determination	Total Linear Feet
01-S-01	-88.88236926	37.01455519	UD	Non-Jurisdictional	509.7
01-S-01	-88.88357789	37.01487164	EPH	Non-Jurisdictional	280.1
01-S-02	-88.88188266	37.01643317	UD	Non-Jurisdictional	314.2
01-S-02	-88.88385559	37.01523198	INT	Jurisdictional	149.6
01-S-02	-88.8830043	37.01585052	EPH	Non-Jurisdictional	549.5
01-S-03	-88.88230919	37.01565796	UD	Non-Jurisdictional	364.6
01-S-04	-88.88326728	37.01607623	UD	Non-Jurisdictional	228.6
01-S-05	-88.88201974	37.01871585	UD	Non-Jurisdictional	440.1
01-S-05	-88.88194083	37.01970813	EPH	Non-Jurisdictional	319.6
01-S-06	-88.88296386	37.01930387	UD	Non-Jurisdictional	380
01-S-06	-88.87949192	37.02174159	INT	Jurisdictional	2,064.40
01-S-06	-88.88221935	37.01994872	EPH	Non-Jurisdictional	309.5
01-S-07	-88.8834788	37.01980277	UD	Non-Jurisdictional	285.1
01-S-07	-88.88281928	37.0199446	EPH	Non-Jurisdictional	126.9
01-S-08	-88.88149065	37.02027186	EPH	Non-Jurisdictional	159.1
01-S-09	-88.88020473	37.02085887	INT	Jurisdictional	213.7
01-S-10	-88.87984637	37.02124493	EPH	Non-Jurisdictional	101.2
01-S-11	-88.87946774	37.02226872	EPH	Non-Jurisdictional	121.5
01-S-12	-88.87890014	37.02229918	EPH	Non-Jurisdictional	54.6
01-S-13	-88.87865145	37.02235002	EPH	Non-Jurisdictional	69.5
01-S-14	-88.8784025	37.02235661	EPH	Non-Jurisdictional	87.4

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<b>Stream Name</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Flow Class</b>	<b>Preliminary Jurisdictional Determination</b>	<b>Total Linear Feet</b>
01-S-15	-88.87845339	37.02636261	EPH	Non-Jurisdictional	124.8
01-S-16	-88.8782916	37.02773755	EPH	Non-Jurisdictional	20.8
01-S-17	-88.87943764	37.02788835	EPH	Non-Jurisdictional	56.1
01-S-18	-88.8796711	37.02872541	EPH	Non-Jurisdictional	71.5
01-S-19	-88.88717733	37.03000188	PER	Jurisdictional	1,846.70
01-S-20	-88.87990003	37.03054532	EPH	Non-Jurisdictional	133.5
01-S-21	-88.88171143	37.0258355	INT	Jurisdictional	3,055.70
01-S-22	-88.87996762	37.02679352	EPH	Non-Jurisdictional	67.1
01-S-23	-88.88148424	37.02604129	EPH	Non-Jurisdictional	32.2
01-S-24	-88.88249775	37.02625767	INT	Jurisdictional	553.7
01-S-25	-88.88139403	37.02534915	EPH	Non-Jurisdictional	210.4
01-S-26	-88.88233967	37.02538562	EPH	Non-Jurisdictional	82.1
01-S-27	-88.88236569	37.02532509	EPH	Non-Jurisdictional	23.5
01-S-28	-88.88298034	37.0253559	EPH	Non-Jurisdictional	93
01-S-29	-88.88356218	37.02491778	EPH	Non-Jurisdictional	231.4
01-S-29	-88.88433434	37.02503283	UD	Non-Jurisdictional	239.1
01-S-30	-88.88324616	37.02448509	EPH	Non-Jurisdictional	90.9
01-S-31	-88.88349282	37.02409148	INT	Jurisdictional	62.5
01-S-32	-88.88378548	37.0238737	EPH	Non-Jurisdictional	23.7
01-S-33	-88.88414642	37.02347455	INT	Jurisdictional	39
01-S-34	-88.8843405	37.03000069	EPH	Non-Jurisdictional	42
01-S-35	-88.88452039	37.03000448	EPH	Non-Jurisdictional	58.1
01-S-36	-88.88592	37.02945573	EPH	Non-Jurisdictional	324.5
01-S-37	-88.88680331	37.02987788	INT	Jurisdictional	106.5
01-S-38	-88.88691999	37.02997608	EPH	Non-Jurisdictional	34.9
01-S-39	-88.88715657	37.02999476	EPH	Non-Jurisdictional	4.2
01-S-40	-88.88727273	37.02997322	EPH	Non-Jurisdictional	25.6
01-S-41	-88.88747766	37.02995668	EPH	Non-Jurisdictional	41.8
01-S-42	-88.88775052	37.03026614	INT	Jurisdictional	214.4
01-S-43	-88.88788184	37.02990963	EPH	Non-Jurisdictional	20.6
01-S-44	-88.88490335	37.02267503	INT	Jurisdictional	568.1
01-S-45	-88.88871659	37.02749869	EPH	Non-Jurisdictional	110.6
01-S-46	-88.89584886	37.02609105	INT	Jurisdictional	1,957.20



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<b>Stream Name</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Flow Class</b>	<b>Preliminary Jurisdictional Determination</b>	<b>Total Linear Feet</b>
01-S-47	-88.89344593	37.02589108	EPH	Non-Jurisdictional	427.4
01-S-48	-88.89351688	37.02580689	EPH	Non-Jurisdictional	139.8
01-S-49	-88.89359055	37.02634256	INT	Jurisdictional	61.2
01-S-50	-88.89751823	37.02726942	INT	Jurisdictional	667.6
01-S-51	-88.89749544	37.02733032	EPH	Non-Jurisdictional	40.8
01-S-52	-88.89623496	37.02740299	EPH	Non-Jurisdictional	455.5
01-S-53	-88.89509901	37.02392302	PER	Jurisdictional	2556
01-S-53	-88.89152349	37.02421522	INT	Jurisdictional	176.1
01-S-53	-88.89104799	37.02460981	EPH	Non-Jurisdictional	239.7
01-S-54	-88.89721122	37.02462808	EPH	Non-Jurisdictional	96.5
01-S-55	-88.89729755	37.02417518	EPH	Non-Jurisdictional	194.5
01-S-56	-88.89634493	37.02437901	EPH	Non-Jurisdictional	348.6
01-S-57	-88.89618536	37.02398817	EPH	Non-Jurisdictional	98.5
01-S-58	-88.89507709	37.0242615	EPH	Non-Jurisdictional	300.2
01-S-59	-88.89464775	37.02396028	INT	Jurisdictional	105.3
01-S-59	-88.8943806	37.02398885	EPH	Non-Jurisdictional	112.8
01-S-60	-88.89439182	37.02384654	EPH	Non-Jurisdictional	40.1
01-S-61	-88.89413867	37.02345783	INT	Jurisdictional	157.1
01-S-62	-88.89417695	37.02342764	EPH	Non-Jurisdictional	27.2
01-S-63	-88.89313131	37.0234449	INT	Jurisdictional	494.5
01-S-64	-88.89299319	37.02417	EPH	Non-Jurisdictional	19.4
01-S-65	-88.89281689	37.02431825	EPH	Non-Jurisdictional	56.1
01-S-66	-88.89265365	37.0241747	EPH	Non-Jurisdictional	34.9
01-S-67	-88.89259231	37.02433229	INT	Jurisdictional	109.3
01-S-68	-88.89227833	37.02448278	INT	Jurisdictional	167.2
01-S-69	-88.89132028	37.02407211	INT	Jurisdictional	363.3
01-S-70	-88.89123337	37.02393523	EPH	Non-Jurisdictional	115.9
01-S-71	-88.8932216	37.02357281	INT	Jurisdictional	44.9
01-S-72	-88.89627711	37.02182551	PER	Jurisdictional	3,269.80
01-S-73	-88.89686403	37.02191223	INT	Jurisdictional	70.1
01-S-74	-88.89704658	37.02192383	INT	Jurisdictional	73
01-S-75	-88.89696264	37.02141649	INT	Jurisdictional	213.7
01-S-76	-88.89816314	37.02167105	EPH	Non-Jurisdictional	79.1

SONG SPARROW SOLAR WETLAND AND WATERBODY DELINEATION REPORT

Stream Name	Latitude	Longitude	Flow Class	Preliminary Jurisdictional Determination	Total Linear Feet
01-S-77	-88.89882557	37.02158798	EPH	Non-Jurisdictional	46.7
01-S-78	-88.90220806	37.02070082	INT	Jurisdictional	694.9
01-S-79	-88.90212055	37.02077291	EPH	Non-Jurisdictional	59.8
01-S-80	-88.91157248	37.02762216	PER	Jurisdictional	6,207.80
01-S-80	-88.91547721	37.03442397	PER	Jurisdictional	2,078.00
01-S-81	-88.90500125	37.02039109	EPH	Non-Jurisdictional	182.3
01-S-82	-88.90397458	37.01934059	EPH	Non-Jurisdictional	108.3
01-S-83	-88.91497914	37.01214098	UD	Non-Jurisdictional	298.8
01-S-83	-88.91573722	37.0125141	EPH	Non-Jurisdictional	268.3
01-S-84	-88.91411405	37.01444407	INT	Jurisdictional	1,807.10
01-S-85	-88.9131895	37.01416418	EPH	Non-Jurisdictional	495.3
01-S-86	-88.91340197	37.01557566	UD	Non-Jurisdictional	411.4
01-S-86	-88.91452756	37.01583556	EPH	Non-Jurisdictional	319.3
01-S-87	-88.91448943	37.01806714	UD	Non-Jurisdictional	996.5
01-S-87	-88.91568942	37.01924715	EPH	Non-Jurisdictional	245.2
01-S-88	-88.91419909	37.02607519	PER	Jurisdictional	5,135.90
01-S-88	-88.91423623	37.02625451	PER	Jurisdictional	5,064.70
01-S-89	-88.91474832	37.01985487	EPH	Non-Jurisdictional	503.3
01-S-89	-88.91332376	37.01979936	EPH	Non-Jurisdictional	197.7
01-S-90	-88.91486763	37.03071277	EPH	Non-Jurisdictional	358.1
01-S-91	-88.91438296	37.03045936	EPH	Non-Jurisdictional	192
01-S-92	-88.91493209	37.02996628	EPH	Non-Jurisdictional	131.2
01-S-93	-88.91461542	37.030228	EPH	Non-Jurisdictional	110.1
01-S-94	-88.91482326	37.03137969	EPH	Non-Jurisdictional	360.8
01-S-95	-88.91461314	37.03180217	EPH	Non-Jurisdictional	95.5
01-S-96	-88.9154126	37.03343678	EPH	Non-Jurisdictional	83.4
01-S-97	-88.91593711	37.03444358	INT	Jurisdictional	465
01-S-98	-88.91606211	37.03484354	EPH	Non-Jurisdictional	52.4
01-S-99	-88.91669068	37.03521548	INT	Jurisdictional	397.8
01-S-100	-88.91713516	37.03526154	INT	Jurisdictional	149.2
01-S-101	-88.91393739	37.02971876	EPH	Non-Jurisdictional	128.8
01-S-102	-88.91319795	37.02773323	INT	Jurisdictional	1,163.30
01-S-102	-88.9137206	37.02517972	EPH	Non-Jurisdictional	892.6

**SONG SPARROW SOLAR WETLAND AND WATERBODY DELINEATION REPORT**

<b>Stream Name</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Flow Class</b>	<b>Preliminary Jurisdictional Determination</b>	<b>Total Linear Feet</b>
01-S-102	-88.91417871	37.02397293	UD	Non-Jurisdictional	99
01-S-103	-88.91300104	37.02891157	EPH	Non-Jurisdictional	37.6
01-S-104	-88.91330384	37.02721722	EPH	Non-Jurisdictional	53.5
01-S-105	-88.90952695	37.02056455	INT	Jurisdictional	615.4
01-S-106	-88.90779089	37.02268818	INT	Jurisdictional	1,465.20
01-S-106	-88.90911239	37.01921024	INT	Non-Jurisdictional	242.5
01-S-107	-88.90834958	37.0201493	EPH	Non-Jurisdictional	51.1
01-S-108	-88.90925308	37.02149679	EPH	Non-Jurisdictional	130.3
01-S-109	-88.90800368	37.02233807	EPH	Non-Jurisdictional	77.8
01-S-110	-88.90649484	37.02030669	INT	Jurisdictional	222
01-S-111	-88.90526229	37.01992921	EPH	Non-Jurisdictional	112.2
01-S-112	-88.90583292	37.02051311	INT	Jurisdictional	176.6
01-S-113	-88.91575135	37.02131377	EPH	Non-Jurisdictional	376.5
01-S-114	-88.91584638	37.02122196	EPH	Non-Jurisdictional	54.8
01-S-115	-88.91499002	37.02367863	EPH	Non-Jurisdictional	162.9
01-S-116	-88.91539326	37.02536304	INT	Jurisdictional	472
01-S-117	-88.9161322	37.02411927	EPH	Non-Jurisdictional	205.6
01-S-118	-88.91520433	37.02762124	EPH	Non-Jurisdictional	127.1
02-S-01	-88.86945446	37.01800056	PER	Jurisdictional	4,267.90
02-S-02	-88.86782937	37.01819972	INT	Jurisdictional	1,869.30
02-S-03	-88.8659495	37.01811904	EPH	Non-Jurisdictional	271.1
02-S-04	-88.86584479	37.01829477	EPH	Non-Jurisdictional	259.5
02-S-05	-88.86490977	37.01841453	UD	Non-Jurisdictional	136.5
02-S-06	-88.86470099	37.01855586	UD	Non-Jurisdictional	104.8
02-S-07	-88.86414419	37.01926983	INT	Non-Jurisdictional	211.1
02-S-08	-88.86409665	37.01615483	UD	Non-Jurisdictional	154.4
02-S-09	-88.86820392	37.01979181	UD	Non-Jurisdictional	389.7
02-S-09	-88.86867382	37.01880847	EPH	Non-Jurisdictional	421.3
02-S-10	-88.87315195	37.01986838	INT	Jurisdictional	409.7
02-S-11	-88.87071013	37.01778817	EPH	Non-Jurisdictional	212.6
02-S-12	-88.87213647	37.01577636	UD	Non-Jurisdictional	452.6
02-S-13	-88.87399884	37.01640641	EPH	Non-Jurisdictional	466
02-S-13	-88.87309739	37.01620559	UD	Non-Jurisdictional	151.1



**SONG SPARROW SOLAR WETLAND AND WATERBODY DELINEATION REPORT**

<b>Stream Name</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Flow Class</b>	<b>Preliminary Jurisdictional Determination</b>	<b>Total Linear Feet</b>
02-S-14	-88.87487178	37.01730727	EPH	Non-Jurisdictional	39.5
02-S-15	-88.87484845	37.01738857	EPH	Non-Jurisdictional	39.9
02-S-16	-88.87475247	37.01754513	EPH	Non-Jurisdictional	42.7
02-S-17	-88.87501658	37.01858416	EPH	Non-Jurisdictional	45.8
02-S-18	-88.8750614	37.01858058	EPH	Non-Jurisdictional	28.7
02-S-19	-88.87540998	37.01892971	EPH	Non-Jurisdictional	93.3
02-S-20	-88.87576386	37.01859493	EPH	Non-Jurisdictional	229.3
02-S-21	-88.87654348	37.01839569	INT	Non-Jurisdictional	664.7
02-S-22	-88.87678336	37.01804865	EPH	Non-Jurisdictional	288.5
02-S-23	-88.87526858	37.0189337	EPH	Non-Jurisdictional	37.2
02-S-24	-88.87477172	37.01914589	EPH	Non-Jurisdictional	64.3
02-S-25	-88.87641807	37.02048485	EPH	Non-Jurisdictional	155.5
02-S-26	-88.87847513	37.0272042	PER	Jurisdictional	2,205.80
02-S-26	-88.87490247	37.01561991	INT	Jurisdictional	3,166.30
02-S-27	-88.87905514	37.01724865	EPH	Non-Jurisdictional	752.6
02-S-28	-88.87711178	37.01851976	EPH	Non-Jurisdictional	224.2
02-S-29	-88.87427006	37.01552653	EPH	Non-Jurisdictional	398.9
02-S-30	-88.87284671	37.01355447	EPH	Non-Jurisdictional	294.3
02-S-31	-88.87128065	37.01169473	UD	Non-Jurisdictional	97.4
02-S-32	-88.87302069	37.01291942	INT	Jurisdictional	1,512.80
02-S-33	-88.87619173	37.01342226	EPH	Non-Jurisdictional	595
02-S-33	-88.87798753	37.01373721	UD	Non-Jurisdictional	542.1
02-S-34	-88.87908174	37.01385441	UD	Non-Jurisdictional	149
02-S-35	-88.87916388	37.01409951	UD	Non-Jurisdictional	227.3
02-S-36	-88.8769192	37.01320751	EPH	Non-Jurisdictional	149
02-S-36	-88.87792901	37.01274074	UD	Non-Jurisdictional	555.4
02-S-37	-88.87632837	37.01492075	EPH	Non-Jurisdictional	680.2
02-S-37	-88.87844492	37.01569966	UD	Non-Jurisdictional	741.6
02-S-38	-88.8771408	37.01980601	EPH	Non-Jurisdictional	118
02-S-39	-88.87713305	37.02056583	EPH	Non-Jurisdictional	48.3
02-S-40	-88.90398605	37.03613277	EPH	Non-Jurisdictional	89.8
02-S-41	-88.9043561	37.0356171	EPH	Non-Jurisdictional	433.6
02-S-42	-88.9044993	37.03526913	EPH	Non-Jurisdictional	80.4

**SONG SPARROW SOLAR WETLAND AND WATERBODY DELINEATION REPORT**

<b>Stream Name</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Flow Class</b>	<b>Preliminary Jurisdictional Determination</b>	<b>Total Linear Feet</b>
02-S-43	-88.90635	37.03523811	EPH	Non-Jurisdictional	37.1
02-S-44	-88.90639585	37.03532795	INT	Jurisdictional	220.4
02-S-45	-88.905005	37.03704722	EPH	Non-Jurisdictional	138.8
02-S-46	-88.90482258	37.03734313	EPH	Non-Jurisdictional	39.9
02-S-47	-88.9055827	37.03703375	EPH	Non-Jurisdictional	73.9
02-S-48	-88.90640423	37.0383686	EPH	Non-Jurisdictional	323.6
02-S-49	-88.90627373	37.03845414	EPH	Non-Jurisdictional	200.3
02-S-50	-88.9060702	37.03827253	EPH	Non-Jurisdictional	22.9
02-S-51	-88.90769456	37.03832444	EPH	Non-Jurisdictional	125.9
02-S-52	-88.90747575	37.03537577	INT	Jurisdictional	308
02-S-53	-88.90766262	37.03537422	EPH	Non-Jurisdictional	123.7
02-S-54	-88.90785697	37.03522294	EPH	Non-Jurisdictional	179.8
02-S-55	-88.91264222	37.03359737	PER	Jurisdictional	2,179.40
02-S-56	-88.9021561	37.03751713	EPH	Non-Jurisdictional	684.9
02-S-57	-88.9024335	37.038073	EPH	Non-Jurisdictional	50.6
02-S-58	-88.91407927	37.03399432	EPH	Non-Jurisdictional	47.9
02-S-59	-88.91279735	37.03173715	EPH	Non-Jurisdictional	972.4
02-S-60	-88.91069885	37.03445353	EPH	Non-Jurisdictional	202.3
02-S-61	-88.91231567	37.02817667	EPH	Non-Jurisdictional	134.2
02-S-62	-88.91041623	37.03539843	EPH	Non-Jurisdictional	368.8
02-S-63	-88.9123458	37.02801411	EPH	Non-Jurisdictional	126.5
02-S-64	-88.91191876	37.02779921	INT	Jurisdictional	87.4
02-S-65	-88.9106513	37.02616661	EPH	Non-Jurisdictional	441.6
02-S-66	-88.91078523	37.02614761	EPH	Non-Jurisdictional	203.1
02-S-67	-88.9084615	37.02381084	INT	Jurisdictional	610.4
02-S-68	-88.91418633	37.03590385	EPH	Non-Jurisdictional	116.7
02-S-69	-88.91412737	37.03605578	EPH	Non-Jurisdictional	37.4
02-S-70	-88.91452208	37.03657993	EPH	Non-Jurisdictional	48.3
02-S-71	-88.91332931	37.03639013	EPH	Non-Jurisdictional	208.2
02-S-72	-88.91192329	37.03802132	EPH	Non-Jurisdictional	63.5
02-S-73	-88.91071583	37.03792076	EPH	Non-Jurisdictional	267.9
02-S-74	-88.90988654	37.03803598	EPH	Non-Jurisdictional	550.9
02-S-75	-88.91035069	37.03511271	EPH	Non-Jurisdictional	165.6

**SONG SPARROW SOLAR WETLAND AND WATERBODY DELINEATION REPORT**

<b>Stream Name</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Flow Class</b>	<b>Preliminary Jurisdictional Determination</b>	<b>Total Linear Feet</b>
02-S-76	-88.91512679	37.02961605	EPH	Non-Jurisdictional	48.5
02-S-77	-88.91872829	37.02759398	PER	Jurisdictional	3,706.50
02-S-77	-88.9228137	37.0257872	EPH	Non-Jurisdictional	54.9
02-S-78	-88.91646792	37.02841367	INT	Jurisdictional	429.4
02-S-79	-88.91660667	37.02792516	EPH	Non-Jurisdictional	61.4
02-S-80	-88.91788066	37.02784884	EPH	Non-Jurisdictional	36.2
02-S-81	-88.92080708	37.02744029	EPH	Non-Jurisdictional	109.5
02-S-82	-88.92089517	37.02723924	EPH	Non-Jurisdictional	152
02-S-83	-88.92066011	37.02689473	EPH	Non-Jurisdictional	184
02-S-84	-88.8716673	37.01281624	EPH	Non-Jurisdictional	445.4
02-S-85	-88.91030063	37.03546116	EPH	Non-Jurisdictional	56
02-S-86	-88.91526611	37.03760895	EPH	Non-Jurisdictional	102.5
03-S-35	-88.92236778	37.02104222	INT	Jurisdictional	1,964.60
03-S-36	-88.92479606	37.02049619	EPH	Non-Jurisdictional	43.6
03-S-37	-88.92464252	37.02110711	EPH	Non-Jurisdictional	305.7
03-S-38	-88.92447589	37.02080528	EPH	Non-Jurisdictional	17.3
03-S-39	-88.92488729	37.02118202	EPH	Non-Jurisdictional	61.6
03-S-40	-88.9249899	37.021301	EPH	Non-Jurisdictional	40.3
03-S-41	-88.92389124	37.02058508	EPH	Non-Jurisdictional	94.7
03-S-42	-88.92356343	37.020605	EPH	Non-Jurisdictional	60.4
03-S-43	-88.92245424	37.0207631	EPH	Non-Jurisdictional	194.9
03-S-44	-88.92280852	37.02196513	EPH	Non-Jurisdictional	1,021.30
03-S-45	-88.92378373	37.02233622	EPH	Non-Jurisdictional	37.9
03-S-46	-88.92365491	37.02199026	EPH	Non-Jurisdictional	345.8
03-S-47	-88.92428452	37.02186481	EPH	Non-Jurisdictional	156
03-S-48	-88.92263995	37.02239793	EPH	Non-Jurisdictional	391.2
03-S-49	-88.92075313	37.02076928	EPH	Non-Jurisdictional	636.4
03-S-50	-88.92101887	37.02102579	EPH	Non-Jurisdictional	28.4
03-S-51	-88.92010156	37.02051676	EPH	Non-Jurisdictional	46.6
03-S-52	-88.9197488	37.02068202	EPH	Non-Jurisdictional	113.6
03-S-53	-88.92071509	37.02144107	EPH	Non-Jurisdictional	208.8
03-S-54	-88.92397066	37.02461759	INT	Jurisdictional	999.1
03-S-55	-88.92359927	37.02504763	EPH	Non-Jurisdictional	37.9



**SONG SPARROW SOLAR WETLAND AND WATERBODY DELINEATION REPORT**

Stream Name	Latitude	Longitude	Flow Class	Preliminary Jurisdictional Determination	Total Linear Feet
03-S-56	-88.9229136	37.02431654	EPH	Non-Jurisdictional	735.2
03-S-57	-88.92310565	37.02462362	EPH	Non-Jurisdictional	66
03-S-58	-88.92269746	37.02392419	EPH	Non-Jurisdictional	185.1
03-S-59	-88.923903	37.02561328	INT	Jurisdictional	485.3
03-S-60	-88.92397912	37.02553225	EPH	Non-Jurisdictional	75.9
03-S-61	-88.92458995	37.02576227	EPH	Non-Jurisdictional	46.8
03-S-62	-88.92272994	37.02583971	EPH	Non-Jurisdictional	39.9
03-S-63	-88.92275283	37.02668304	EPH	Non-Jurisdictional	421.4
03-S-64	-88.92363432	37.02700016	EPH	Non-Jurisdictional	101
03-S-65	-88.92400694	37.02714815	EPH	Non-Jurisdictional	379.1
03-S-66	-88.92446872	37.02735747	EPH	Non-Jurisdictional	133.2
03-S-67	-88.92473375	37.02898687	EPH	Non-Jurisdictional	444.9
03-S-68	-88.92567958	37.02889392	EPH	Non-Jurisdictional	439.7

<sup>1</sup> Pending official determination by the USACE


**Table 4. Open Water Features Identified at the Song Sparrow Solar Project, Ballard County, Kentucky**

Open Water Name	Latitude	Longitude	Cowardin Classification	Preliminary Jurisdictional Class <sup>1</sup>	Total Area in Acres
01-OW-01	37.027520	-88.892400	PUBHx	Jurisdictional	1.38
01-OW-02	37.020968	-88.901075	PUBHx	Non-Jurisdictional	0.07
01-OW-03	37.019775	-88.911479	PUBHx	Non-Jurisdictional	0.03
02-OW-01	37.019001	-88.874721	PUBHx	Non-Jurisdictional	0.01
02-OW-02	37.018419	-88.877183	PUBHx	Non-Jurisdictional	0.02
02-OW-03	37.035888	-88.903121	PUBHx	Non-Jurisdictional	0.04
02-OW-04	37.037662	-88.905225	PUBHx	Non-Jurisdictional	0.04
02-OW-05	37.034448	-88.911935	PUBHx	Non-Jurisdictional	0.08
02-OW-06	37.033550	-88.910153	PUBHx	Non-Jurisdictional	0.02



<sup>1</sup> Pending official determination by the USACE

PUBHx = Palustrine Unconsolidated Bottom Permanently Flooded Excavated Pond



## Appendix D      PHOTOLOGS

<b>Client:</b>	<b>Clearway Energy Group, LLC.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID: 1</b>			
<b>Photo Location:</b> O1-OW-01			
<b>Preliminary Jurisdictional Class:</b> JD			
<b>GPS Location:</b> 37.027520, -88.892400			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID: 2</b>			
<b>Photo Location:</b> 01-OW-02			
<b>Preliminary Jurisdictional Class:</b> Non-JD			
<b>GPS Location:</b> 37.020968, -88.901075			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	<b>Clearway Energy Group, LLC.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID: 3</b>			
<b>Photo Location:</b> 01-OW-03			
<b>Preliminary Jurisdictional Class:</b> Non-JD			
<b>GPS Location:</b> 37.019775, -88.911479			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID: 4</b>			
<b>Photo Location:</b> 02-OW-01			
<b>Preliminary Jurisdictional Class:</b> Non-JD			
<b>GPS Location:</b> 37.019001, -88.874721			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b> Clearway Energy Group, LLC.		<b>Project:</b> Song Sparrow Solar Project	
<b>Site Name:</b> Song Sparrow Solar		<b>Site Location:</b> Ballard County, Kentucky	
<b>Photograph ID:</b> 5			
<b>Photo Location:</b> 02-OW-02			
<b>Preliminary Jurisdictional Class:</b> Non-JD			
<b>GPS Location:</b> 37.018419, -88.877183			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 6			
<b>Photo Location:</b> 02-OW-03			
<b>Preliminary Jurisdictional Class:</b> Non-JD			
<b>GPS Location:</b> 37.035888, -88.903121			
<b>Survey Date:</b> 2/22/2023			



<b>Client:</b>	<b>Clearway Energy Group, LLC.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID: 7</b>			
<b>Photo Location:</b> 02-OW-04			
<b>Preliminary Jurisdictional Class:</b> Non-JD			
<b>GPS Location:</b> 37.037662, -88.905225			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID: 8</b>			
<b>Photo Location:</b> 02-OW-05			
<b>Preliminary Jurisdictional Class:</b> Non-JD			
<b>GPS Location:</b> 37.034448, -88.911935			
<b>Survey Date:</b> 2/28/2023			



<b>Client:</b>	<b>Clearway Energy Group, LLC.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID:</b> 9			
<b>Photo Location:</b> 03-OW-02			
<b>Preliminary Jurisdictional Class:</b> Non-JD			
<b>GPS Location:</b> 37.012439, -88.935512			
<b>Survey Date:</b> 2/28/2023			
<b>Photograph ID:</b> 10			
<b>Photo Location:</b> 03-OW-03			
<b>Preliminary Jurisdictional Class:</b> JD			
<b>GPS Location:</b> 37.020635, -88.931380			
<b>Survey Date:</b> 3/1/2023			

<b>Client:</b>	Clearway Energy Group, LLC.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky

<b>Photograph ID:</b> 11	
<b>Photo Location:</b> 03-OW-04	
<b>Preliminary Jurisdictional Class:</b> Non-JD	
<b>GPS Location:</b> 37.021534, -88.929809	
<b>Survey Date:</b> 3/1/2023	



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID: 1</b>			
<b>Stream ID:</b> 01-S-01			
<b>Flow Class:</b> EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0151 , -88.88375			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID: 2</b>			
<b>Stream ID:</b> 01-S-01			
<b>Flow Class:</b> EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01509 , -88.88374			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID: 3</b>			
<b>Stream ID:</b> 01-S-02			
<b>Flow Class:</b> INT/EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01524 , -88.88405			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID: 4</b>			
<b>Stream ID:</b> 01-S-02			
<b>Flow Class:</b> INT/EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0153 , -88.88374			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 5			
<b>Stream ID:</b> 01-S-03			
<b>Flow Class:</b> UD			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01596 , -88.88279			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 6			
<b>Stream ID:</b> 01-S-03			
<b>Flow Class:</b> UD			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01597 , -88.88277			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			

<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 7			
<b>Stream ID:</b> 01-S-04			
<b>Flow Class:</b> UD			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01633 , -88.88349			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 8			
<b>Stream ID:</b> 01-S-04			
<b>Flow Class:</b> UD			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01609 , -88.8833			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 9			
<b>Stream ID:</b> 01-S-05			
<b>Flow Class:</b> EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01816 , -88.88214			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 10			
<b>Stream ID:</b> 01-S-05			
<b>Flow Class:</b> EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01995 , -88.88192			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID:</b> 11	
<b>Stream ID:</b> 01-S-06	
<b>Flow Class:</b> INT/EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02343 , -88.87763	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/20/2023	

<b>Photograph ID:</b> 12	
<b>Stream ID:</b> 01-S-06	
<b>Flow Class:</b> INT/EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02341 , -88.87764	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/20/2023	



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID:</b> 13	
<b>Stream ID:</b> 01-S-07	
<b>Flow Class:</b> EPH/UD	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01983 , -88.88342	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/20/2023	

<b>Photograph ID:</b> 14	
<b>Stream ID:</b> 01-S-07	
<b>Flow Class:</b> EPH/UD	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01983 , -88.88342	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/20/2023	



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID:</b> 15	
<b>Stream ID:</b> 01-S-08	
<b>Flow Class:</b> EPH/INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02013 , -88.88169	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/20/2023	

<b>Photograph ID:</b> 16	
<b>Stream ID:</b> 01-S-08	
<b>Flow Class:</b> EPH/INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02048 , -88.88141	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/20/2023	



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID:</b> 17	
<b>Stream ID:</b> 01-S-10	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02118 , -88.87981	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/20/2023	

<b>Photograph ID:</b> 18	
<b>Stream ID:</b> 01-S-10	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02141 , -88.87986	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/20/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 19			
<b>Stream ID:</b> 01-S-11			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02226 , -88.87948			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 20			
<b>Stream ID:</b> 01-S-11			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02227 , -88.87948			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 21			
<b>Stream ID:</b> 01-S-12			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02224 , -88.87893			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 22			
<b>Stream ID:</b> 01-S-12			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02236 , -88.87891			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 23			
<b>Stream ID:</b> 01-S-13			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02227 , -88.87859			
<b>Photo Direction:</b> Dwon			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 24			
<b>Stream ID:</b> 01-S-13			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02244 , -88.87867			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 25			
<b>Stream ID:</b> 01-S-14			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02226 , -88.87838			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 26			
<b>Stream ID:</b> 01-S-15			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02653 , -88.87848			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 27			
<b>Stream ID:</b> 01-S-15			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02628 , -88.87829			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 28			
<b>Stream ID:</b> 01-S-16			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02773 , -88.87829			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 29			
<b>Stream ID:</b> 01-S-16			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02773 , -88.87829			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 30			
<b>Stream ID:</b> 01-S-17			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02796 , -88.8795			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 31			
<b>Stream ID:</b> 01-S-17			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02796 , -88.87949			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 32			
<b>Stream ID:</b> 01-S-18			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02872 , -88.87961			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky

<b>Photograph ID:</b> 33	
<b>Stream ID:</b> 01-S-18	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02873 , -88.8798	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/20/2023	

<b>Photograph ID:</b> 34	
<b>Stream ID:</b> 01-S-19	
<b>Flow Class:</b> PER	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.03002 , -88.88677	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/21/2023	



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 35			
<b>Stream ID:</b> 01-S-19			
<b>Flow Class:</b> PER			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03003 , -88.88676			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 36			
<b>Stream ID:</b> 01-S-20			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03039 , -88.88004			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID:</b> 37			
<b>Stream ID:</b> 01-S-20			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03043 , -88.88002			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 38			
<b>Stream ID:</b> 01-S-21			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02874 , -88.87955			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID:</b> 39			
<b>Stream ID:</b> 01-S-21			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02873 , -88.87957			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 40			
<b>Stream ID:</b> 01-S-22			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02689 , -88.88001			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>



<b>Photograph ID:</b> 41	
<b>Stream ID:</b> 01-S-22	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02682 , -88.88001	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/20/2023	

<b>Photograph ID:</b> 42	
<b>Stream ID:</b> 01-S-23	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02604 , -88.88143	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/20/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 43			
<b>Stream ID:</b> 01-S-23			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02607 , -88.88154			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 44			
<b>Stream ID:</b> 01-S-24			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02604 , -88.88216			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 45			
<b>Stream ID:</b> 01-S-24			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02581 , -88.88176			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 46			
<b>Stream ID:</b> 01-S-25			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.02511 , -88.88136			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 47			
<b>Stream ID:</b> 01-S-25			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.02561 , -88.88157			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 48			
<b>Stream ID:</b> 01-S-26			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02538 , -88.88241			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 49			
<b>Stream ID:</b> 01-S-26			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02537 , -88.88243			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 50			
<b>Stream ID:</b> 01-S-27			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02536 , -88.88239			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 51			
<b>Stream ID:</b> 01-S-27			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02533 , -88.88236			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 52			
<b>Stream ID:</b> 01-S-28			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02535 , -88.88298			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 53			
<b>Stream ID:</b> 01-S-28			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0253 , -88.88289			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 54			
<b>Stream ID:</b> 01-S-29			
<b>Flow Class:</b> EPH/JD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02498 , -88.88397			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 55			
<b>Stream ID:</b> 01-S-29			
<b>Flow Class:</b> EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02494 , -88.88376			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 56			
<b>Stream ID:</b> 01-S-30			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02451 , -88.88326			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID:</b> 57			
<b>Stream ID:</b> 01-S-30			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02459 , -88.88329			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 58			
<b>Stream ID:</b> 01-S-31			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02413 , -88.88356			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>



<b>Photograph ID:</b> 59	
<b>Stream ID:</b> 01-S-31	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02409 , -88.88352	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/20/2023	

<b>Photograph ID:</b> 60	
<b>Stream ID:</b> 01-S-33	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02354 , -88.88417	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/20/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 61			
<b>Stream ID:</b> 01-S-33			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02345 , -88.88413			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 62			
<b>Stream ID:</b> 01-S-34			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03004 , -88.88435			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID:</b> 63			
<b>Stream ID:</b> 01-S-34			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02995 , -88.88438			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 64			
<b>Stream ID:</b> 01-S-35			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02996 , -88.8846			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 65			
<b>Stream ID:</b> 01-S-35			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03004 , -88.88446			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 66			
<b>Stream ID:</b> 01-S-36			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.02958 , -88.88583			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 67			
<b>Stream ID:</b> 01-S-36			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.02957 , -88.88583			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 68			
<b>Stream ID:</b> 01-S-37			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02986 , -88.88683			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 69			
<b>Stream ID:</b> 01-S-37			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03002 , -88.8868			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 70			
<b>Stream ID:</b> 01-S-38			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02994 , -88.88695			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID:</b> 71			
<b>Stream ID:</b> 01-S-38			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03001 , -88.88694			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 72			
<b>Stream ID:</b> 01-S-39			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02994 , -88.88716			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>



<b>Photograph ID:</b> 73	
<b>Stream ID:</b> 01-S-39	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02992 , -88.88716	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/21/2023	

<b>Photograph ID:</b> 74	
<b>Stream ID:</b> 01-S-40	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02997 , -88.88728	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/21/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 75			
<b>Stream ID:</b> 01-S-40			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02995 , -88.88729			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 76			
<b>Stream ID:</b> 01-S-41			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02994 , -88.88748			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 77			
<b>Stream ID:</b> 01-S-41			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02995 , -88.88748			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 78			
<b>Stream ID:</b> 01-S-42			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03016 , -88.88766			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 79			
<b>Stream ID:</b> 01-S-42			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03015 , -88.88766			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 80			
<b>Stream ID:</b> 01-S-43			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02991 , -88.88788			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID:</b> 81			
<b>Stream ID:</b> 01-S-43			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02994 , -88.8879			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 82			
<b>Stream ID:</b> 01-S-44			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02345, -88.88461			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/14/2023			




<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky

<b>Photograph ID:</b> 83	
<b>Stream ID:</b> 01-S-45	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.0275 , -88.88871	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/21/2023	

<b>Photograph ID:</b> 84	
<b>Stream ID:</b> 01-S-45	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.0275 , -88.88872	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/21/2023	



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID:</b> 85	
<b>Stream ID:</b> 01-S-46	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02615 , -88.89822	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/21/2023	

<b>Photograph ID:</b> 86	
<b>Stream ID:</b> 01-S-46	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02616 , -88.89821	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/21/2023	





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID:</b> 87	
<b>Stream ID:</b> 01-S-47	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02601 , -88.89379	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/21/2023	

<b>Photograph ID:</b> 88	
<b>Stream ID:</b> 01-S-47	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02601 , -88.89379	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/21/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 89			
<b>Stream ID:</b> 01-S-48			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02584 , -88.89357			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 90			
<b>Stream ID:</b> 01-S-48			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02584 , -88.89357			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 91			
<b>Stream ID:</b> 01-S-49			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02633 , -88.89354			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 92			
<b>Stream ID:</b> 01-S-49			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02633 , -88.89354			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 93			
<b>Stream ID:</b> 01-S-50			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02703 , -88.89799			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 94			
<b>Stream ID:</b> 01-S-50			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02703 , -88.898			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 95			
<b>Stream ID:</b> 01-S-51			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02736 , -88.89752			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 96			
<b>Stream ID:</b> 01-S-51			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02736 , -88.89752			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 97			
<b>Stream ID:</b> 01-S-52			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02743 , -88.89608			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 98			
<b>Stream ID:</b> 01-S-52			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02743 , -88.89608			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 99			
<b>Stream ID:</b> 01-S-53			
<b>Flow Class:</b> PER			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02509 , -88.89823			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 100			
<b>Stream ID:</b> 01-S-53			
<b>Flow Class:</b> PER			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02509 , -88.89823			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID: 1</b>			
<b>Stream ID:</b> 01-S-54			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02316, -88.88466			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/14/2023			
<b>Photograph ID: 2</b>			
<b>Stream ID:</b> 01-S-54			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02316, -88.88466			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/14/2023			




<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky

<b>Photograph ID:</b> 3	
<b>Stream ID:</b> 01-S-55	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02433 , -88.89723	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/21/2023	

<b>Photograph ID:</b> 4	
<b>Stream ID:</b> 01-S-55	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02432 , -88.89724	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/21/2023	





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>



<b>Photograph ID:</b> 5	
<b>Stream ID:</b> 01-S-56	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02444 , -88.89651	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/21/2023	

<b>Photograph ID:</b> 6	
<b>Stream ID:</b> 01-S-56	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02444 , -88.89651	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/21/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 7			
<b>Stream ID:</b> 01-S-57			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02402 , -88.8962			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 8			
<b>Stream ID:</b> 01-S-57			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02401 , -88.89619			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 9			
<b>Stream ID:</b> 01-S-58			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02432 , -88.89496			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 10			
<b>Stream ID:</b> 01-S-58			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02432 , -88.89496			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 11			
<b>Stream ID:</b> 01-S-59			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02398 , -88.8946			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 12			
<b>Stream ID:</b> 01-S-59			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02399 , -88.89462			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			




<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 13			
<b>Stream ID:</b> 01-S-60			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02388 , -88.8944			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 14			
<b>Stream ID:</b> 01-S-60			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0239 , -88.8944			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 15			
<b>Stream ID:</b> 01-S-61			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02346 , -88.89414			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 16			
<b>Stream ID:</b> 01-S-61			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02346 , -88.89414			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 17			
<b>Stream ID:</b> 01-S-62			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02347 , -88.89414			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 18			
<b>Stream ID:</b> 01-S-62			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0234 , -88.89422			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 19			
<b>Stream ID:</b> 01-S-63			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02356 , -88.89331			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 20			
<b>Stream ID:</b> 01-S-63			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02356 , -88.89331			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 21			
<b>Stream ID:</b> 01-S-64			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02417 , -88.89299			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 22			
<b>Stream ID:</b> 01-S-64			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02418 , -88.893			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			




<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 23			
<b>Stream ID:</b> 01-S-65			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02438 , -88.89277			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 24			
<b>Stream ID:</b> 01-S-65			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02424 , -88.89283			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 25			
<b>Stream ID:</b> 01-S-66			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02414 , -88.89267			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 26			
<b>Stream ID:</b> 01-S-66			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02424 , -88.89266			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky



<b>Photograph ID:</b> 27	
<b>Stream ID:</b> 01-S-67	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02444 , -88.89258	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/22/2023	

<b>Photograph ID:</b> 28	
<b>Stream ID:</b> 01-S-68	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02428 , -88.89244	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/22/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 29			
<b>Stream ID:</b> 01-S-69			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02419 , -88.89181			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 30			
<b>Stream ID:</b> 01-S-69			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02407 , -88.89133			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 31			
<b>Stream ID:</b> 01-S-70			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0239 , -88.89109			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 32			
<b>Stream ID:</b> 01-S-70			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02404 , -88.89138			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 33			
<b>Stream ID:</b> 01-S-71			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02358 , -88.89319			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 34			
<b>Stream ID:</b> 01-S-71			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02357 , -88.89315			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 35			
<b>Stream ID:</b> 01-S-72			
<b>Flow Class:</b> PER			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01998 , -88.90147			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 36			
<b>Stream ID:</b> 01-S-72			
<b>Flow Class:</b> PER			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01998 , -88.90147			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky



<b>Photograph ID:</b> 37	
<b>Stream ID:</b> 01-S-73	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.0219 , -88.89688	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/22/2023	

<b>Photograph ID:</b> 38	
<b>Stream ID:</b> 01-S-73	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02187 , -88.89687	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/22/2023	





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID:</b> 39			
<b>Stream ID:</b> 01-S-74			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02189 , -88.89704			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 40			
<b>Stream ID:</b> 01-S-74			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02191 , -88.89704			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 41			
<b>Stream ID:</b> 01-S-75			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02151 , -88.89709			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 42			
<b>Stream ID:</b> 01-S-75			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02157 , -88.89722			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 43			
<b>Stream ID:</b> 01-S-76			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02173 , -88.89814			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 44			
<b>Stream ID:</b> 01-S-76			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02171 , -88.89812			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 45			
<b>Stream ID:</b> 01-S-77			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02159 , -88.89883			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 46			
<b>Stream ID:</b> 01-S-77			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02165 , -88.8988			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID: 1</b>			
<b>Stream ID:</b> 01-S-78			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01979 , -88.90212			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID: 2</b>			
<b>Stream ID:</b> 01-S-78			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01979 , -88.90211			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>

<b>Photograph ID:</b> 3	
<b>Stream ID:</b> 01-S-79	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02076 , -88.90208	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/22/2023	

<b>Photograph ID:</b> 4	
<b>Stream ID:</b> 01-S-79	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02078 , -88.90205	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/22/2023	





<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>



<b>Photograph ID: 5</b>	
<b>Stream ID:</b> 01-S-80	
<b>Flow Class:</b> PER	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02933 , -88.91295	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/28/2023	

<b>Photograph ID: 6</b>	
<b>Stream ID:</b> 01-S-80	
<b>Flow Class:</b> PER	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02933 , -88.91295	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/28/2023	



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID: 7</b>			
<b>Stream ID:</b> 01-S-81			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02038 , -88.90498			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID: 8</b>			
<b>Stream ID:</b> 01-S-81			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02038 , -88.90498			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID:</b> 9			
<b>Stream ID:</b> 01-S-82			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01921 , -88.904			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 10			
<b>Stream ID:</b> 01-S-82			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01921 , -88.90399			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>

<b>Photograph ID:</b> 11	
<b>Stream ID:</b> 01-S-83	
<b>Flow Class:</b> EPH/UD	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01229 , -88.91549	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/23/2023	

<b>Photograph ID:</b> 12	
<b>Stream ID:</b> 01-S-83	
<b>Flow Class:</b> EPH/UD	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01226 , -88.91549	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/23/2023	



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>



<b>Photograph ID:</b> 13	
<b>Stream ID:</b> 01-S-84	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01288 , -88.91334	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/23/2023	

<b>Photograph ID:</b> 14	
<b>Stream ID:</b> 01-S-84	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01288 , -88.91334	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/23/2023	



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID: 15</b>			
<b>Stream ID:</b> 01-S-85			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01411 , -88.91269			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID: 16</b>			
<b>Stream ID:</b> 01-S-85			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01411 , -88.91268			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID: 17</b>			
<b>Stream ID:</b> 01-S-86			
<b>Flow Class:</b> EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0159 , -88.91486			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID: 18</b>			
<b>Stream ID:</b> 01-S-86			
<b>Flow Class:</b> EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0159 , -88.91486			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID:</b> 19			
<b>Stream ID:</b> 01-S-87			
<b>Flow Class:</b> EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01929 , -88.91573			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 20			
<b>Stream ID:</b> 01-S-87			
<b>Flow Class:</b> EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01786 , -88.91396			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID:</b> 21			
<b>Stream ID:</b> 01-S-87			
<b>Flow Class:</b> EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01787 , -88.91396			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 22			
<b>Stream ID:</b> 01-S-87			
<b>Flow Class:</b> EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01929 , -88.91573			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			




<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID: 23</b>			
<b>Stream ID:</b> 01-S-88			
<b>Flow Class:</b> PER			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03086 , -88.91399			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID: 24</b>			
<b>Stream ID:</b> 01-S-88			
<b>Flow Class:</b> PER			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03079 , -88.91408			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID:</b> 25			
<b>Stream ID:</b> 01-S-89			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01986 , -88.91457			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 26			
<b>Stream ID:</b> 01-S-89			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01986 , -88.91456			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>



<b>Photograph ID:</b> 27	
<b>Stream ID:</b> 01-S-89	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> Non-JD	
<b>Latitude/Longitude:</b> 37.01977 , -88.91359	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/23/2023	

<b>Photograph ID:</b> 28	
<b>Stream ID:</b> 01-S-89	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> Non-JD	
<b>Latitude/Longitude:</b> 37.01977 , -88.91358	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/23/2023	



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID:</b> 29			
<b>Stream ID:</b> 01-S-90			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0307 , -88.91444			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 30			
<b>Stream ID:</b> 01-S-90			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03072 , -88.91424			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID:</b> 31			
<b>Stream ID:</b> 01-S-91			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03048 , -88.91451			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 32			
<b>Stream ID:</b> 01-S-91			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03048 , -88.91451			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID:</b> 33			
<b>Stream ID:</b> 01-S-92			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02991 , -88.91482			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 34			
<b>Stream ID:</b> 01-S-92			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02993 , -88.91483			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>

<b>Photograph ID:</b> 35	
<b>Stream ID:</b> 01-S-93	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.03024 , -88.91464	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/23/2023	

<b>Photograph ID:</b> 36	
<b>Stream ID:</b> 01-S-93	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.03024 , -88.91464	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/23/2023	



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID:</b> 37			
<b>Stream ID:</b> 01-S-94			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03153 , -88.91447			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 38			
<b>Stream ID:</b> 01-S-94			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03151 , -88.9145			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID:</b> 39			
<b>Stream ID:</b> 01-S-95			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03179 , -88.91479			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 40			
<b>Stream ID:</b> 01-S-95			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03182 , -88.91451			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, KY
<b>Photograph ID:</b> 41			
<b>Stream ID:</b> 01-S-96			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03333 , -88.91544			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 42			
<b>Stream ID:</b> 01-S-97			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03414 , -88.91593			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			




<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, KY
<b>Photograph ID:</b> 43			
<b>Stream ID:</b> 01-S-97			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03414 , -88.91593			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 44			
<b>Stream ID:</b> 01-S-98			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03486 , -88.91619			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>



<b>Photograph ID:</b> 45	
<b>Stream ID:</b> 01-S-98	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.03486 , -88.91618	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/23/2023	

<b>Photograph ID:</b> 46	
<b>Stream ID:</b> 01-S-99	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.03521 , -88.91614	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/23/2023	



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID:</b> 47			
<b>Stream ID:</b> 01-S-99			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0352 , -88.91614			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 48			
<b>Stream ID:</b> 01-S-100			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.035262 , -88.917135			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID:</b> 49			
<b>Stream ID:</b> 01-S-100			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.035262 , -88.917135			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 50			
<b>Stream ID:</b> 01-S-101			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02986 , -88.91403			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>

<b>Photograph ID:</b> 51	
<b>Stream ID:</b> 01-S-101	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02974 , -88.91393	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/23/2023	

<b>Photograph ID:</b> 52	
<b>Stream ID:</b> 01-S-102	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02913 , -88.9131	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/23/2023	



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID:</b> 53			
<b>Stream ID:</b> 01-S-102			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02914 , -88.91309			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 54			
<b>Stream ID:</b> 01-S-102			
<b>Flow Class:</b> EPH/JD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02568 , -88.91343			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID:</b> 55			
<b>Stream ID:</b> 01-S-102			
<b>Flow Class:</b> EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02566944, -88.91344722			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 56			
<b>Stream ID:</b> 01-S-103			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02892 , -88.91302			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>


<b>Photograph ID:</b> 57	
<b>Stream ID:</b> 01-S-103	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02892 , -88.91302	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/23/2023	

<b>Photograph ID:</b> 58	
<b>Stream ID:</b> 01-S-104	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02719 , -88.91337	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/23/2023	



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, KY
<b>Photograph ID:</b> 59			
<b>Stream ID:</b> 01-S-104			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02726 , -88.91325			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 60			
<b>Stream ID:</b> 01-S-105			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02093 , -88.90919			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, KY</b>
<b>Photograph ID:</b> 61			
<b>Stream ID:</b> 01-S-105			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02094 , -88.90916			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky



<b>Photograph ID:</b> 1	
<b>Stream ID:</b> 01-S-106	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02083 , -88.90797	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/23/2023	

<b>Photograph ID:</b> 2	
<b>Stream ID:</b> 01-S-106	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02083 , -88.90798	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/23/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 3			
<b>Stream ID:</b> 01-S-107			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02014 , -88.90836			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 4			
<b>Stream ID:</b> 01-S-107			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02014 , -88.90836			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 5			
<b>Stream ID:</b> 01-S-108			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02153 , -88.90924			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 6			
<b>Stream ID:</b> 01-S-108			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02153 , -88.90924			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID: 7</b>			
<b>Stream ID:</b> 01-S-109			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02236 , -88.90804			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID: 8</b>			
<b>Stream ID:</b> 01-S-109			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02236 , -88.90804			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 9			
<b>Stream ID:</b> 01-S-110			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02012 , -88.90642			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 10			
<b>Stream ID:</b> 01-S-110			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02013 , -88.90646			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID:</b> 11	
<b>Stream ID:</b> 01-S-111	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01992 , -88.90527	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/23/2023	

<b>Photograph ID:</b> 12	
<b>Stream ID:</b> 01-S-111	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01992 , -88.90528	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/23/2023	



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 13			
<b>Stream ID:</b> 01-S-112			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02054 , -88.90601			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 14			
<b>Stream ID:</b> 01-S-112			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02054 , -88.90602			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>



<b>Photograph ID:</b> 15	
<b>Stream ID:</b> 01-S-113	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.0213 , -88.91591	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/24/2023	

<b>Photograph ID:</b> 16	
<b>Stream ID:</b> 01-S-113	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.0213 , -88.91591	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/24/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 17			
<b>Stream ID:</b> 01-S-114			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02124 , -88.91583			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/24/2023			
<b>Photograph ID:</b> 18			
<b>Stream ID:</b> 01-S-114			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02124 , -88.91584			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/24/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 19			
<b>Stream ID:</b> 01-S-115			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02366 , -88.91486			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/24/2023			
<b>Photograph ID:</b> 20			
<b>Stream ID:</b> 01-S-115			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02371 , -88.91476			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/24/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 21			
<b>Stream ID:</b> 01-S-116			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02649 , -88.91464			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/24/2023			
<b>Photograph ID:</b> 22			
<b>Stream ID:</b> 01-S-116			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02664 , -88.9145			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/24/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky

<b>Photograph ID:</b> 23	
<b>Stream ID:</b> 01-S-116	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02376 , -88.91641	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/24/2023	

<b>Photograph ID:</b> 24	
<b>Stream ID:</b> 01-S-116	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02376 , -88.91641	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/24/2023	



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 25			
<b>Stream ID:</b> 01-S-117			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02419 , -88.91624			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/24/2023			
<b>Photograph ID:</b> 26			
<b>Stream ID:</b> 01-S-117			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02421 , -88.91627			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/24/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 27			
<b>Stream ID:</b> 01-S-118			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02755 , -88.91528			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/24/2023			
<b>Photograph ID:</b> 28			
<b>Stream ID:</b> 01-S-118			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02773 , -88.91506			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/24/2023			



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID: 1</b>	
<b>Stream ID:</b> 02-S-01	
<b>Flow Class:</b> PER	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02632 , -88.87805	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/20/2023	

<b>Photograph ID: 2</b>	
<b>Stream ID:</b> 02-S-01	
<b>Flow Class:</b> PER	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02632 , -88.87804	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/20/2023	





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID:</b> 3	
<b>Stream ID:</b> 02-S-02	
<b>Flow Class:</b> PER	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.0183 , -88.86913	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/20/2023	

<b>Photograph ID:</b> 4	
<b>Stream ID:</b> 02-S-02	
<b>Flow Class:</b> PER	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.0183 , -88.86912	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/20/2023	





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID: 5</b>			
<b>Stream ID:</b> 02-S-03			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01818 , -88.86632			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID: 6</b>			
<b>Stream ID:</b> 02-S-03			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.0182 , -88.86637			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 7			
<b>Stream ID:</b> 02-S-04			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01828 , -88.86594			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 8			
<b>Stream ID:</b> 02-S-04			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01828 , -88.86594			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 9			
<b>Stream ID:</b> 02-S-05			
<b>Flow Class:</b> UD			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01846 , -88.86485			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 10			
<b>Stream ID:</b> 02-S-05			
<b>Flow Class:</b> UD			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01846 , -88.86485			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 11			
<b>Stream ID:</b> 02-S-06			
<b>Flow Class:</b> UD			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01852 , -88.8648			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 12			
<b>Stream ID:</b> 02-S-06			
<b>Flow Class:</b> UD			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.0185 , -88.8648			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 13			
<b>Stream ID:</b> 02-S-07			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01903 , -88.86437			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 14			
<b>Stream ID:</b> 02-S-07			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01905 , -88.86433			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 15			
<b>Stream ID:</b> 02-S-08			
<b>Flow Class:</b> UD			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01637, -88.86412			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 16			
<b>Stream ID:</b> 02-S-08			
<b>Flow Class:</b> UD			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01637, -88.86412			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			




<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 17			
<b>Stream ID:</b> 02-S-09			
<b>Flow Class:</b> EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02023 , -88.86806			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 18			
<b>Stream ID:</b> 02-S-09			
<b>Flow Class:</b> EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02023 , -88.86805			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/20/2023			



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID:</b> 19	
<b>Stream ID:</b> 02-S-10	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01949 , -88.87308	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/20/2023	

<b>Photograph ID:</b> 20	
<b>Stream ID:</b> 02-S-10	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01951 , -88.87304	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/20/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 21			
<b>Stream ID:</b> 02-S-12			
<b>Flow Class:</b> UD			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01565 , -88.87163			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 22			
<b>Stream ID:</b> 02-S-12			
<b>Flow Class:</b> UD			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01566 , -88.87163			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 23			
<b>Stream ID:</b> 02-S-13			
<b>Flow Class:</b> EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01619 , -88.87337			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 24			
<b>Stream ID:</b> 02-S-13			
<b>Flow Class:</b> EPH/UD			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01619 , -88.87337			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 25			
<b>Stream ID:</b> 02-S-14			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01733 , -88.87486			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 26			
<b>Stream ID:</b> 02-S-14			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01733 , -88.87486			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID:</b> 27	
<b>Stream ID:</b> 02-S-15	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01739 , -88.87484	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/21/2023	

<b>Photograph ID:</b> 28	
<b>Stream ID:</b> 02-S-15	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01739 , -88.87484	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/21/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 29			
<b>Stream ID:</b> 02-S-16			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01754 , -88.87479			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 30			
<b>Stream ID:</b> 02-S-16			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01754 , -88.87479			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 31			
<b>Stream ID:</b> 02-S-17			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01859 , -88.87502			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 32			
<b>Stream ID:</b> 02-S-17			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0186 , -88.87502			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 33			
<b>Stream ID:</b> 02-S-18			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01859 , -88.87506			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 34			
<b>Stream ID:</b> 02-S-18			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01859 , -88.87504			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 35			
<b>Stream ID:</b> 02-S-19			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01898 , -88.87532			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 36			
<b>Stream ID:</b> 02-S-19			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01894 , -88.87542			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 37			
<b>Stream ID:</b> 02-S-20			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01875 , -88.87558			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 38			
<b>Stream ID:</b> 02-S-20			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01875 , -88.87558			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID:</b> 39	
<b>Stream ID:</b> 02-S-21	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> Non-JD	
<b>Latitude/Longitude:</b> 37.01839 , -88.87613	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/21/2023	

<b>Photograph ID:</b> 40	
<b>Stream ID:</b> 02-S-21	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> Non-JD	
<b>Latitude/Longitude:</b> 37.01841 , -88.87627	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/21/2023	



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID:</b> 41			
<b>Stream ID:</b> 02-S-22			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01801 , -88.87682			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 42			
<b>Stream ID:</b> 02-S-22			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.018 , -88.87683			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 43			
<b>Stream ID:</b> 02-S-23			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01898 , -88.8753			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 44			
<b>Stream ID:</b> 02-S-23			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01896 , -88.8753			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 45			
<b>Stream ID:</b> 02-S-24			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01913 , -88.87476			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 46			
<b>Stream ID:</b> 02-S-24			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01913 , -88.87479			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			




<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 47			
<b>Stream ID:</b> 02-S-26			
<b>Flow Class:</b> PER/INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01569 , -88.87489			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 48			
<b>Stream ID:</b> 02-S-26			
<b>Flow Class:</b> PER/INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01569 , -88.87489			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 49			
<b>Stream ID:</b> 02-S-27			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01731 , -88.87865			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 50			
<b>Stream ID:</b> 02-S-27			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.0173 , -88.87864			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 51			
<b>Stream ID:</b> 02-S-28			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01853 , -88.87718			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 52			
<b>Stream ID:</b> 02-S-28			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01853 , -88.87718			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID:</b> 53	
<b>Stream ID:</b> 02-S-29	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01478 , -88.8724	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/22/2023	

<b>Photograph ID:</b> 54	
<b>Stream ID:</b> 02-S-29	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01478 , -88.8724	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/22/2023	

<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 55			
<b>Stream ID:</b> 02-S-30			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01365 , -88.87265			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 56			
<b>Stream ID:</b> 02-S-30			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01365 , -88.87264			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 57			
<b>Stream ID:</b> 02-S-31			
<b>Flow Class:</b> UD			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.0117 , -88.87129			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 58			
<b>Stream ID:</b> 02-S-31			
<b>Flow Class:</b> UD			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.0117 , -88.87128			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky

<b>Photograph ID:</b> 59	
<b>Stream ID:</b> 02-S-32	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01197 , -88.87143	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/22/2023	

<b>Photograph ID:</b> 60	
<b>Stream ID:</b> 02-S-32	
<b>Flow Class:</b> INT	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01196 , -88.87144	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/22/2023	



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID:</b> 61	
<b>Stream ID:</b> 02-S-33	
<b>Flow Class:</b> EPH/UD	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01374 , -88.8779	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/22/2023	

<b>Photograph ID:</b> 62	
<b>Stream ID:</b> 02-S-33	
<b>Flow Class:</b> EPH/UD	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01374 , -88.8779	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/22/2023	

<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky

<b>Photograph ID:</b> 63	
<b>Stream ID:</b> 02-S-34	
<b>Flow Class:</b> UD	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01386 , -88.87908	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/22/2023	

<b>Photograph ID:</b> 64	
<b>Stream ID:</b> 02-S-34	
<b>Flow Class:</b> UD	
<b>Jurisdictional Determination:</b> Non-JD	
<b>Latitude/Longitude:</b> 37.01386 , -88.87908	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/22/2023	



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 65			
<b>Stream ID:</b> 02-S-35			
<b>Flow Class:</b> UD			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01413 , -88.87921			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 66			
<b>Stream ID:</b> 02-S-35			
<b>Flow Class:</b> UD			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01412 , -88.8792			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			

<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky

<b>Photograph ID:</b> 67	
<b>Stream ID:</b> 02-S-36	
<b>Flow Class:</b> EPH/UD	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01256 , -88.87862	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/22/2023	

<b>Photograph ID:</b> 68	
<b>Stream ID:</b> 02-S-36	
<b>Flow Class:</b> EPH/UD	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01256 , -88.87861	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/22/2023	





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID:</b> 69	
<b>Stream ID:</b> 02-S-37	
<b>Flow Class:</b> EPH/UD	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01491 , -88.87599	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/22/2023	



<b>Photograph ID:</b> 70	
<b>Stream ID:</b> 02-S-37	
<b>Flow Class:</b> EPH/UD	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.01589 , -88.87896	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/22/2023	

<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 71			
<b>Stream ID:</b> 02-S-38			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01979 , -88.87718			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 72			
<b>Stream ID:</b> 02-S-38			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.01979 , -88.87718			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 73			
<b>Stream ID:</b> 02-S-39			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.02058 , -88.87716			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 74			
<b>Stream ID:</b> 02-S-39			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.02058 , -88.87717			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/22/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 75			
<b>Stream ID:</b> 02-S-40			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.03614 , -88.90399			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 76			
<b>Stream ID:</b> 02-S-40			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.03613 , -88.90398			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 77			
<b>Stream ID:</b> 02-S-41			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03594 , -88.90394			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 78			
<b>Stream ID:</b> 02-S-41			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03595 , -88.90395			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 79			
<b>Stream ID:</b> 02-S-42			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.03523 , -88.90451			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 80			
<b>Stream ID:</b> 02-S-42			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.03523 , -88.9045			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID:</b> 81	
<b>Stream ID:</b> 02-S-43	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.03528 , -88.90636	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/23/2023	

<b>Photograph ID:</b> 82	
<b>Stream ID:</b> 02-S-43	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.03528 , -88.90636	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/23/2023	



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 83			
<b>Stream ID:</b> 02-S-44			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03533 , -88.9064			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 84			
<b>Stream ID:</b> 02-S-44			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03533 , -88.9064			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky



<b>Photograph ID:</b> 85	
<b>Stream ID:</b> 02-S-45	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> Non-JD	
<b>Latitude/Longitude:</b> 37.03711 , -88.90496	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/23/2023	

<b>Photograph ID:</b> 86	
<b>Stream ID:</b> 02-S-45	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> Non-JD	
<b>Latitude/Longitude:</b> 37.03711 , -88.90496	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/23/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 87			
<b>Stream ID:</b> 02-S-46			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.03736 , -88.90481			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 88			
<b>Stream ID:</b> 02-S-46			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.03736 , -88.90481			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 89			
<b>Stream ID:</b> 02-S-47			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.03697 , -88.90553			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 90			
<b>Stream ID:</b> 02-S-47			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.03697 , -88.90553			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 91			
<b>Stream ID:</b> 02-S-48			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03838 , -88.90646			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 92			
<b>Stream ID:</b> 02-S-48			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03838 , -88.90646			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 93			
<b>Stream ID:</b> 02-S-49			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03848 , -88.90651			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 94			
<b>Stream ID:</b> 02-S-49			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03847 , -88.9065			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 95			
<b>Stream ID:</b> 02-S-50			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03828 , -88.90607			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 96			
<b>Stream ID:</b> 02-S-50			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03828 , -88.90608			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 97			
<b>Stream ID:</b> 02-S-51			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03844 , -88.90774			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 98			
<b>Stream ID:</b> 02-S-51			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03844 , -88.90773			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID:</b> 99			
<b>Stream ID:</b> 02-S-52			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0353 , -88.90749			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 100			
<b>Stream ID:</b> 02-S-52			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03554 , -88.90746			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>



<b>Photograph ID:</b> 101	
<b>Stream ID:</b> 02-S-53	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.03531 , -88.9076	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/23/2023	

<b>Photograph ID:</b> 102	
<b>Stream ID:</b> 02-S-53	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.03527 , -88.90761	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/23/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 103			
<b>Stream ID:</b> 02-S-54			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0353 , -88.90796			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 104			
<b>Stream ID:</b> 02-S-54			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0353 , -88.90796			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID:</b> 105			
<b>Stream ID:</b> 02-S-55			
<b>Flow Class:</b> PER			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03367 , -88.91289			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 106			
<b>Stream ID:</b> 02-S-55			
<b>Flow Class:</b> PER			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03367 , -88.91289			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 107			
<b>Stream ID:</b> 02-S-56			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03687 , -88.9019			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/28/2023			
<b>Photograph ID:</b> 108			
<b>Stream ID:</b> 02-S-56			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03687 , -88.9019			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/28/2023			



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID:</b> 109			
<b>Stream ID:</b> 02-S-57			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03807 , -88.90246			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/28/2023			
<b>Photograph ID:</b> 110			
<b>Stream ID:</b> 02-S-57			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03809 , -88.90242			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/28/2023			



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>



<b>Photograph ID:</b> 111	
<b>Stream ID:</b> 02-S-58	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.03401 , -88.91409	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/28/2023	

<b>Photograph ID:</b> 112	
<b>Stream ID:</b> 02-S-58	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.03401 , -88.91408	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/28/2023	




<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 113			
<b>Stream ID:</b> 02-S-59			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03176 , -88.91416			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/28/2023			
<b>Photograph ID:</b> 114			
<b>Stream ID:</b> 02-S-59			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03176 , -88.91416			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/28/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 115			
<b>Stream ID:</b> 02-S-61			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02813 , -88.91231			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/28/2023			
<b>Photograph ID:</b> 116			
<b>Stream ID:</b> 02-S-61			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02815 , -88.91231			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/28/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 117			
<b>Stream ID:</b> 02-S-62			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.03522 , -88.91061			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/28/2023			
<b>Photograph ID:</b> 118			
<b>Stream ID:</b> 02-S-62			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.03524 , -88.91061			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/28/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky



<b>Photograph ID: 1</b>	
<b>Stream ID:</b> 02-S-63	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02811 , -88.91239	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 2/28/2023	

<b>Photograph ID: 2</b>	
<b>Stream ID:</b> 02-S-63	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02811 , -88.91238	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 2/28/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 3			
<b>Stream ID:</b> 02-S-64			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03547 , -88.91034			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/28/2023			
<b>Photograph ID:</b> 4			
<b>Stream ID:</b> 02-S-64			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03547 , -88.91031			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/28/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 5			
<b>Stream ID:</b> 02-S-65			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0266 , -88.91089			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/28/2023			
<b>Photograph ID:</b> 6			
<b>Stream ID:</b> 02-S-65			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02661 , -88.91089			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/28/2023			






<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID: 7</b>			
<b>Stream ID:</b> 02-S-66			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02622 , -88.91081			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/28/2023			
<b>Photograph ID: 8</b>			
<b>Stream ID:</b> 02-S-66			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02621 , -88.91081			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/28/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 9			
<b>Stream ID:</b> 02-S-67			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02436 , -88.90892			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/28/2023			
<b>Photograph ID:</b> 10			
<b>Stream ID:</b> 02-S-67			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02436 , -88.90892			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/28/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 11			
<b>Stream ID:</b> 02-S-68			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03598 , -88.91418			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/28/2023			
<b>Photograph ID:</b> 12			
<b>Stream ID:</b> 02-S-68			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03597 , -88.91418			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/28/2023			

<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 13			
<b>Stream ID:</b> 02-S-69			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03605 , -88.91411			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 2/28/2023			
<b>Photograph ID:</b> 14			
<b>Stream ID:</b> 02-S-69			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03602 , -88.91405			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 2/28/2023			



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>

<b>Photograph ID:</b> 15	
<b>Stream ID:</b> 02-S-70	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.03659 , -88.91459	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 3/1/2023	

<b>Photograph ID:</b> 16	
<b>Stream ID:</b> 02-S-70	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.03659 , -88.91454	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 3/1/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky



<b>Photograph ID:</b> 17	
<b>Stream ID:</b> 02-S-71	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> Non-JD	
<b>Latitude/Longitude:</b> 37.03637 , -88.91339	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 3/1/2023	

<b>Photograph ID:</b> 18	
<b>Stream ID:</b> 02-S-71	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> Non-JD	
<b>Latitude/Longitude:</b> 37.03636 , -88.91341	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 3/1/2023	



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID:</b> 19			
<b>Stream ID:</b> 02-S-72			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.03801 , -88.91194			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 20			
<b>Stream ID:</b> 02-S-72			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.03802 , -88.91193			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 21			
<b>Stream ID:</b> 02-S-73			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03796 , -88.91068			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 22			
<b>Stream ID:</b> 02-S-73			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.03796 , -88.91069			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>



<b>Photograph ID:</b> 23	
<b>Stream ID:</b> 02-S-74	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.0381 , -88.91006	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 3/1/2023	

<b>Photograph ID:</b> 24	
<b>Stream ID:</b> 02-S-74	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.0381 , -88.91023	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 3/1/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 25			
<b>Stream ID:</b> 02-S-75			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.03511 , -88.91025			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 26			
<b>Stream ID:</b> 02-S-75			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.03511 , -88.91025			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID:</b> 27			
<b>Stream ID:</b> 02-S-76			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02963 , -88.91515			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 28			
<b>Stream ID:</b> 02-S-76			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02961 , -88.91511			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 29			
<b>Stream ID:</b> 02-S-77			
<b>Flow Class:</b> PER			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02573 , -88.92317			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 30			
<b>Stream ID:</b> 02-S-77			
<b>Flow Class:</b> PER			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02581 , -88.92281			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 31			
<b>Stream ID:</b> 02-S-78			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02803 , -88.9167			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 32			
<b>Stream ID:</b> 02-S-78			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02849 , -88.91641			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 33			
<b>Stream ID:</b> 02-S-79			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02796 , -88.91661			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 34			
<b>Stream ID:</b> 02-S-79			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02797 , -88.91663			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 35			
<b>Stream ID:</b> 02-S-80			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02786 , -88.9179			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 36			
<b>Stream ID:</b> 02-S-80			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02789 , -88.91787			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 37			
<b>Stream ID:</b> 02-S-81			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02745 , -88.92083			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 38			
<b>Stream ID:</b> 02-S-81			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02745 , -88.92083			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 39			
<b>Stream ID:</b> 02-S-82			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02722 , -88.92094			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 40			
<b>Stream ID:</b> 02-S-82			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02722 , -88.92094			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 41			
<b>Stream ID:</b> 02-S-83			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02709, -88.92068			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 42			
<b>Stream ID:</b> 02-S-83			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02706, -88.92068			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			





<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>
<b>Photograph ID:</b> 43			
<b>Stream ID:</b> 02-S-84			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01264, -88.87186			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/14/2023			
<b>Photograph ID:</b> 44			
<b>Stream ID:</b> 02-S-84			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.01264, -88.87186			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/14/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 45			
<b>Stream ID:</b> 02-S-85			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.03547, -88.91034			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/14/2023			
<b>Photograph ID:</b> 46			
<b>Stream ID:</b> 02-S-85			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> Non-JD			
<b>Latitude/Longitude:</b> 37.03547, -88.91034			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/14/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID: 1</b>			
<b>Stream ID:</b> 03-S-35			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02107, -88.92181			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID: 2</b>			
<b>Stream ID:</b> 03-S-35			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02107, -88.92179			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 3			
<b>Stream ID:</b> 03-S-36			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02051, -88.92481			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 4			
<b>Stream ID:</b> 03-S-36			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02046, -88.92478			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 5			
<b>Stream ID:</b> 03-S-37			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02082, -88.92446			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 6			
<b>Stream ID:</b> 03-S-37			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02076, -88.92444			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky



<b>Photograph ID:</b> 7	
<b>Stream ID:</b> 03-S-38	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02081, -88.9245	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 3/1/2023	

<b>Photograph ID:</b> 8	
<b>Stream ID:</b> 03-S-38	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02081, -88.92449	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 3/1/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 9			
<b>Stream ID:</b> 03-S-39			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02117, -88.92493			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 10			
<b>Stream ID:</b> 03-S-39			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02116, -88.92489			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 11			
<b>Stream ID:</b> 03-S-40			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02126, -88.92497			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 12			
<b>Stream ID:</b> 03-S-40			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02126, -88.92496			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 13			
<b>Stream ID:</b> 03-S-41			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02073, -88.92387			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 14			
<b>Stream ID:</b> 03-S-41			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02053, -88.92397			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 15			
<b>Stream ID:</b> 03-S-42			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02061, -88.92356			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 16			
<b>Stream ID:</b> 03-S-42			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02061, -88.92357			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 17			
<b>Stream ID:</b> 03-S-43			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02101, -88.92233			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 18			
<b>Stream ID:</b> 03-S-43			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.021, -88.92238			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			




<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 19			
<b>Stream ID:</b> 03-S-44			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02198, -88.92307			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 20			
<b>Stream ID:</b> 03-S-44			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02198, -88.92307			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 21			
<b>Stream ID:</b> 03-S-45			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02232, -88.92376			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 22			
<b>Stream ID:</b> 03-S-45			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02236, -88.92378			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 23			
<b>Stream ID:</b> 03-S-46			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02198, -88.92402			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 24			
<b>Stream ID:</b> 03-S-46			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02198, -88.92402			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 25			
<b>Stream ID:</b> 03-S-47			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02192, -88.92414			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 26			
<b>Stream ID:</b> 03-S-47			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0219, -88.92415			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 27			
<b>Stream ID:</b> 03-S-48			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02235, -88.92267			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 28			
<b>Stream ID:</b> 03-S-48			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.0227, -88.92273			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 29			
<b>Stream ID:</b> 03-S-49			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02098, -88.92101			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 30			
<b>Stream ID:</b> 03-S-49			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02099, -88.92101			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 31			
<b>Stream ID:</b> 03-S-50			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02107, -88.92104			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 32			
<b>Stream ID:</b> 03-S-50			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.021, -88.92102			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 33			
<b>Stream ID:</b> 03-S-51			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02052, -88.92009			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 34			
<b>Stream ID:</b> 03-S-51			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02054, -88.92011			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			



<b>Client:</b>	<b>Clearway Energy, Inc.</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard County, Kentucky</b>



<b>Photograph ID:</b> 35	
<b>Stream ID:</b> 03-S-52	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.0206, -88.91973	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 3/1/2023	

<b>Photograph ID:</b> 36	
<b>Stream ID:</b> 03-S-52	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02068, -88.91974	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 3/1/2023	



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 37			
<b>Stream ID:</b> 03-S-53			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02134, -88.92076			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 38			
<b>Stream ID:</b> 03-S-53			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02116, -88.92077			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/1/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 39			
<b>Stream ID:</b> 03-S-54			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02507, -88.9235			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/2/2023			
<b>Photograph ID:</b> 40			
<b>Stream ID:</b> 03-S-54			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02509, -88.92348			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/2/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky



<b>Photograph ID:</b> 41	
<b>Stream ID:</b> 03-S-55	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02504, -88.92368	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 3/2/2023	

<b>Photograph ID:</b> 42	
<b>Stream ID:</b> 03-S-55	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.0251, -88.92347	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 3/2/2023	





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 43			
<b>Stream ID:</b> 03-S-56			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02353, -88.92334			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/2/2023			
<b>Photograph ID:</b> 44			
<b>Stream ID:</b> 03-S-56			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02348, -88.92334			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/2/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 45			
<b>Stream ID:</b> 03-S-57			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02458, -88.92318			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/2/2023			
<b>Photograph ID:</b> 46			
<b>Stream ID:</b> 03-S-57			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02467, -88.92301			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/2/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 47			
<b>Stream ID:</b> 03-S-58			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02379, -88.92242			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/2/2023			
<b>Photograph ID:</b> 48			
<b>Stream ID:</b> 03-S-58			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02413, -88.92289			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/2/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 49			
<b>Stream ID:</b> 03-S-59			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02561, -88.92385			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/2/2023			
<b>Photograph ID:</b> 50			
<b>Stream ID:</b> 03-S-59			
<b>Flow Class:</b> INT			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02566, -88.92313			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/2/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 51			
<b>Stream ID:</b> 03-S-60			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02544, -88.92404			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/2/2023			
<b>Photograph ID:</b> 52			
<b>Stream ID:</b> 03-S-60			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02565, -88.92391			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/2/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 53			
<b>Stream ID:</b> 03-S-61			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02579, -88.92452			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/2/2023			
<b>Photograph ID:</b> 54			
<b>Stream ID:</b> 03-S-61			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02575, -88.92469			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/2/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 55			
<b>Stream ID:</b> 03-S-63			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02688, -88.92341			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/2/2023			
<b>Photograph ID:</b> 56			
<b>Stream ID:</b> 03-S-63			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02688, -88.92348			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/2/2023			





<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 57			
<b>Stream ID:</b> 03-S-64			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02698, -88.9236			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/2/2023			
<b>Photograph ID:</b> 58			
<b>Stream ID:</b> 03-S-64			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02699, -88.92361			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/2/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 59			
<b>Stream ID:</b> 03-S-65			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02719, -88.92423			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/2/2023			
<b>Photograph ID:</b> 60			
<b>Stream ID:</b> 03-S-65			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02702, -88.92346			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/2/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 61			
<b>Stream ID:</b> 03-S-66			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02741, -88.92462			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/2/2023			
<b>Photograph ID:</b> 62			
<b>Stream ID:</b> 03-S-66			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02743, -88.92468			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/2/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky
<b>Photograph ID:</b> 63			
<b>Stream ID:</b> 03-S-67			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02884, -88.92466			
<b>Photo Direction:</b> Upstream View.			
<b>Survey Date:</b> 3/2/2023			
<b>Photograph ID:</b> 64			
<b>Stream ID:</b> 03-S-67			
<b>Flow Class:</b> EPH			
<b>Jurisdictional Determination:</b> JD			
<b>Latitude/Longitude:</b> 37.02889, -88.92465			
<b>Photo Direction:</b> Downstream View.			
<b>Survey Date:</b> 3/2/2023			



<b>Client:</b>	Clearway Energy, Inc.	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard County, Kentucky

<b>Photograph ID:</b> 65	
<b>Stream ID:</b> 03-S-68	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02907, -88.92551	
<b>Photo Direction:</b> Upstream View.	
<b>Survey Date:</b> 3/2/2023	

<b>Photograph ID:</b> 66	
<b>Stream ID:</b> 03-S-68	
<b>Flow Class:</b> EPH	
<b>Jurisdictional Determination:</b> JD	
<b>Latitude/Longitude:</b> 37.02892, -88.92568	
<b>Photo Direction:</b> Downstream View.	
<b>Survey Date:</b> 3/2/2023	



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>

<b>Photograph ID:</b> 1	
<b>Wetland:</b> 01-W-01	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 01-WAS-01	
<b>GPS Coordinates:</b> 37.02933, -88.8820	
<b>Survey Date:</b> 2/20/2023	

<b>Photograph ID:</b> 2	
<b>Wetland:</b> 01-W-01	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 01-WAS-02	
<b>GPS Coordinates:</b> 37.02935, -88.88189	
<b>Survey Date:</b> 2/20/2023	




<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>

<b>Photograph ID:</b> 3	
<b>Wetland:</b> 01-W-02	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PFO	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 01-WAS-03	
<b>GPS Coordinates:</b> 37.02662, -88.88077	
<b>Survey Date:</b> 2/20/2023	

<b>Photograph ID:</b> 4	
<b>Wetland:</b> 01-W-02	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PFO	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 01-WAS-04	
<b>GPS Coordinates:</b> 37.02658, -88.88075	
<b>Survey Date:</b> 2/20/2023	




<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>



<b>Photograph ID:</b> 5	
<b>Wetland:</b> 01-W-03	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PFO	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 01-WAS-05	
<b>GPS Coordinates:</b> 37.02551, -88.88179	
<b>Survey Date:</b> 2/20/2023	

<b>Photograph ID:</b> 6	
<b>Wetland:</b> 01-W-03	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PFO	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 01-WAS-06	
<b>GPS Coordinates:</b> 37.02547, -88.88174	
<b>Survey Date:</b> 2/20/2023	



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>
<b>Photograph ID: 7</b>			
<b>Wetland:</b> 01-W-04			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PEM/PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-07			
<b>GPS Coordinates:</b> 37.02973, -88.88691			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID: 8</b>			
<b>Wetland:</b> 01-W-04			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PEM/PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-08			
<b>GPS Coordinates:</b> 37.02974, -88.88702			
<b>Survey Date:</b> 2/21/2023			




<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY
<b>Photograph ID:</b> 9			
<b>Wetland:</b> 01-W-05			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-09			
<b>GPS Coordinates:</b> 37.02721, -88.88913			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 10			
<b>Wetland:</b> 01-W-05			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-10			
<b>GPS Coordinates:</b> 37.02721, -88.88913			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY
<b>Photograph ID:</b> 11			
<b>Wetland:</b> 01-W-06			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-11			
<b>GPS Coordinates:</b> 37.02703, -88.89304			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 12			
<b>Wetland:</b> 01-W-06			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-12			
<b>GPS Coordinates:</b> 37.02698, -88.89283			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY


<b>Photograph ID:</b> 13	
<b>Wetland:</b> 01-W-07	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PFO	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 01-WAS-13	
<b>GPS Coordinates:</b> 37.02353, -88.8943	
<b>Survey Date:</b> 2/21/2023	

<b>Photograph ID:</b> 14	
<b>Wetland:</b> 01-W-07	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PFO	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 01-WAS-14	
<b>GPS Coordinates:</b> 37.02347, -88.89431	
<b>Survey Date:</b> 2/21/2023	



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY



<b>Photograph ID:</b> 15	
<b>Wetland:</b> 01-W-08	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM/PFO	
<b>Jurisdictional Determination:</b> Non-JD	
<b>WAS Point:</b> 01-WAS-15	
<b>GPS Coordinates:</b> 37.02293, -88.89399	
<b>Survey Date:</b> 2/21/2023	

<b>Photograph ID:</b> 16	
<b>Wetland:</b> 01-W-08	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM/PFO	
<b>Jurisdictional Determination:</b> Non-JD	
<b>WAS Point:</b> 01-WAS-16	
<b>GPS Coordinates:</b> 37.02272, -88.8939	
<b>Survey Date:</b> 2/21/2023	





<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>
<b>Photograph ID: 17</b>			
<b>Wetland:</b> 01-W-09			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PSS			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-17			
<b>GPS Coordinates:</b> 37.02296, -88.89273			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID: 18</b>			
<b>Wetland:</b> 01-W-09			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PSS			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-18			
<b>GPS Coordinates:</b> 37.02301, -88.89278			
<b>Survey Date:</b> 2/21/2023			



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>
<b>Photograph ID:</b> 19			
<b>Wetland:</b> 01-W-10			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PFO			
<b>Jurisdictional Determination:</b> Non-JD			
<b>WAS Point:</b> 01-WAS-19			
<b>GPS Coordinates:</b> 37.02209, -88.89101			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 20			
<b>Wetland:</b> 01-W-10			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PFO			
<b>Jurisdictional Determination:</b> Non-JD			
<b>WAS Point:</b> 01-WAS-20			
<b>GPS Coordinates:</b> 37.02206, -88.89103			
<b>Survey Date:</b> 2/22/2023			



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY
<b>Photograph ID:</b> 21			
<b>Wetland:</b> 01-W-11			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-21			
<b>GPS Coordinates:</b> 37.02352, -88.8929			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 22			
<b>Wetland:</b> 01-W-11			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-22			
<b>GPS Coordinates:</b> 37.02352, -88.89295			
<b>Survey Date:</b> 2/22/2023			





<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>
<b>Photograph ID:</b> 23			
<b>Wetland:</b> 01-W-12			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-23			
<b>GPS Coordinates:</b> 37.02154, -88.90182			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 24			
<b>Wetland:</b> 01-W-12			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PEM/PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-24			
<b>GPS Coordinates:</b> 37.02148, -88.90158			
<b>Survey Date:</b> 2/22/2023			





<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY
<b>Photograph ID:</b> 25			
<b>Wetland:</b> 01-W-13			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PEM/PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-25			
<b>GPS Coordinates:</b> 37.02184, -88.8954			
<b>Survey Date:</b> 2/22/2023			
<b>Photograph ID:</b> 26			
<b>Wetland:</b> 01-W-13			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PEM/PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-26			
<b>GPS Coordinates:</b> 37.02188, -88.89544			
<b>Survey Date:</b> 2/22/2023			



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY
<b>Photograph ID:</b> 27			
<b>Wetland:</b> 01-W-14			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-27			
<b>GPS Coordinates:</b> 37.03046, -88.91478			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 28			
<b>Wetland:</b> 01-W-14			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-28			
<b>GPS Coordinates:</b> 37.03048, -88.91476			
<b>Survey Date:</b> 2/23/2023			



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY
<b>Photograph ID:</b> 29			
<b>Wetland:</b> 01-W-15			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-29			
<b>GPS Coordinates:</b> 37.02034, -88.91034			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 30			
<b>Wetland:</b> 01-W-15			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-30			
<b>GPS Coordinates:</b> 37.02034, -88.91038			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>

<b>Photograph ID:</b> 31	
<b>Wetland:</b> 01-W-16	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM/PSS	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 01-WAS-31	
<b>GPS Coordinates:</b> 37.02132, -88.90828	
<b>Survey Date:</b> 2/23/2023	


<b>Photograph ID:</b> 32	
<b>Wetland:</b> 01-W-16	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 01-WAS-32	
<b>GPS Coordinates:</b> 37.02137, -88.90836	
<b>Survey Date:</b> 2/23/2023	



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>
<b>Photograph ID:</b> 33			
<b>Wetland:</b> 01-W-17			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-33			
<b>GPS Coordinates:</b> 37.02181, -88.90832			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 34			
<b>Wetland:</b> 01-W-17			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-34			
<b>GPS Coordinates:</b> 37.02175, -88.90831			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>

<b>Photograph ID:</b> 35	
<b>Wetland:</b> 01-W-18	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM/PFO	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 01-WAS-35	
<b>GPS Coordinates:</b> 37.0201, -88.90623	
<b>Survey Date:</b> 2/23/2023	

<b>Photograph ID:</b> 36	
<b>Wetland:</b> 01-W-18	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM/PFO	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 01-WAS-36	
<b>GPS Coordinates:</b> 37.02024, -88.90625	
<b>Survey Date:</b> 2/23/2023	



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY
<b>Photograph ID:</b> 37			
<b>Wetland:</b> 01-W-19			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PFO			
<b>Jurisdictional Determination:</b> Non-JD			
<b>WAS Point:</b> 01-WAS-37			
<b>GPS Coordinates:</b> 37.0194, -88.90646			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 38			
<b>Wetland:</b> 01-W-20			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 01-WAS-38			
<b>GPS Coordinates:</b> 37.02626, -88.91474			
<b>Survey Date:</b> 2/24/2023			





<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>



<b>Photograph ID:</b> 39	
<b>Wetland:</b> 01-W-20	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 01-WAS-39	
<b>GPS Coordinates:</b> 37.02621, -88.91471	
<b>Survey Date:</b> 2/24/2023	

<b>Photograph ID:</b> 40	
<b>Wetland:</b> N/A	
<b>Feature Type:</b> Upland Test Pit, No Feature Associated	
<b>Cowardin Class:</b> N/A	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 01-TP-01	
<b>GPS Coordinates:</b> 37.03012, -88.88166	
<b>Survey Date:</b> 2/20/2023	




<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY
<b>Photograph ID:</b> 41			
<b>Wetland:</b> 02-W-01			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PEM/PSS			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 02-WAS-01			
<b>GPS Coordinates:</b> 37.01896,			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 42			
<b>Wetland:</b> 02-W-01			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PEM/PSS			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 02-WAS-02			
<b>GPS Coordinates:</b> #REF!			
<b>Survey Date:</b> 2/20/2023			




<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY
<b>Photograph ID:</b> 43			
<b>Wetland:</b> 02-W-02			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PSS			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 02-WAS-03			
<b>GPS Coordinates:</b> 37.01962, -88.86817			
<b>Survey Date:</b> 2/20/2023			
<b>Photograph ID:</b> 44			
<b>Wetland:</b> 02-W-02			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PSS			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 02-WAS-04			
<b>GPS Coordinates:</b> 37.01961, -88.86818			
<b>Survey Date:</b> 2/20/2023			




<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>


<b>Photograph ID:</b> 45	
<b>Wetland:</b> 02-W-03	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> Non-JD	
<b>WAS Point:</b> 02-WAS-05	
<b>GPS Coordinates:</b> 37.01968, -88.8703	
<b>Survey Date:</b> 2/20/2023	

<b>Photograph ID:</b> 46	
<b>Wetland:</b> 02-W-03	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> Non-JD	
<b>WAS Point:</b> 02-WAS-06	
<b>GPS Coordinates:</b> 37.01966, -88.87033	
<b>Survey Date:</b> 2/20/2023	





<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY

<b>Photograph ID:</b> 47	
<b>Wetland:</b> 02-W-04	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> Non-JD	
<b>WAS Point:</b> 02-WAS-07	
<b>GPS Coordinates:</b> 37.01945, -88.87133	
<b>Survey Date:</b> 2/20/2023	

<b>Photograph ID:</b> 48	
<b>Wetland:</b> 02-W-04	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> Non-JD	
<b>WAS Point:</b> 02-WAS-08	
<b>GPS Coordinates:</b> 37.01942, -88.87133	
<b>Survey Date:</b> 2/20/2023	



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY
<b>Photograph ID:</b> 49			
<b>Wetland:</b> 02-W-05			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> Non-JD			
<b>WAS Point:</b> 02-W-09			
<b>GPS Coordinates:</b> 37.01849, -88.87135			
<b>Survey Date:</b> 2/21/2023			
<b>Photograph ID:</b> 50			
<b>Wetland:</b> 02-W-05			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> Non-JD			
<b>WAS Point:</b> 02-W-10			
<b>GPS Coordinates:</b> 37.01847, -88.87135			
<b>Survey Date:</b> 2/21/2023			




<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>


<b>Photograph ID:</b> 51	
<b>Wetland:</b> 02-W-06	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PFO	
<b>Jurisdictional Determination:</b> Non-JD	
<b>WAS Point:</b> 02-WAS-13	
<b>GPS Coordinates:</b> 37.01684, -88.87536	
<b>Survey Date:</b> 2/21/2023	

<b>Photograph ID:</b> 52	
<b>Wetland:</b> 02-W-06	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PFO	
<b>Jurisdictional Determination:</b> Non-JD	
<b>WAS Point:</b> 02-WAS-14	
<b>GPS Coordinates:</b> 37.01688, -88.87537	
<b>Survey Date:</b> 2/21/2023	



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY


<b>Photograph ID:</b> 53	
<b>Wetland:</b> 02-W-07	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 02-WAS-011	
<b>GPS Coordinates:</b> 37.01307, -88.87321	
<b>Survey Date:</b> 2/21/2023	

<b>Photograph ID:</b> 54	
<b>Wetland:</b> 02-W-07	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 02-WAS-012	
<b>GPS Coordinates:</b> 37.01316, -88.87326	
<b>Survey Date:</b> 2/21/2023	




<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>



<b>Photograph ID:</b> 55	
<b>Wetland:</b> 02-W-08	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> Non-JD	
<b>WAS Point:</b> 02-WAS-15	
<b>GPS Coordinates:</b> 37.03709, -88.90742	
<b>Survey Date:</b> 2/23/2023	

<b>Photograph ID:</b> 56	
<b>Wetland:</b> 02-W-08	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> Non-JD	
<b>WAS Point:</b> 02-WAS-16	
<b>GPS Coordinates:</b> 37.03704, -88.90743	
<b>Survey Date:</b> 2/23/2023	





<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY
<b>Photograph ID:</b> 57			
<b>Wetland:</b> 02-W-09			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 02-WAS-17			
<b>GPS Coordinates:</b> 37.03199, -88.91277			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 58			
<b>Wetland:</b> 02-W-09			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 02-WAS-18			
<b>GPS Coordinates:</b> 37.03194, -88.91279			
<b>Survey Date:</b> 2/23/2023			





<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY
<b>Photograph ID:</b> 59			
<b>Wetland:</b> 02-W-10			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 02-WAS-19			
<b>GPS Coordinates:</b> 37.03187, -88.91245			
<b>Survey Date:</b> 2/23/2023			
<b>Photograph ID:</b> 60			
<b>Wetland:</b> 02-W-10			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 02-WAS-20			
<b>GPS Coordinates:</b> 37.03177, -88.91245			
<b>Survey Date:</b> 2/23/2023			




<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY
<b>Photograph ID:</b> 61			
<b>Wetland:</b> 02-W-11			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 02-WAS-21			
<b>GPS Coordinates:</b> 37.03772, -88.90217			
<b>Survey Date:</b> 2/24/2023			
<b>Photograph ID:</b> 62			
<b>Wetland:</b> 02-W-11			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 02-WAS-22			
<b>GPS Coordinates:</b> 37.03766, -88.90206			
<b>Survey Date:</b> 2/24/2023			




<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>
<b>Photograph ID:</b> 63			
<b>Wetland:</b> 02-W-12			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 02-WAS-23			
<b>GPS Coordinates:</b> 37.03378, -88.9141			
<b>Survey Date:</b> 2/24/2023			
<b>Photograph ID:</b> 64			
<b>Wetland:</b> 02-W-12			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 02-WAS-24			
<b>GPS Coordinates:</b> 37.03375, -88.91411			
<b>Survey Date:</b> 2/24/2023			




<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY



<b>Photograph ID:</b> 65	
<b>Wetland:</b> 02-W-13	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 02-WAS-27	
<b>GPS Coordinates:</b> 37.03346, -88.91332	
<b>Survey Date:</b> 2/28/2023	

<b>Photograph ID:</b> 66	
<b>Wetland:</b> 02-W-13	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 02-WAS-28	
<b>GPS Coordinates:</b> 37.03332, -88.91326	
<b>Survey Date:</b> 2/28/2023	





<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>
<b>Photograph ID:</b> 67			
<b>Wetland:</b> 02-W-14			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PEM/PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 02-WAS-25			
<b>GPS Coordinates:</b> 37.03175, -88.91084			
<b>Survey Date:</b> 2/24/2023			
<b>Photograph ID:</b> 68			
<b>Wetland:</b> 02-W-14			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PEM/PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 02-WAS-26			
<b>GPS Coordinates:</b> 37.03179, -88.91089			
<b>Survey Date:</b> 2/24/2023			




<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>
<b>Photograph ID:</b> 69			
<b>Wetland:</b> 02-W-15			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PSS/PFO			
<b>Jurisdictional Determination:</b> Non-JD			
<b>WAS Point:</b> 02-WAS-30			
<b>GPS Coordinates:</b> 37.03536, -88.91438			
<b>Survey Date:</b> 2/28/2023			
<b>Photograph ID:</b> 70			
<b>Wetland:</b> 02-W-15			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PSS/PFO			
<b>Jurisdictional Determination:</b> Non-JD			
<b>WAS Point:</b> 02-WAS-31			
<b>GPS Coordinates:</b> 37.0354, -88.91448			
<b>Survey Date:</b> 2/28/2023			




<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>
<b>Photograph ID: 71</b>			
<b>Wetland:</b> 02-W-16			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PSS/PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 02-WAS-32			
<b>GPS Coordinates:</b> 37.03764, -88.91432			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID: 72</b>			
<b>Wetland:</b> 02-W-16			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PSS/PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 02-WAS-33			
<b>GPS Coordinates:</b> 37.03763, -88.91421			
<b>Survey Date:</b> 3/1/2023			



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY

<b>Photograph ID:</b> 73	
<b>Wetland:</b> 02-W-17	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 02-WAS-34	
<b>GPS Coordinates:</b> 37.02785, -88.92221	
<b>Survey Date:</b> 3/1/2023	

<b>Photograph ID:</b> 74	
<b>Wetland:</b> 02-W-17	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 02-WAS-35	
<b>GPS Coordinates:</b> 37.02793, -88.92218	
<b>Survey Date:</b> 3/1/2023	





<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>

<b>Photograph ID:</b> 75	
<b>Wetland:</b> 03-W-01	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 03-WAS-01	
<b>GPS Coordinates:</b> 36.99478, -88.93609	
<b>Survey Date:</b> 2/28/2023	

<b>Photograph ID:</b> 76	
<b>Wetland:</b> 03-W-01	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 03-WAS-02	
<b>GPS Coordinates:</b> 36.99476, -88.93609	
<b>Survey Date:</b> 2/28/2023	



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY
<b>Photograph ID:</b> 77			
<b>Wetland:</b> 03-W-02			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 03-WAS-03			
<b>GPS Coordinates:</b> 37.02036, -88.93184			
<b>Survey Date:</b> 2/28/2023			
<b>Photograph ID:</b> 78			
<b>Wetland:</b> 03-W-02			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 03-WAS-04			
<b>GPS Coordinates:</b> 36.99719, -88.93781			
<b>Survey Date:</b> 2/28/2023			



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY

<b>Photograph ID:</b> 79	
<b>Wetland:</b> 03-W-03	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 03-WAS-05	
<b>GPS Coordinates:</b> 36.99716, -88.93779	
<b>Survey Date:</b> 2/28/2023	

<b>Photograph ID:</b> 80	
<b>Wetland:</b> 03-W-03	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 03-WAS-06	
<b>GPS Coordinates:</b> 37.00659, -88.93749	
<b>Survey Date:</b> 2/28/2023	



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>

<b>Photograph ID:</b> 81	
<b>Wetland:</b> 03-W-04	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PFO	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 03-WAS-07	
<b>GPS Coordinates:</b> 37.00664, -88.93746	
<b>Survey Date:</b> 2/28/2023	

<b>Photograph ID:</b> 82	
<b>Wetland:</b> 03-W-04	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PFO	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 03-WAS-08	
<b>GPS Coordinates:</b> 37.00901, -88.93833	
<b>Survey Date:</b> 2/28/2023	




<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY

<b>Photograph ID:</b> 83	
<b>Wetland:</b> 03-W-05	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 03-WAS-09	
<b>GPS Coordinates:</b> 37.00893, -88.93837	
<b>Survey Date:</b> 2/28/2023	

<b>Photograph ID:</b> 84	
<b>Wetland:</b> 03-W-05	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 03-WAS-10	
<b>GPS Coordinates:</b> 37.01149, -88.93804	
<b>Survey Date:</b> 2/28/2023	



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY


<b>Photograph ID:</b> 85	
<b>Wetland:</b> 03-W-06	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> Non-JD	
<b>WAS Point:</b> 03-WAS-11	
<b>GPS Coordinates:</b> 37.01157, -88.93801	
<b>Survey Date:</b> 2/28/2023	

<b>Photograph ID:</b> 86	
<b>Wetland:</b> 03-W-06	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> Non-JD	
<b>WAS Point:</b> 03-WAS-12	
<b>GPS Coordinates:</b> 37.01151, -88.93856	
<b>Survey Date:</b> 2/28/2023	



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>

<b>Photograph ID:</b> 87	
<b>Wetland:</b> 03-W-07	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> Non-JD	
<b>WAS Point:</b> 03-WAS-13	
<b>GPS Coordinates:</b> 37.01151, -88.93858	
<b>Survey Date:</b> 2/28/2023	

<b>Photograph ID:</b> 88	
<b>Wetland:</b> 03-W-07	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> Non-JD	
<b>WAS Point:</b> 03-WAS-14	
<b>GPS Coordinates:</b> 37.01265, -88.93597	
<b>Survey Date:</b> 2/28/2023	



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY

<b>Photograph ID:</b> 89	
<b>Wetland:</b> 03-W-08	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 03-WAS-15	
<b>GPS Coordinates:</b> 37.01279, -88.93593	
<b>Survey Date:</b> 3/1/2023	

<b>Photograph ID:</b> 90	
<b>Wetland:</b> 03-W-08	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> JD	
<b>WAS Point:</b> 03-WAS-16	
<b>GPS Coordinates:</b> 37.01841, -88.93234	
<b>Survey Date:</b> 3/1/2023	





<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY



<b>Photograph ID:</b> 91	
<b>Wetland:</b> 03-W-09	
<b>Feature Type:</b> Wetland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> Non-JD	
<b>WAS Point:</b> 03-WAS-17	
<b>GPS Coordinates:</b> 37.01843, -88.93234	
<b>Survey Date:</b> 3/1/2023	

<b>Photograph ID:</b> 92	
<b>Wetland:</b> 03-W-09	
<b>Feature Type:</b> Upland	
<b>Cowardin Class:</b> PEM	
<b>Jurisdictional Determination:</b> Non-JD	
<b>WAS Point:</b> 03-WAS-18	
<b>GPS Coordinates:</b> 37.01628, -88.93204	
<b>Survey Date:</b> 3/1/2023	





<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY
<b>Photograph ID:</b> 93			
<b>Wetland:</b> 03-W-10			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 03-WAS-19			
<b>GPS Coordinates:</b> 37.01625, -88.93204			
<b>Survey Date:</b> 3/1/2023			
<b>Photograph ID:</b> 94			
<b>Wetland:</b> 03-W-10			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PEM			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 03-WAS-20			
<b>GPS Coordinates:</b> 37.02029, -88.93184			
<b>Survey Date:</b> 3/1/2023			




<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>
<b>Photograph ID:</b> 95			
<b>Wetland:</b> 03-W-11			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 03-WAS-21			
<b>GPS Coordinates:</b> 37.02692, -88.92349			
<b>Survey Date:</b> 3/2/2023			
<b>Photograph ID:</b> 96			
<b>Wetland:</b> 03-W-11			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 03-WAS-22			
<b>GPS Coordinates:</b> 37.02701, -88.92347			
<b>Survey Date:</b> 3/2/2023			



<b>Client:</b>	Clearway Energy Group, LLC	<b>Project:</b>	Song Sparrow Solar Project
<b>Site Name:</b>	Song Sparrow Solar	<b>Site Location:</b>	Ballard, KY
<b>Photograph ID:</b> 97			
<b>Wetland:</b> 03-W-12			
<b>Feature Type:</b> Wetland			
<b>Cowardin Class:</b> PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 03-WAS-23			
<b>GPS Coordinates:</b> 37.02941, -88.92533			
<b>Survey Date:</b> 3/2/2023			
<b>Photograph ID:</b> 98			
<b>Wetland:</b> 03-W-12			
<b>Feature Type:</b> Upland			
<b>Cowardin Class:</b> PFO			
<b>Jurisdictional Determination:</b> JD			
<b>WAS Point:</b> 03-WAS-24			
<b>GPS Coordinates:</b> 37.0294, -88.92522			
<b>Survey Date:</b> 3/2/2023			



<b>Client:</b>	<b>Clearway Energy Group, LLC</b>	<b>Project:</b>	<b>Song Sparrow Solar Project</b>
<b>Site Name:</b>	<b>Song Sparrow Solar</b>	<b>Site Location:</b>	<b>Ballard, KY</b>
<b>Photograph ID:</b> 99			
<b>Wetland:</b> N/A			
<b>Feature Type:</b> Upland Test Pit, No Feature Associated			
<b>Cowardin Class:</b> N/A			
<b>Jurisdictional Determination:</b> N/A			
<b>WAS Point:</b> 03-TP-01			
<b>GPS Coordinates:</b> 37.02201, -88.92266			
<b>Survey Date:</b> 3/1/2023			