



**DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SAVANNAH DISTRICT
100 W. OGLETHORPE AVENUE
SAVANNAH, GEORGIA 31401-3604**

June 12, 2020

SAS-2013-00561

**JOINT PUBLIC NOTICE
Savannah District/State of Georgia**

The Savannah District has received an application for a Department of the Army Permit, pursuant to Section 404 of the Clean Water Act (33 U.S.C. § 1344), as follows:

Application Number: SAS-2013-00561

Applicant: Mr. Stuart Forrester
The Chemours Company FC LLC
2649 Zero Bay Road
Patterson, Georgia 31557

Agent: Mr. Danny LeJeune
Kleinfelder, Inc.
8933 Western Way, Suite 12
Jacksonville, Florida 32256

Location of Proposed Work: The project site consists of two separate project areas displayed as Amelia A and Amelia B on the map entitled "Figure 1: Site Location." The Amelia A project area is situated south of Golden Isles Highway (U.S. Hwy 341) and northwest of U.S. Hwy 84. The Amelia B project area is situated south of the Amelia A project area and is mostly southeast of U.S. Hwy 84 with a small portion west of U.S. Hwy 84. The project areas are situated west and southwest of the City of Jesup in Wayne County, Georgia (Latitude 31.5401, Longitude -81.9712).

Description of Work Subject to the Jurisdiction of the U.S. Army Corps of Engineers: The proposed project would extract mineral sands within a 3,980.18-acre project area and would be completed in two phases. There is a total of 637.12 acre of wetlands within the proposed project area. The proposed project would permanently impact 4.47 acres of these wetlands for mining activities to include the construction of access roads and the extraction of mineral sands. Phase 1 of the proposed project would permanently impact 2.09 acres of freshwater wetlands for the extraction mineral sands and the construction of an access road. Phase 2 of the proposed project would impact 2.38 acres of freshwater wetland to construct a 100-foot wide access road. The remainder of the mining activities would be conducted in upland areas. The proposed access roads are sized to allow for enough room to allow for passage of the 130 ton off road cranes

used during mine operations as well as a pipe and power corridor and diversion berms on either side of the road for safety purposes.

The applicant provided the following compensatory mitigation plan for the proposed project:

- Phase 1: Completion of the “Qualitative Worksheet for Wetland Adverse Impact” sheet revealed that 1.54 2018 Wetland Credits or 12.32 Grandfathered Wetland Credits would offset the proposed 2.09 acres of impacts to jurisdictional wetlands (Attachment 2). Wetland credits will be purchased from an approved Mitigation Bank within the service area of the project.
- Phase 2: Exact mitigation for this impact is to be determined and approved by the Corps prior to the impact being conducted.

BACKGROUND

Two Jurisdictional Determinations (JD) have been issued for this site. On October 26, 2015, an Approved JD, with Corps Action ID SAS-2013-00561, was issued that covered 3,804.06 acres of the proposed project area encompassing all of Amelia A and portions of Amelia B. On October 11, 2017, a Preliminary JD, with Corps Action ID SAS-2017-00139, was issued for an additional 167.07 acres at the north end of Amelia B.

This Joint Public Notice announces a request for authorizations from both the U.S. Army Corps of Engineers and the State of Georgia. The applicant's proposed work may also require local governmental approval.

STATE OF GEORGIA

Water Quality Certification: The Georgia Department of Natural Resources, Environmental Protection Division will review the proposed project for water quality certification, in accordance with the provisions of Section 401 of the Clean Water Act. Prior to issuance of a Department of the Army permit for a project location in, on, or adjacent to the waters of the State of Georgia, review for Water Quality Certification is required. A reasonable period of time, which shall not exceed one year, is established under the Clean Water Act for the State to act on a request for Water Quality Certification, after which, issuance of such a Department of the Army permit may proceed.

State-owned Property and Resources: The applicant may also require assent from the State of Georgia, which may be in the form of a license, easement, lease, permit or other appropriate instrument.

Georgia Coastal Management Program: Prior to the Savannah District Corps of Engineers making a final permit decision on this application, the project must be certified by the Georgia Department of Natural Resources, Coastal Resources Division, to be consistent with applicable provisions of the State of Georgia Coastal Management Program (15 CFR Part 930). Anyone wishing to comment on Coastal Management Program certification of this project should submit comments in writing within 30 days of the date of this notice to the Federal Consistency Coordinator, Ecological Services Section, Coastal Resources Division, Georgia Department of Natural Resources, One Conservation Way, Brunswick, Georgia 31523-8600 (Telephone 912-264-7218).

U.S. ARMY CORPS OF ENGINEERS

The Savannah District must consider the purpose and the impacts of the applicant's proposed work, prior to a decision on issuance of a Department of the Army Permit.

Cultural Resources Assessment: Review of the latest published version of the National Register of Historic Places and Georgia's Natural, Archaeological, and Historic Resources GIS (GNAHRGIS) indicate that no registered properties or properties listed as eligible for inclusion are located at the site or in the area affected by the proposed work. Presently unknown archaeological, scientific, prehistorical or historical data may be located at the site and could be affected by the proposed work.

Based on the information above, the Corps may initiate consultation under Section 106 of the National Heritage Preservation Act (NHPA) with the Georgia Department of Natural Resources, Historic Preservation Office (GASHPO) and Federally Recognized Tribes if required upon further review of the proposed project.

Endangered Species: A preliminary review the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service's Protected Resource Divisions (NMFSPRD)'s list of Endangered and Threatened Species (IPaC) indicates the following listed species may occur in the project area: wood stork (*Mycteria americana*) and eastern indigo snake (*Drymarchon corais couperi*).

Per the Effects Determination Guidance for Endangered and Threatened Species (EDGES), the Corps has determined that the proposed project may affect, but is not likely to adversely affect the eastern indigo snake.

With regards to the wood stork, the Corps requests that the FWS confirm if the proposed project site is within 2,500 feet of an active wood stork nesting colony. The Corps will make an effects determination for the wood stork upon receipt of the requested information.

Pursuant to Section 7(c) of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 et seq.), we request information from the U.S. Department of the Interior,

Fish and Wildlife Service, the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service; or, any other interested party, on whether any species listed or proposed for listing may be present in the area.

Public Interest Review: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and in general, the needs and welfare of the people.

Consideration of Public Comments: The U.S. Army Corps of Engineers is soliciting comments from the public; federal, state, and local agencies and officials; Native American Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Application of Section 404(b)(1) Guidelines: The proposed activity involves the discharge of dredged or fill material into the waters of the United States. The Savannah District's evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under the authority of Section 404(b) of the Clean Water Act.

Public Hearing: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application for a Department of the Army permit. Requests for public hearings shall state, with particularity, the reasons for requesting a public hearing. The decision whether to hold a public hearing is at the discretion of the District Engineer, or his designated appointee,

based on the need for additional substantial information necessary in evaluating the proposed project.

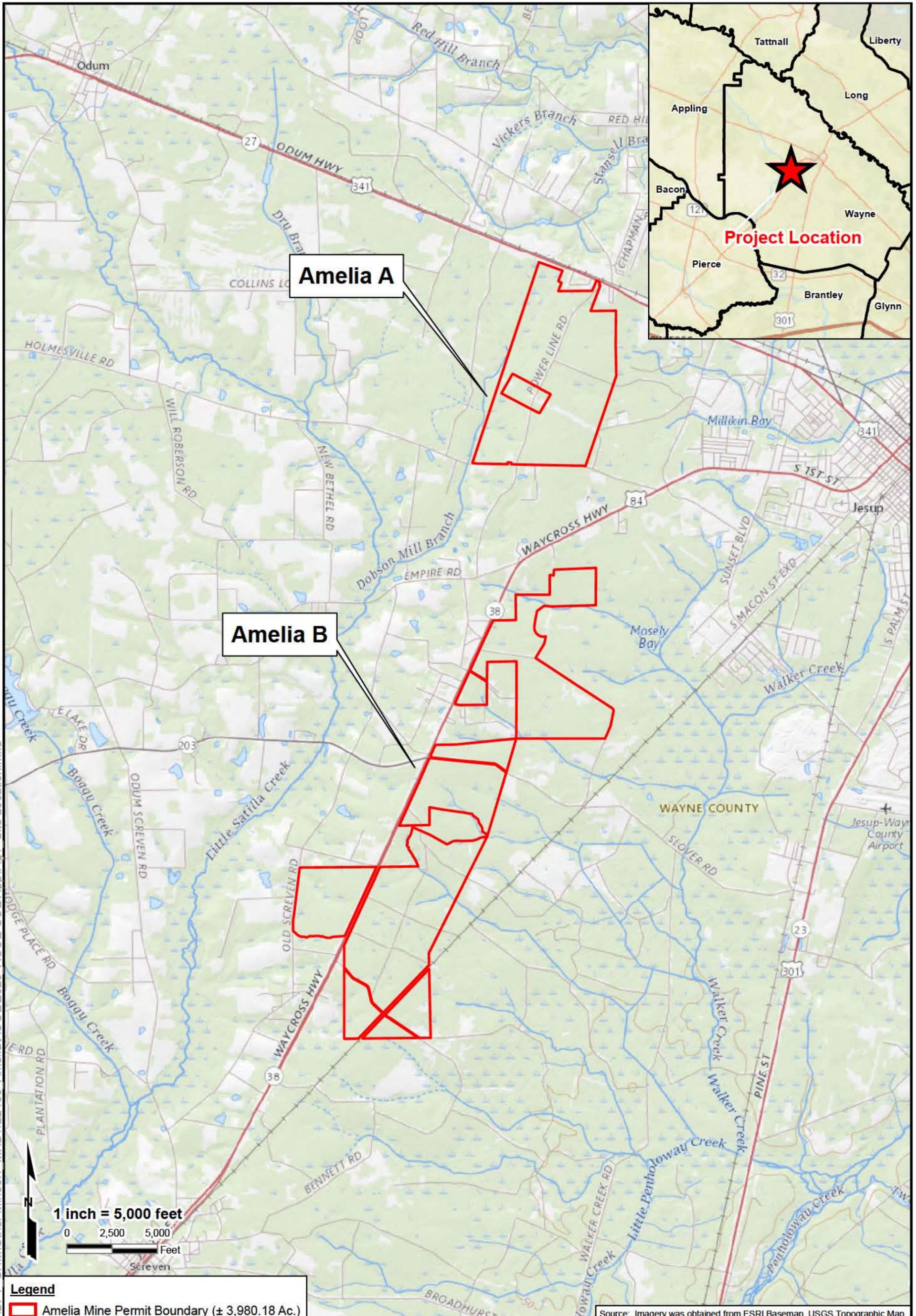
Comment Period: Anyone wishing to comment on this application for a Department of the Army Permit should submit comments in writing to the Commander, U.S. Army Corps of Engineers, Savannah District, Attention: Mr. Roscoe L. Sullivan, III, 100 West Oglethorpe Avenue, Savannah, Georgia 31401-3604, no later than 30 days from the date of this notice. Please refer to the applicant's name and the application number in your comments.

If you have any further questions concerning this matter, please contact Mr. Roscoe L. Sullivan, III, Project Manager, Coastal Branch via email at roscoe.l.sullivan@usace.army.mil or via phone at (912) 652-5618.

Enclosures:

1. Figures 1 – 9c (17 pages)
2. IPaC Report (10 pages)

FIGURES



Document Path: G:\DPT-CHM\Other Mines\1_MXD\122438_Amelia\ACOE\2020_ACOE COE App\Fig1_Site Location.mxd

1 inch = 5,000 feet



Legend

Amelia Mine Permit Boundary (± 3,980.18 Ac.)

Source: Imagery was obtained from ESRI Basemap, USGS Topographic Map.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

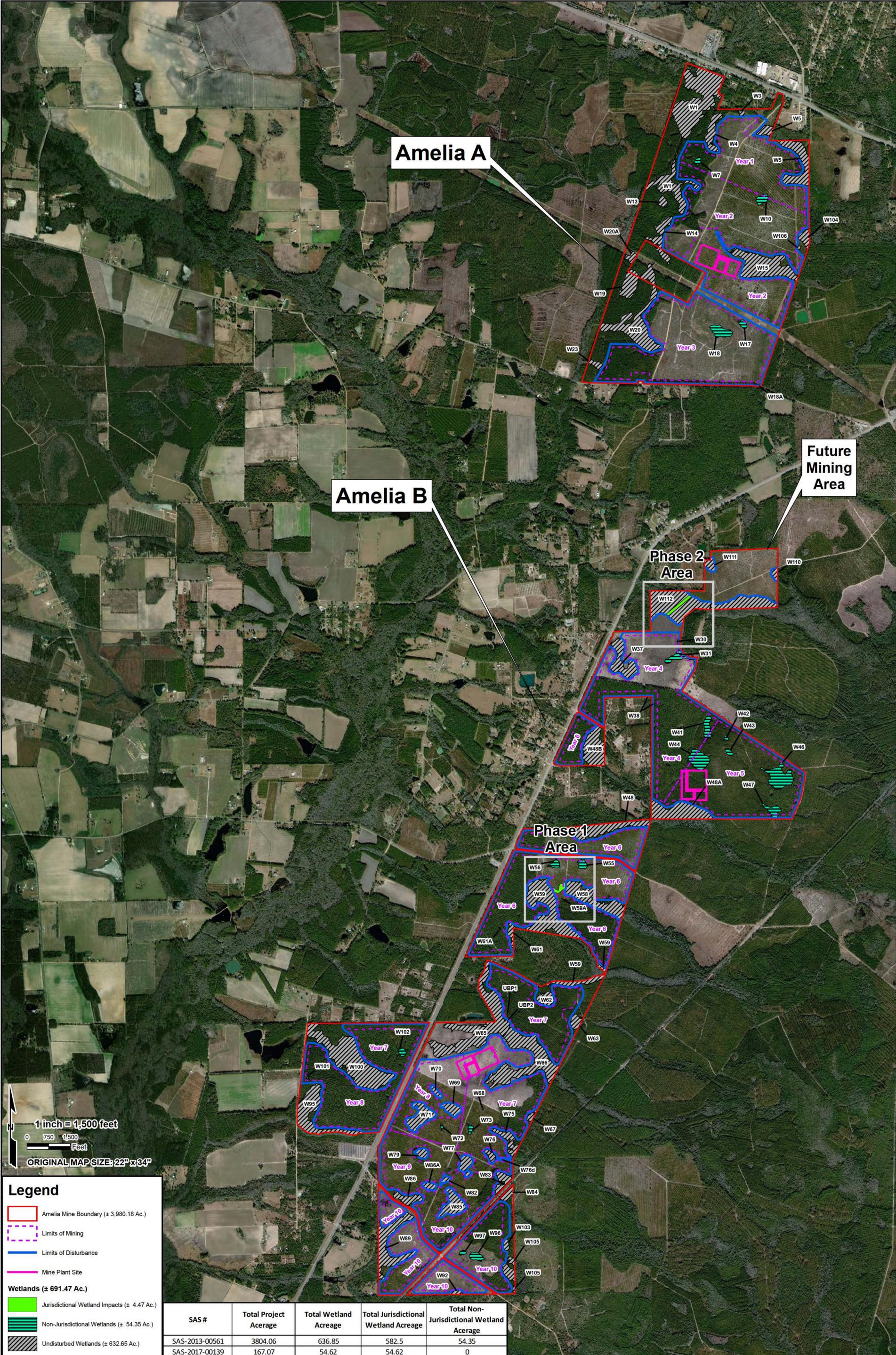


| | |
|-------------|---------------|
| PROJECT NO. | 122438.010 |
| DRAWN: | 3/10/2020 |
| DRAWN BY: | LS |
| CHECKED BY: | DL |
| FILE NAME: | See File Path |

| |
|--|
| Site Location |
| The Chemours Company FC, LLC Amelia Mine Wayne County, Georgia |

| |
|----------|
| FIGURE |
| 1 |

Document Path: G:\UDPT_CHEM\Other Mines\1_MXD\122438_Amelia Mine Plan A&B.mxd



1 inch = 1,500 feet
 0 750 1,500 Feet
 ORIGINAL MAP SIZE: 22" x 34"

| Legend | |
|-------------------------|---|
| | Amelia Mine Boundary (± 3,980.18 Ac.) |
| | Limits of Mining |
| | Limits of Disturbance |
| | Mine Plant Site |
| Wetlands (± 691.47 Ac.) | |
| | Jurisdictional Wetland Impacts (± 4.47 Ac.) |
| | Non-Jurisdictional Wetlands (± 54.35 Ac.) |
| | Undisturbed Wetlands (± 632.65 Ac.) |

| SAS # | Total Project Acreage | Total Wetland Acreage | Total Jurisdictional Wetland Acreage | Total Non-Jurisdictional Wetland Acreage |
|----------------|-----------------------|-----------------------|--------------------------------------|--|
| SAS-2013-00561 | 3804.06 | 636.85 | 582.5 | 54.35 |
| SAS-2017-00139 | 167.07 | 54.62 | 54.62 | 0 |

Source: Imagery was obtained from ESRI Basemap, World Imagery, Image Date: 12/18/2018.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. KLEINFELDER makes no representation or warranty, expressed or implied, as to accuracy, completeness, timeliness, or quality of the data or information. This document is not intended to be a final engineering drawing. The use of this document for any purpose other than that intended by the author is at the user's risk. The user shall be responsible for verifying the accuracy of the information represented in the base risk of the party using or missing the information.

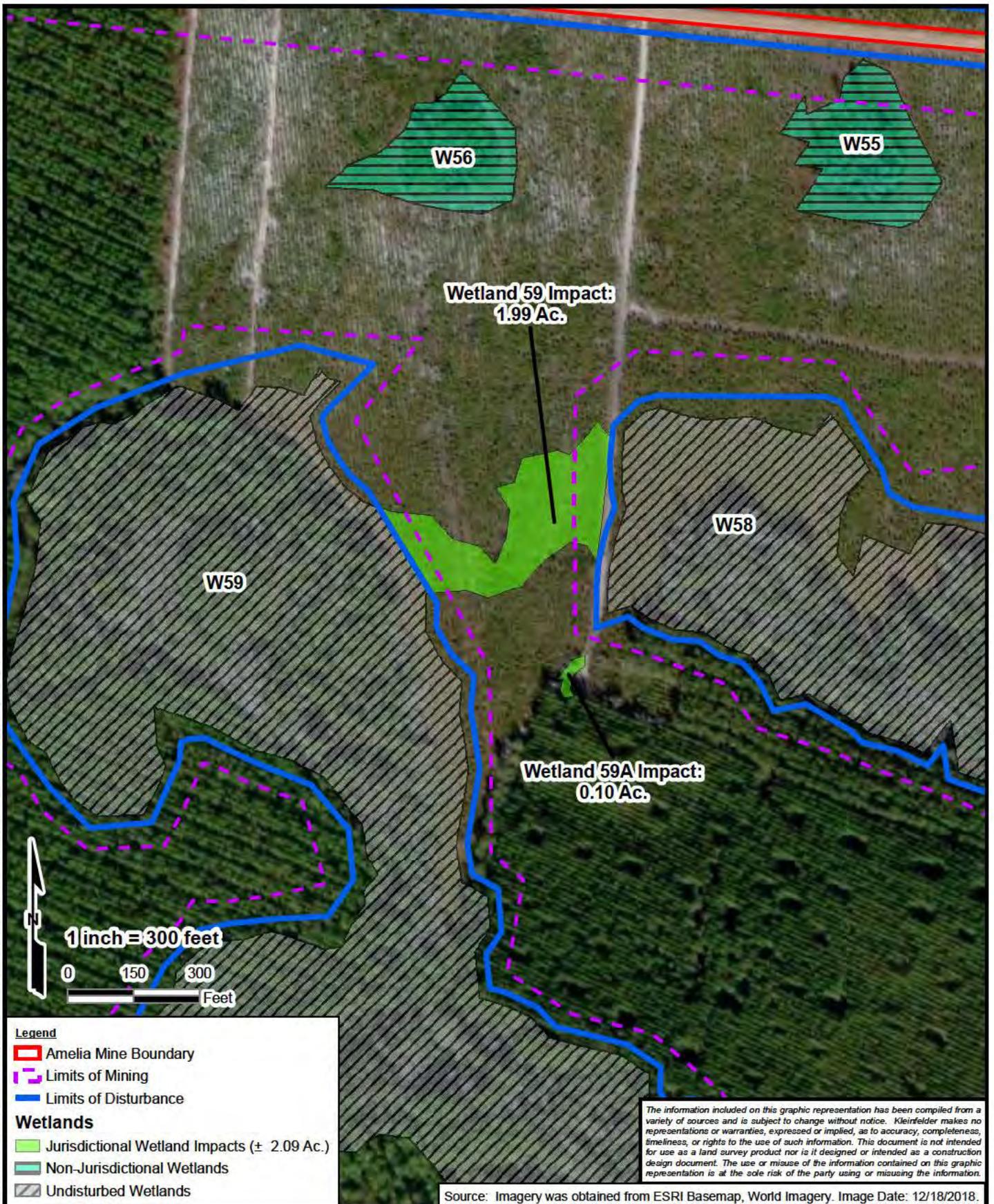
| NO. | REVISION | BY | DATE |
|-----|----------|----|------|
| △ | | | |
| △ | | | |
| △ | | | |
| △ | | | |
| △ | | | |



PROJECT NO. 122438.010
 DRAWN: 3/10/2020
 DRAWN BY: LS
 CHECKED BY: DL
 FILE NAME: See File Path

Mine Plan

The Chemours Company FC, LLC
 Amelia Mine
 Wayne County, Georgia



Legend

- Amelia Mine Boundary
- - - Limits of Mining
- Limits of Disturbance

Wetlands

- Jurisdictional Wetland Impacts (± 2.09 Ac.)
- Non-Jurisdictional Wetlands
- Undisturbed Wetlands

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

Source: Imagery was obtained from ESRI Basemap, World Imagery. Image Date: 12/18/2018.

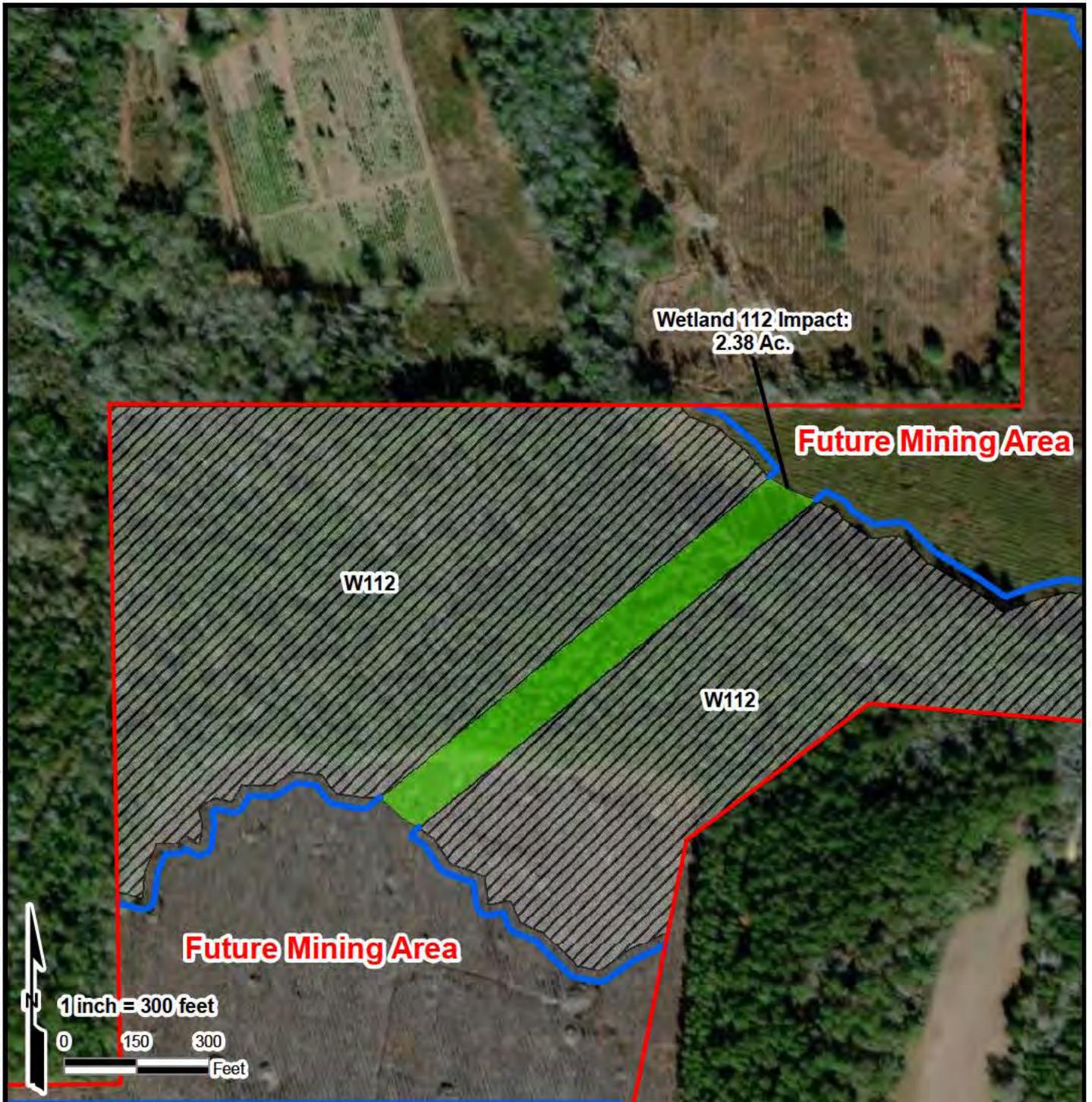
| | |
|-------------|---------------|
| PROJECT NO. | 122438.010 |
| DRAWN: | 3/10/2020 |
| DRAWN BY: | LS |
| CHECKED BY: | DL |
| FILE NAME: | See File Path |

**Aerial Map
Phase 1 Impact**

The Chemours Company FC, LLC
Amelia Mine
Wayne County, Georgia

Figure
3A

Document Path: G:\DPT_CHM\Other Mines\1_MXD\122438_Amelia\ACOE\2020_ACOE COE App\Fig3B_Amelia Phase2_Aerial.mxd

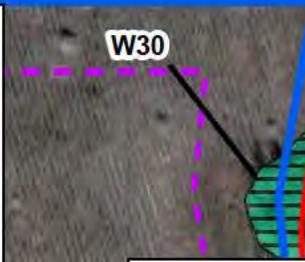


Legend

- Amelia Mine Boundary (± 3,980.18 Ac.)
- Limits of Mining
- Limits of Disturbance

Wetlands

- Jurisdictional Wetland Impact (± 2.38 Ac.)
- Non-Jurisdictional Wetland
- Undisturbed Wetlands



The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

Source: Imagery was obtained from ESRI Basemap, World Imagery. Image Date: 12/18/2018.

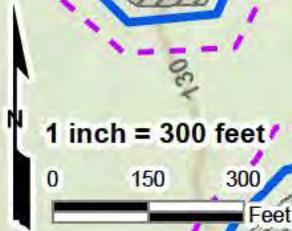
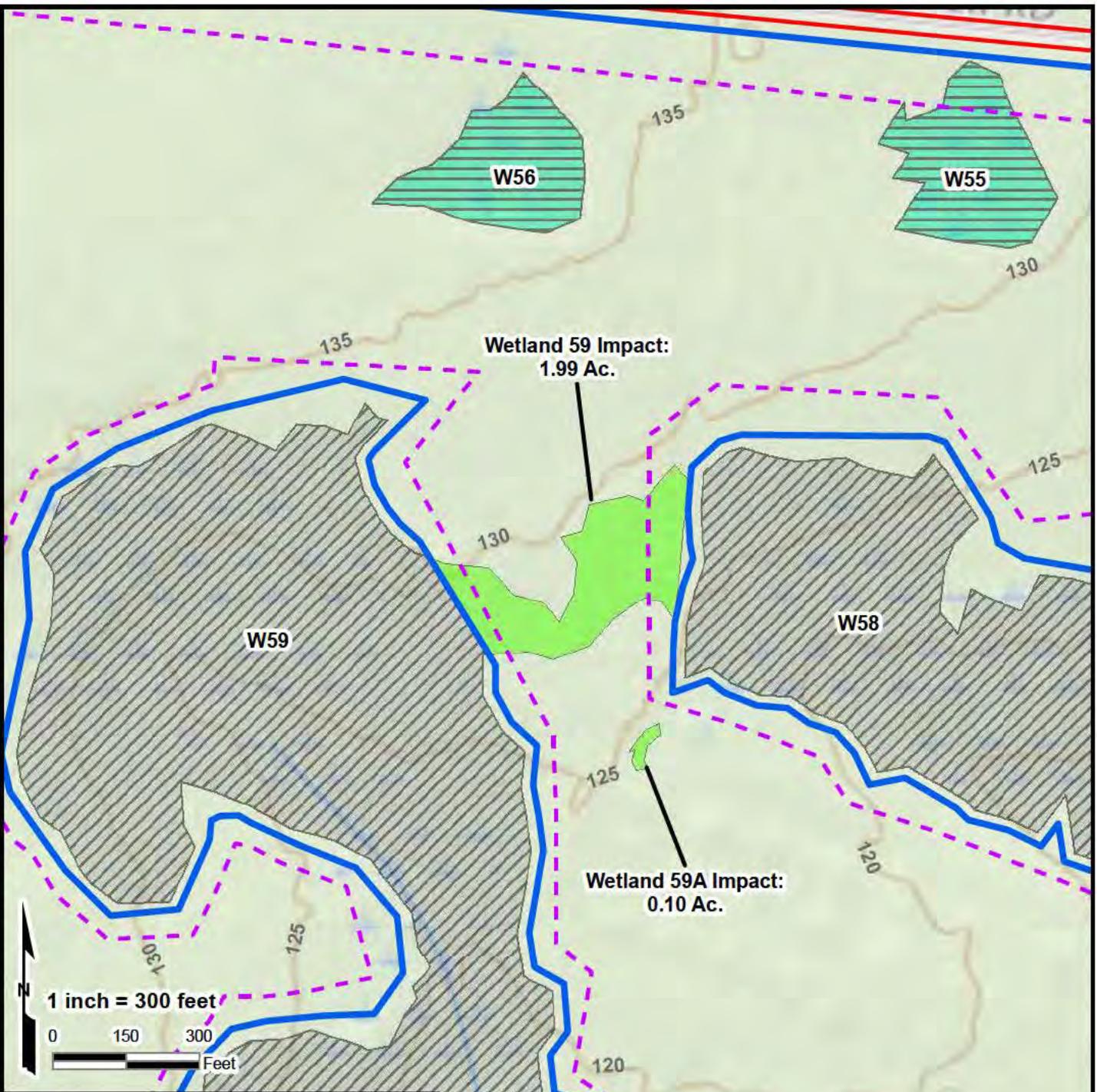


| | |
|-------------|---------------|
| PROJECT NO. | 122438 010 |
| DRAWN: | 3/10/2020 |
| DRAWN BY: | LS |
| CHECKED BY: | DL |
| FILE NAME: | See File Path |

| |
|--|
| Aerial Map Phase 2 Impact |
| The Chemours Company FC, LLC Amelia Mine Wayne County, Georgia |

| |
|---------------------|
| Figure 3B |
|---------------------|

Document Path: G:\DPT_CH\MOther Mines\1_MXD\122438_Amelia\ACOE\2020_ACOE COE App\Fig4A_Amelia Phase1 Topo.mxd



- Legend**
- Amelia Mine Boundary (± 3,980.18 Ac.)
 - Limits of Mining
 - Limits of Disturbance
- Wetlands**
- Jurisdictional Wetland Impacts (± 2.09 Ac.)
 - Non-Jurisdictional Wetlands
 - Undisturbed Wetlands

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

Source: Imagery was obtained from ESRI Basemap, USGS Topo.



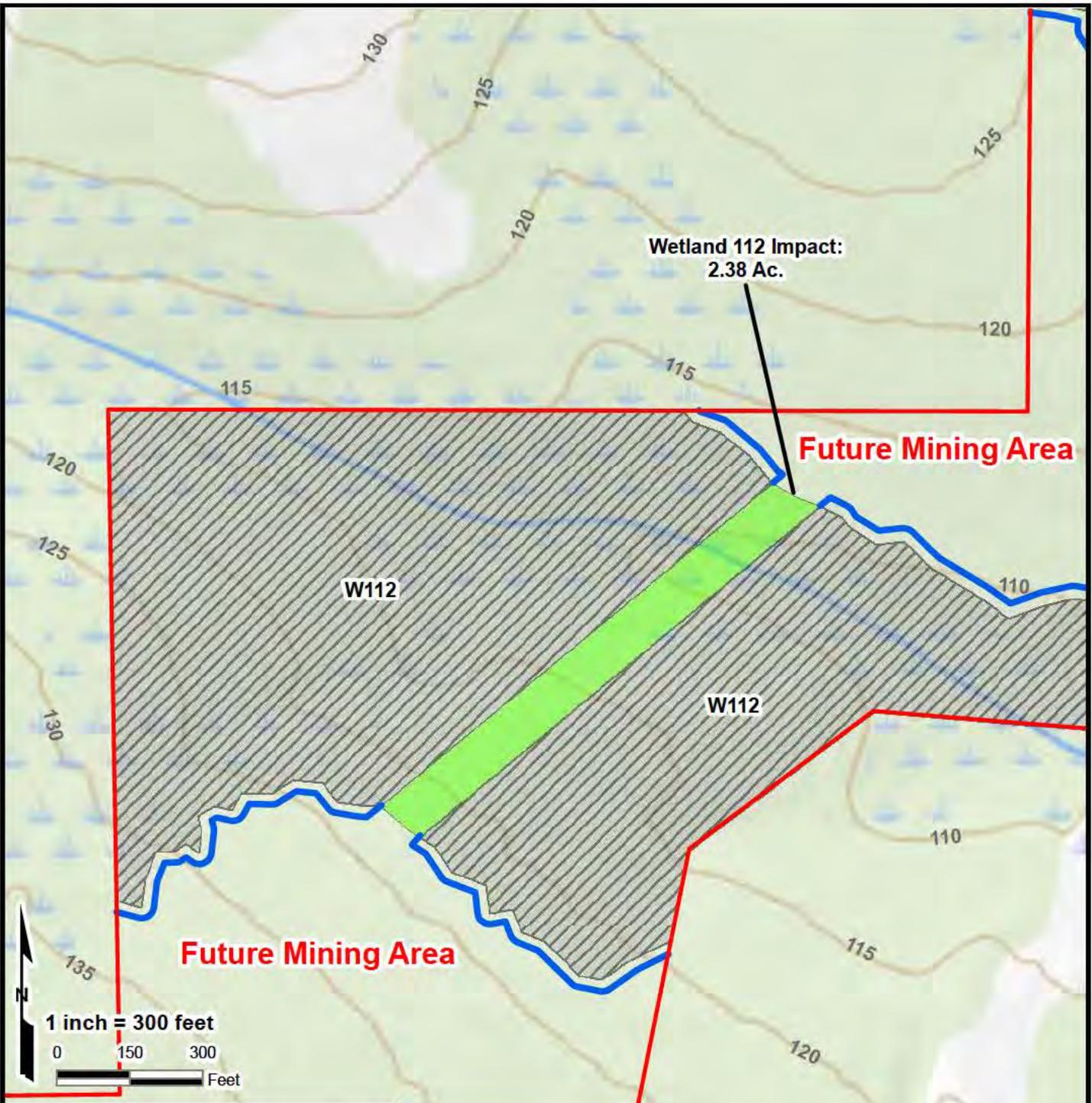
| | |
|-------------|---------------|
| PROJECT NO. | 122438.010 |
| DRAWN: | 3/10/2020 |
| DRAWN BY: | LS |
| CHECKED BY: | DL |
| FILE NAME: | See File Path |

**USGS Topographic Map
Phase 1**

The Chemours Company FC, LLC
Amelia Mine
Wayne County, Georgia

Figure
4A

Document Path: G:\DPT_CH\MOther Mines\1_MXD\122438_Amelia\ACOE\2020_ACOE COE App\Fig4B_Amelia Phase2 Topo.mxd

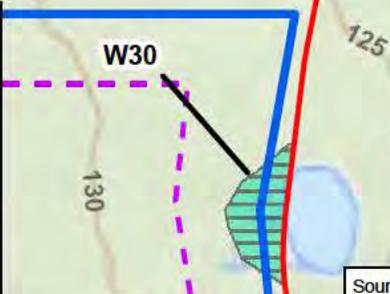


Legend

- Amelia Mine Boundary (± 3,980.18 Ac.)
- Limits of Mining
- Limits of Disturbance

Wetlands

- Jurisdictional Wetland Impact (± 2.38 Ac.)
- Non-Jurisdictional Wetland
- Undisturbed Wetlands



The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

Source: Imagery was obtained from ESRI Basemap, USGS Topo

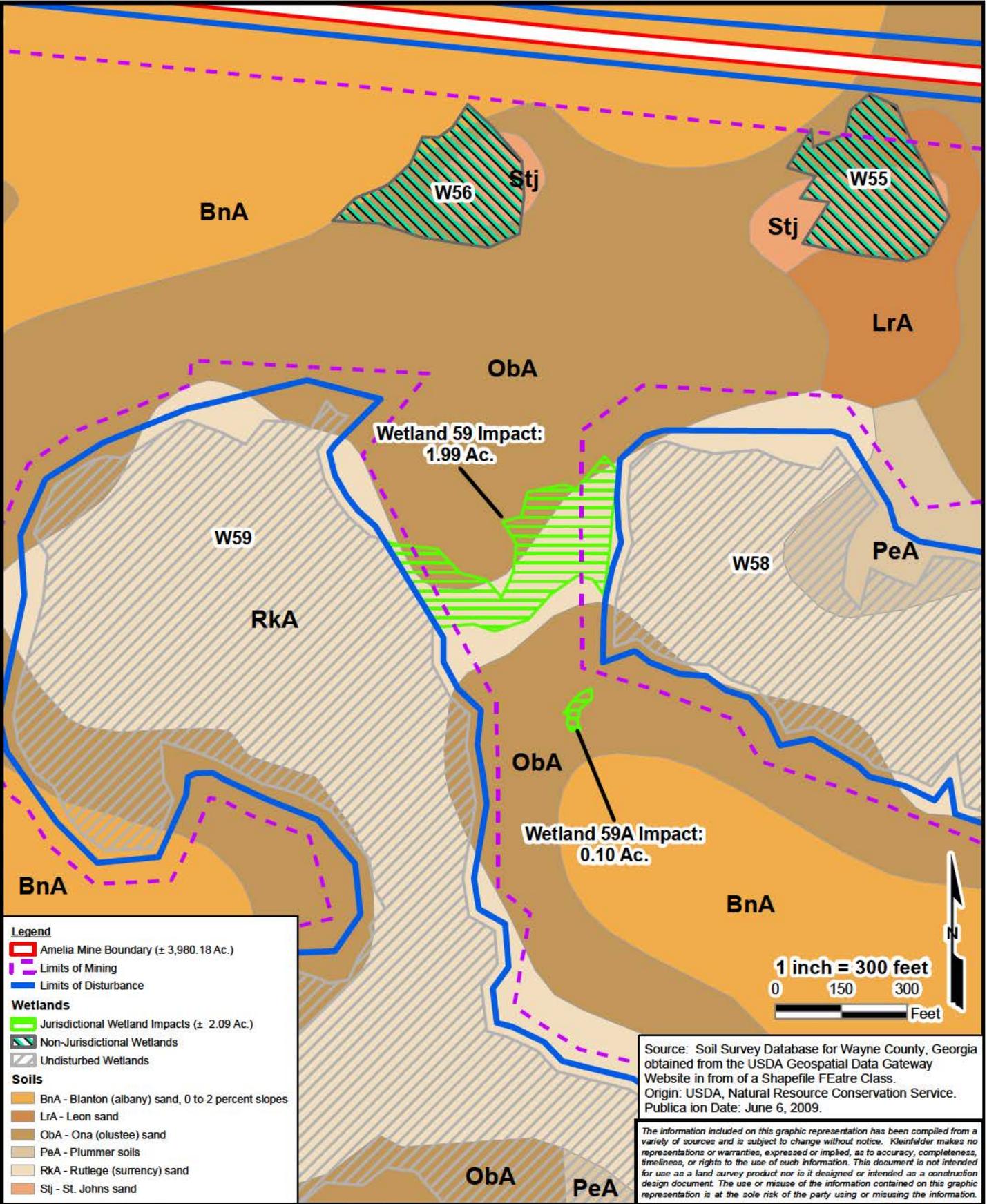
| | |
|-------------|---------------|
| PROJECT NO. | 122438.010 |
| DRAWN: | 3/10/2020 |
| DRAWN BY: | LS |
| CHECKED BY: | DL |
| FILE NAME: | See File Path |

**USGS Topographic Map
Phase 2**

The Chemours Company FC, LLC
Amelia Mine
Wayne County, Georgia

Figure
4B

Document Path: G:\DPT_CHM\Other Mines\1_MXD\122438_Amelia\ACOE\2020_ACOE COE App\Fig5A_Amelia Phase1 Soils.mxd



Legend

- Amelia Mine Boundary (± 3,980.18 Ac.)
- Limits of Mining
- Limits of Disturbance

Wetlands

- Jurisdictional Wetland Impacts (± 2.09 Ac.)
- Non-Jurisdictional Wetlands
- Undisturbed Wetlands

Soils

- BnA - Blanton (albany) sand, 0 to 2 percent slopes
- LrA - Leon sand
- ObA - Ona (olustee) sand
- PeA - Plummer soils
- RkA - Rutledge (surrency) sand
- Stj - St. Johns sand

Source: Soil Survey Database for Wayne County, Georgia obtained from the USDA Geospatial Data Gateway Website in from of a Shapefile FEatree Class.
 Origin: USDA, Natural Resource Conservation Service.
 Publication Date: June 6, 2009.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



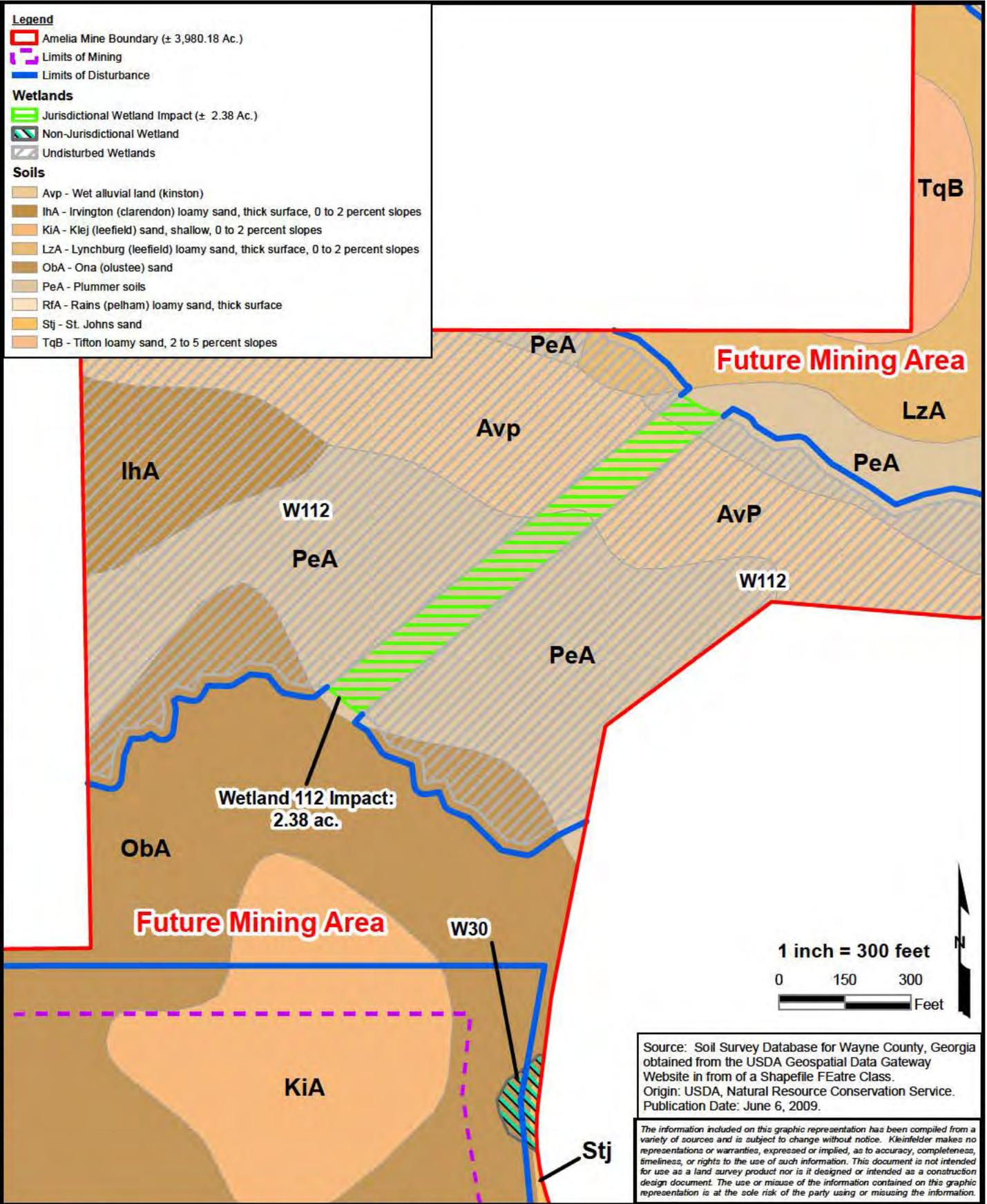
| | |
|-------------|---------------|
| PROJECT NO. | 122438.010 |
| DRAWN: | 3/10/2020 |
| DRAWN BY: | LS |
| CHECKED BY: | DL |
| FILE NAME: | See File Path |

**Soils Map
Phase 1**

The Chemours Company FC, LLC
 Amelia Mine
 Wayne County, Georgia

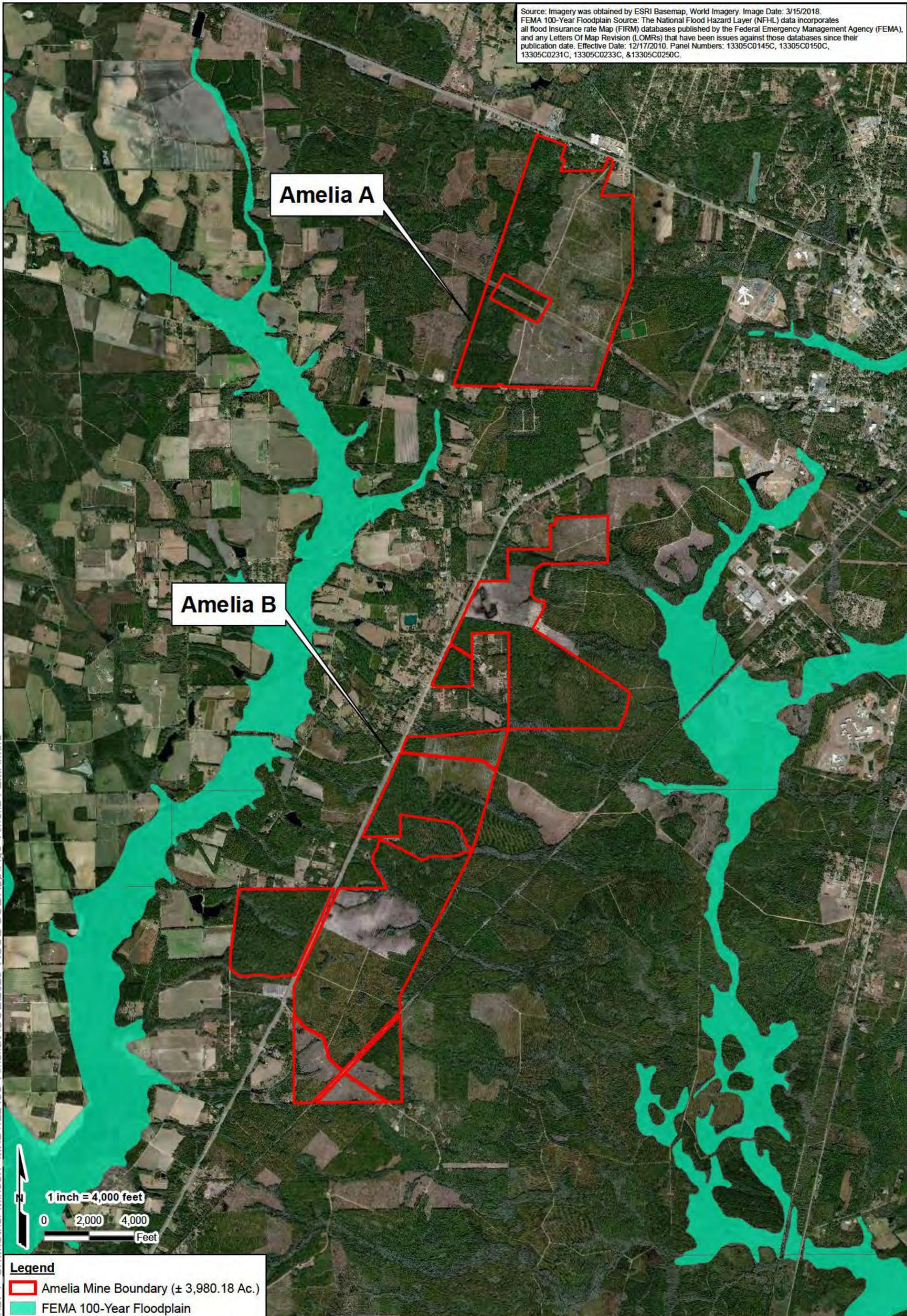
Figure
5A

Document Path: G:\DPT_CHM\Other Mines\1_MXD\122438_Amelia\ACOE\2020_ACOE COE App\Fig5B_Amelia Phase2 Soils.mxd



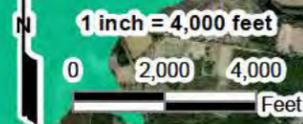
| | | | |
|---|------------------------|-------------------------------------|---|
| <p>KLEINFELDER Bright People. Right Solutions. www.kleinfelder.com</p> | PROJECT NO. 122438.010 | <p>Soils Map Phase 2</p> | Figure |
| | DRAWN: 3/10/2020 | | <p>The Chemours Company FC, LLC Amelia Mine Wayne County, Georgia</p> |
| | DRAWN BY: LS | | |
| | CHECKED BY: DL | | |
| FILE NAME: See File Path | | | |

Source: Imagery was obtained by ESRI Basemap, World Imagery. Image Date: 3/15/2018.
 FEMA 100-Year Floodplain Source: The National Flood Hazard Layer (NFHL) data incorporates all flood insurance rate Map (FIRM) databases published by the Federal Emergency Management Agency (FEMA), and any Letters Of Map Revision (LOMRs) that have been issued against those databases since their publication date. Effective Date: 12/17/2010. Panel Numbers: 13305C0145C, 13305C0150C, 13305C0231C, 13305C0233C, & 13305C0250C.



Amelia A

Amelia B



Legend

| | |
|---|---------------------------------------|
|  | Amelia Mine Boundary (± 3,980.18 Ac.) |
|  | FEMA 100-Year Floodplain |

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



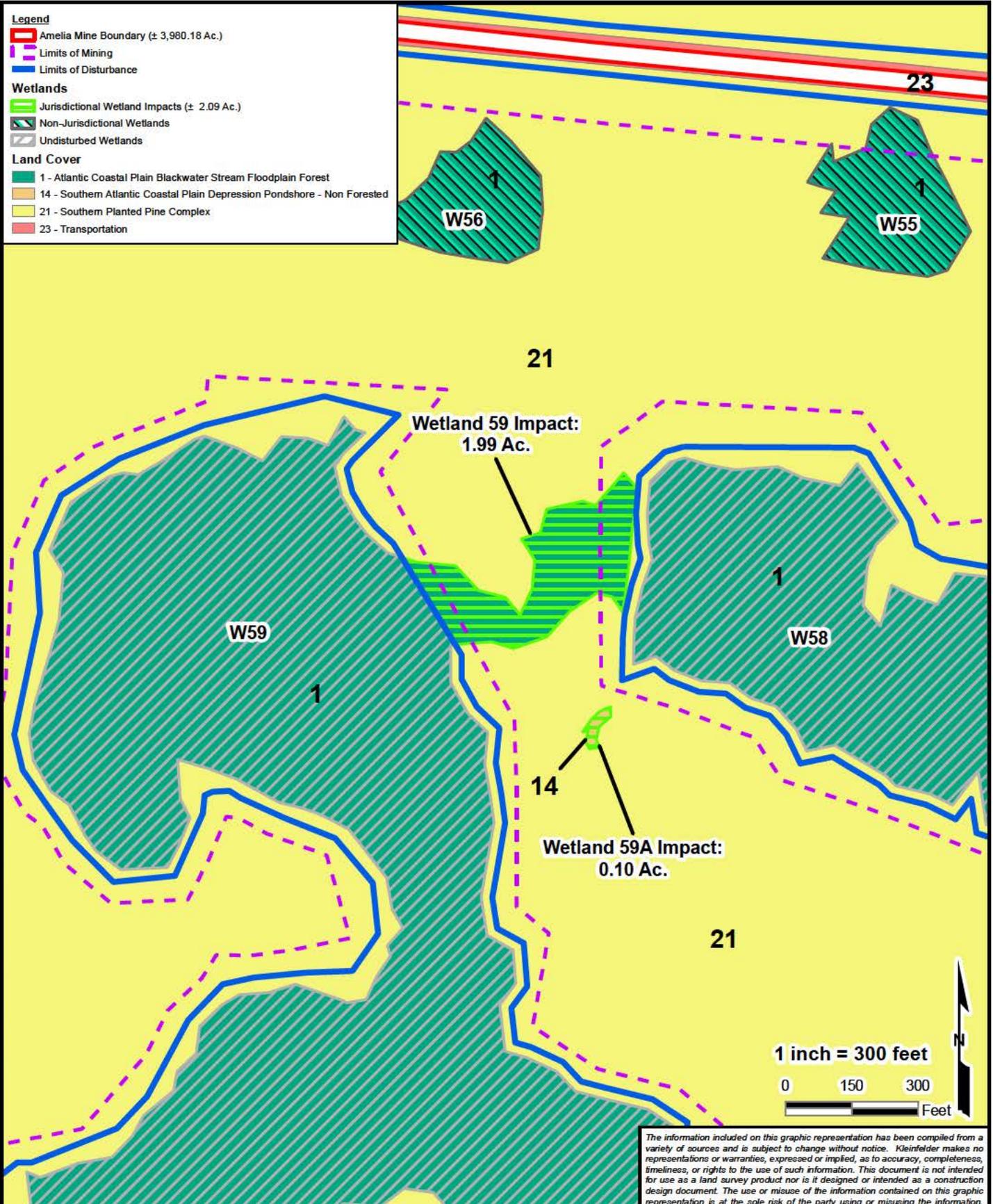
| | |
|-------------|---------------|
| PROJECT NO. | 122438.010 |
| DRAWN: | 3/10/2020 |
| DRAWN BY: | LS |
| CHECKED BY: | DL |
| FILE NAME: | See File Path |

| | |
|--|--|
| FEMA Floodplain Map | |
| The Chemours Company FC, LLC Amelia Mine Wayne County, Georgia | |

FIGURE
6

Document Path: G:\DPT\CHM\Other Mines\1_MXD\122438_Amelia\ACOE\2020_ACOE COE App\Fig6_Amelia FEMA.mxd

Document Path: G:\DPT_CHM\Other Mines\1_MXD\122438_Amelia\ACOE\2020_ACOE COE App\Fig7A_Amelia Phase1 PreLU&Veg.mxd



| | | | |
|---|------------------------|---|-----------------------------|
|  <p>KLEINFELDER Bright People. Right Solutions. www.kleinfelder.com</p> | PROJECT NO. 122438.010 | <p>Pre-Mining Land Use and Vegetation Phase 1</p> | <p>Figure 7A</p> |
| | DRAWN: 3/10/2020 | | |
| | DRAWN BY: LS | <p>The Chemours Company FC, LLC Amelia Mine Wayne County, Georgia</p> | |
| | CHECKED BY: DL | | |
| FILE NAME: See File Path | | | |

Document Path: G:\DPT_CHM\Other Mines\1_MXD\122438_Amelia\ACOE\2020_ACOE COE App\Fig7B_Amelia Phase2 PreLU&Veg.mxd

Legend

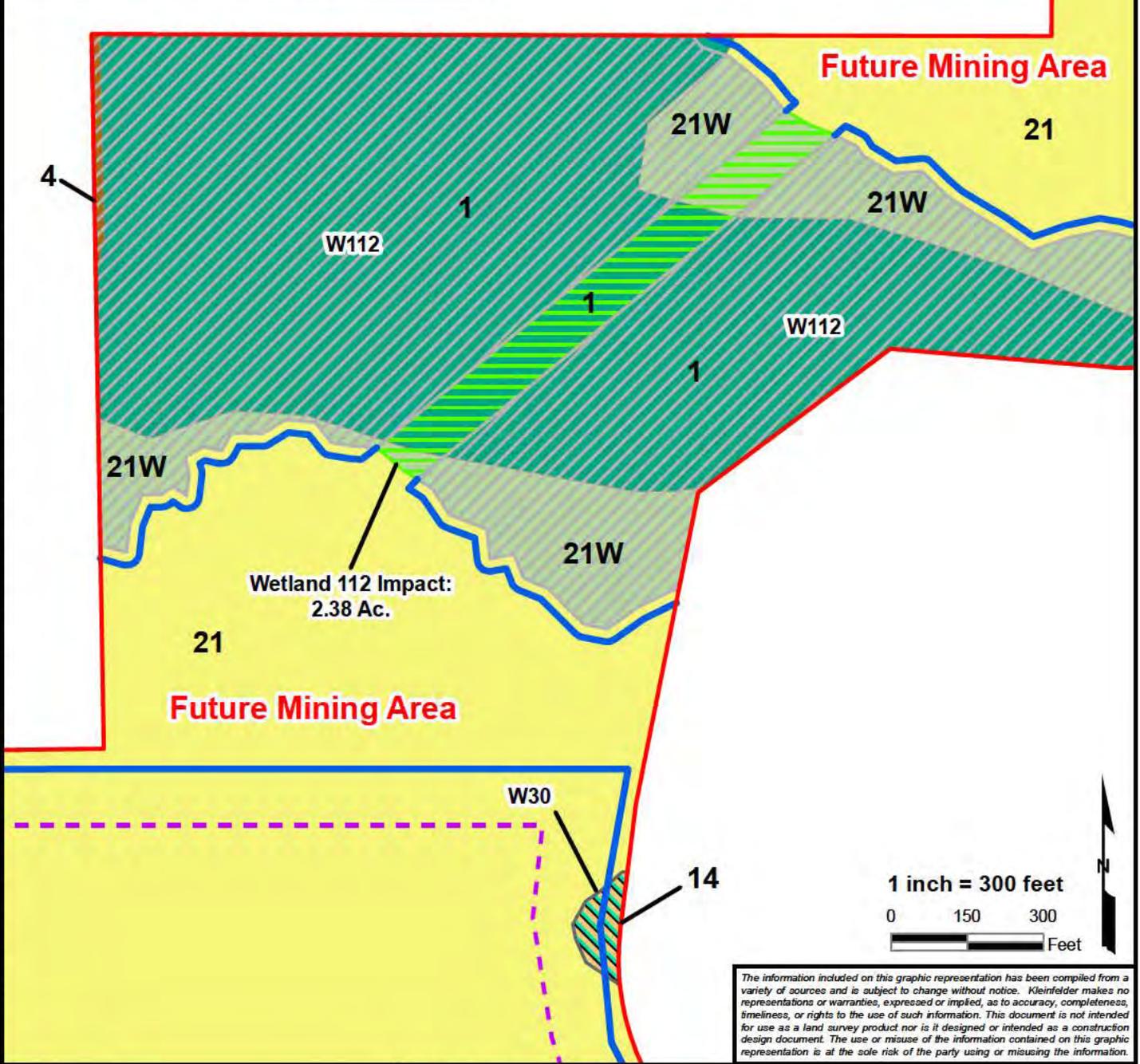
- Amelia Mine Boundary (± 3,980.18 Ac.)
- Limits of Mining
- Limits of Disturbance

Wetlands

- Jurisdictional Wetland Impact (± 2.38 Ac.)
- Non-Jurisdictional Wetland
- Undisturbed Wetlands

Land Cover

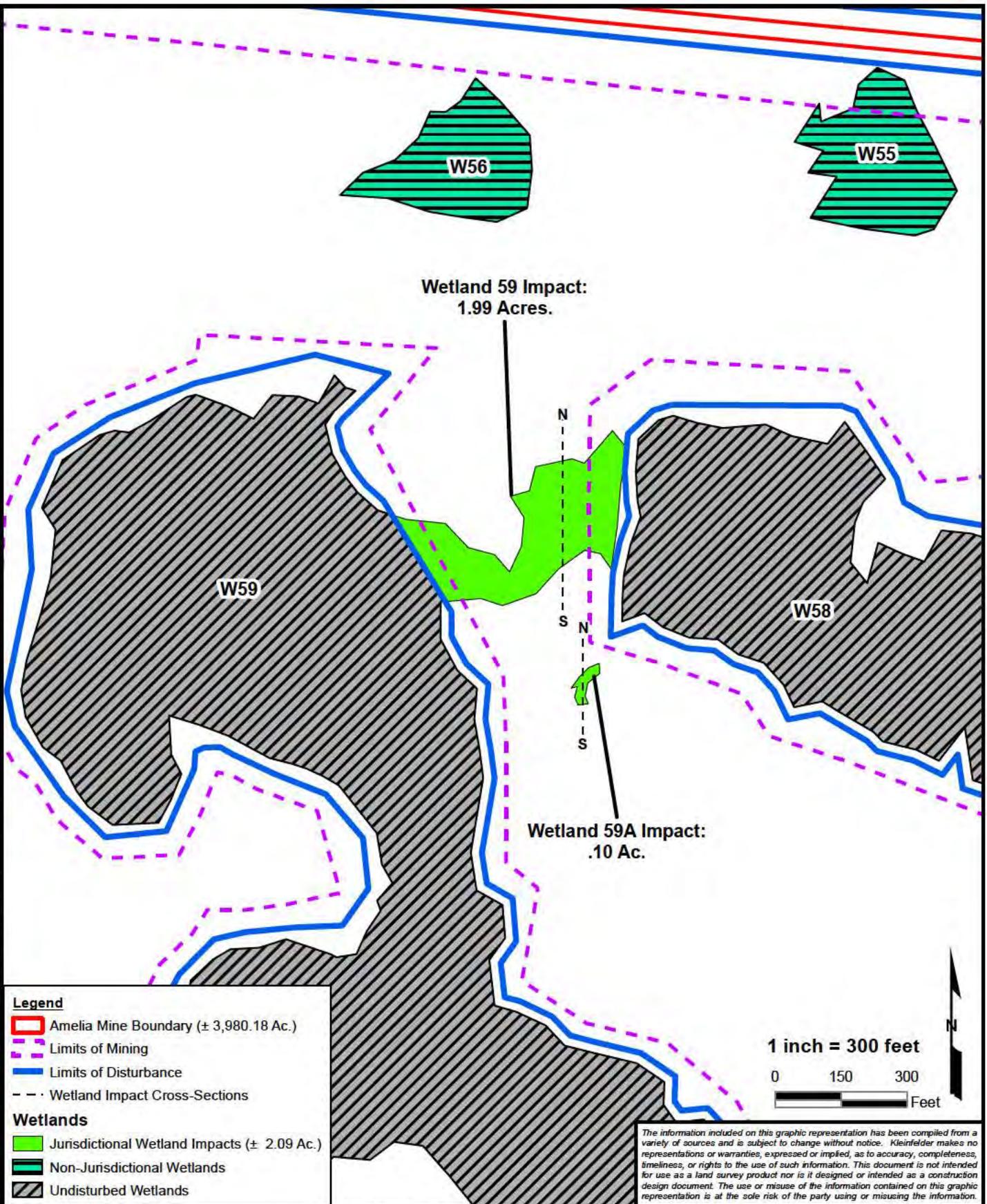
- 1 - Atlantic Coastal Plain Blackwater Stream Floodplain Forest
- 4 - Clearcut
- 14 - Southern Atlantic Coastal Plain Depression Pondshore - Non Forested
- 21 - Southern Planted Pine Complex
- 21W - Southern Planted Pine Complex - Wetland



The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

| | | | |
|---|------------------------|--|--------|
|  <p>KLEINFELDER Bright People. Right Solutions. www.kleinfelder.com</p> | PROJECT NO. 122438 010 | <p>Pre-Mining Land Use and Vegetation Phase 2</p> <p>The Chemours Company FC, LLC Amelia Mine Wayne County, Georgia</p> | Figure |
| | DRAWN: 3/10/2020 | | 7B |
| | DRAWN BY: LS | | |
| | CHECKED BY: DL | | |
| FILE NAME: See File Path | | | |

Document Path: G:\DPT_CHM\Other Mines\1_MXD\122438_Amelia\ACOE\2020_ACOE COE App\Fig8A_Amelia Phase1 Impacts.mxd

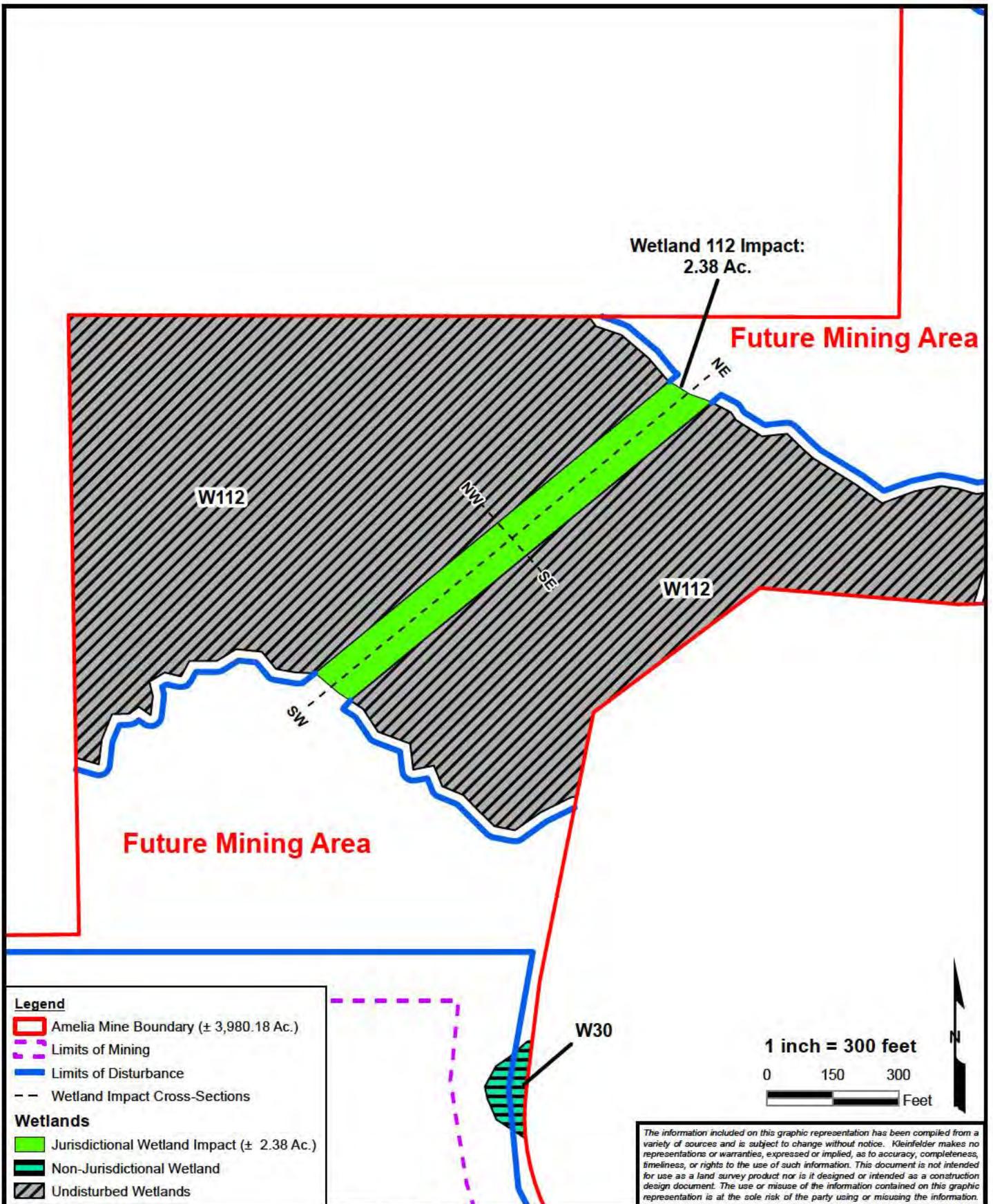


| | |
|-------------|---------------|
| PROJECT NO. | 122438.010 |
| DRAWN: | 3/10/2020 |
| DRAWN BY: | LS |
| CHECKED BY: | DL |
| FILE NAME: | See File Path |

**Wetland Impact Map
Phase 1**

The Chemours Company FC, LLC
Amelia Mine
Wayne County, Georgia

Figure
8A



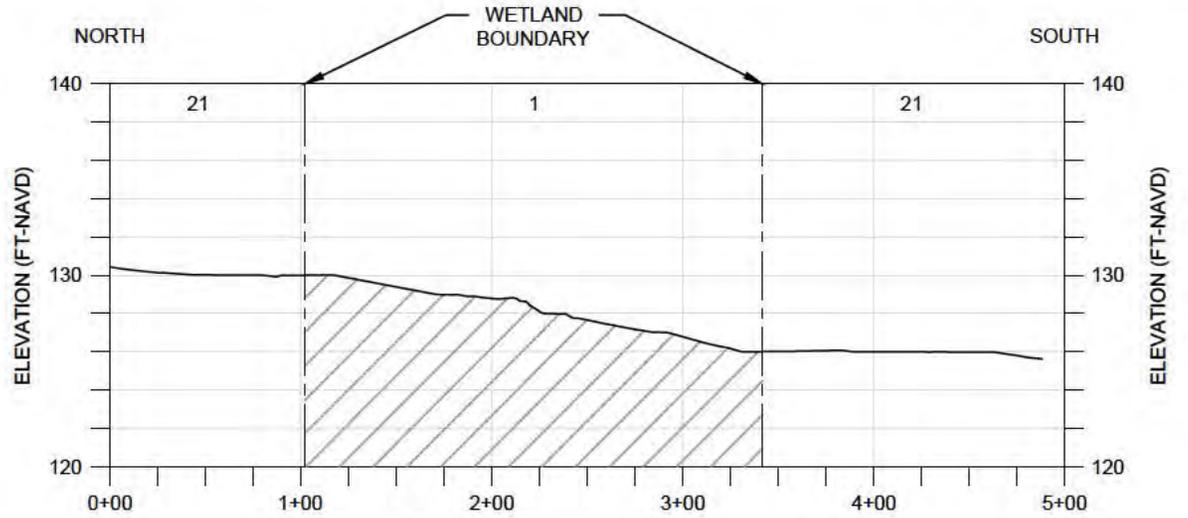
The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

| | | | |
|---|------------------------|---|-----------------------------|
|  <p>KLEINFELDER Bright People. Right Solutions. www.kleinfelder.com</p> | PROJECT NO. 122438.010 | <p>Wetland Impact Map Phase 2</p> | <p>Figure 8B</p> |
| | DRAWN: 3/10/2020 | | |
| | DRAWN BY: LS | <p>The Chemours Company FC, LLC Amelia Mine Wayne County, Georgia</p> | |
| | CHECKED BY: DL | | |
| FILE NAME: See File Path | | | |

LEGEND

-  IMPACTED WETLAND
-  EXISTING GROUND
-  LAND USE CODE

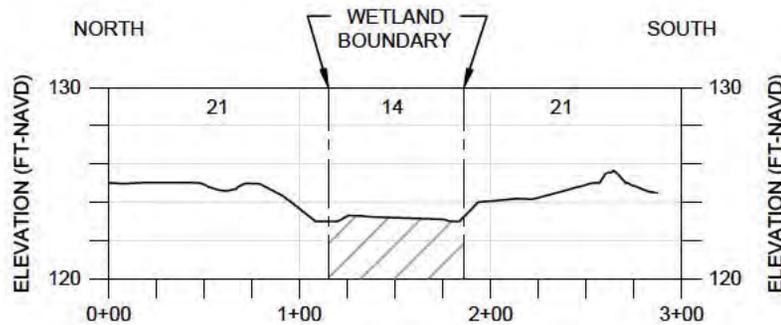
- 1 - Atlantic Coastal Plain Blackwater Stream Floodplain Forest
- 14 - Southern Atlantic Coastal Plain Pondshore - Non Forested
- 21 - Southern Planted Pine Complex



SECTION AA - PHASE 1 - WETLAND 59

HORIZONTAL SCALE: 1"=100'

VERTICAL SCALE: 1"=10'



SECTION BB - PHASE 1 - WETLAND 59A

HORIZONTAL SCALE: 1"=100'

VERTICAL SCALE: 1"=10'

NOTES:

1. Existing grade 1-foot contours provided by Southern Resources Mapping (SRM, 2012).
2. Vertical Datum: NAVD88.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



| | |
|-------------|----------------------|
| PROJECT NO. | 00122438.010A |
| DRAWN: | 03/26/2020 |
| DRAWN BY: | NCD |
| CHECKED BY: | TB |
| FILE NAME: | Amelia-WetImp-CS.dwg |

WETLAND IMPACT CROSS-SECTIONS

THE CHEMOURS COMPANY FC, LLC
 AMELIA MINE
 WAYNE COUNTY, GEORGIA

FIGURE

9A

LEGEND

 IMPACTED WETLAND

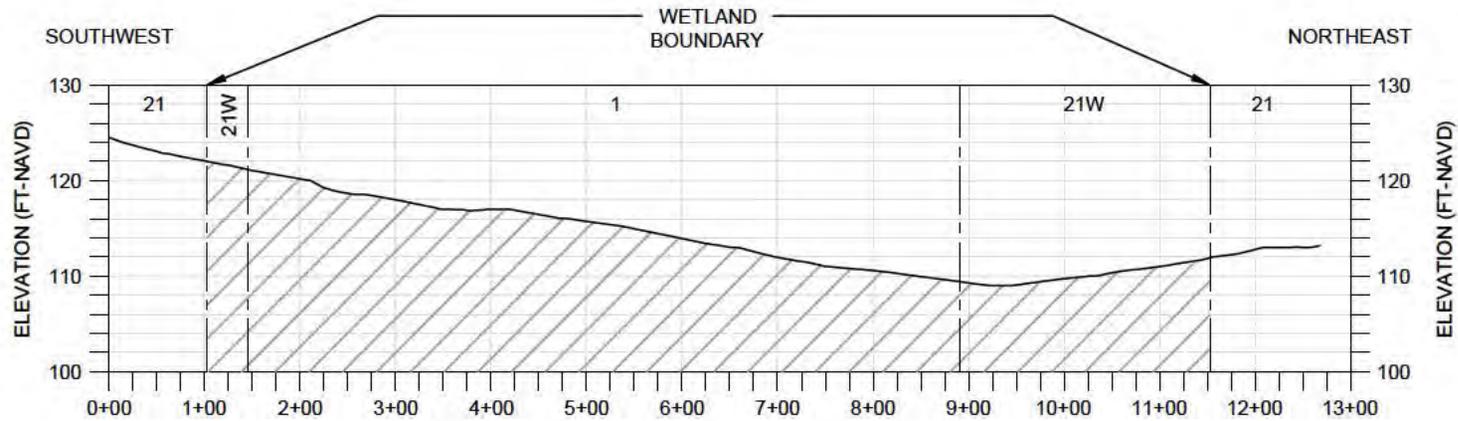
 EXISTING GROUND

 LAND USE CODE

1 - Atlantic Coastal Plain Blackwater Stream Floodplain Forest

21 - Southern Planted Pine Complex

21W - Southern Planted Pine Complex - Wetland



SECTION CC - PHASE 2 - WETLAND 112

HORIZONTAL SCALE: 1"=200'

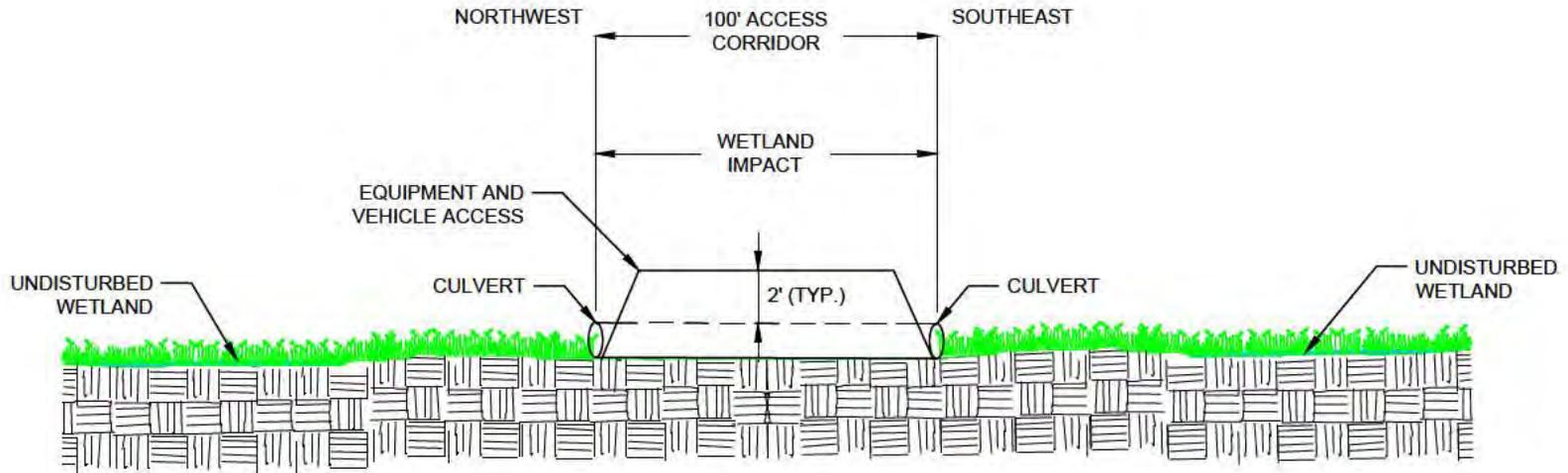
VERTICAL SCALE: 1"=20'

NOTES:

- Existing grade 1-foot contours provided by Southern Resources Mapping (SRM, 2012).
- Vertical Datum: NAVD88.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.

| | | | |
|---|---------------------------|---|-----------------------------|
|  <p>KLEINFELDER Bright People. Right Solutions.</p> | PROJECT NO. 00122438.010A | <p>WETLAND IMPACT CROSS-SECTIONS</p> | <p>FIGURE 9B</p> |
| | DRAWN: 03/26/2020 | | |
| | DRAWN BY: NCD | <p>THE CHEMOURS COMPANY FC, LLC AMELIA MINE WAYNE COUNTY, GEORGIA</p> | |
| | CHECKED BY: TB | | |
| FILE NAME: Amelia-WetImp-CS.dwg | | | |



SECTION DD - CULVERTED ROAD WETLAND CROSSING
N.T.S.

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, expressed or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



| |
|---------------------------------|
| PROJECT NO. 00122438.010A |
| DRAWN: 05/27/2020 |
| DRAWN BY: NCD |
| CHECKED BY: TB |
| FILE NAME: Amelia-WetImp-CS.dwg |

WETLAND IMPACT CROSS-SECTIONS

THE CHEMOURS COMPANY FC, LLC
AMELIA MINE
WAYNE COUNTY, GEORGIA

FIGURE

9C

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Wayne County, Georgia



Local office

Georgia Ecological Services Field Office

☎ (706) 613-9493

📅 (706) 613-6059

355 East Hancock Avenue

Room 320

Athens, GA 30601

Encls 2

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME

STATUS

Wood Stork *Mycteria americana*

Threatened

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/8477>

Reptiles

NAME

STATUS

Eastern Indigo Snake *Drymarchon corais couperi*

Threatened

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/646>Gopher Tortoise *Gopherus polyphemus*

Candidate

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/6994>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the [FAQ below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

| NAME | BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.) |
|---|--|
| American Kestrel <i>Falco sparverius paulus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA | Breeds Apr 1 to Aug 31 |
| Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. | Breeds May 1 to Jul 31 |
| Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. | Breeds May 10 to Sep 10 |
| Swallow-tailed Kite <i>Elanoides forficatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8938 | Breeds Mar 10 to Jun 30 |

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

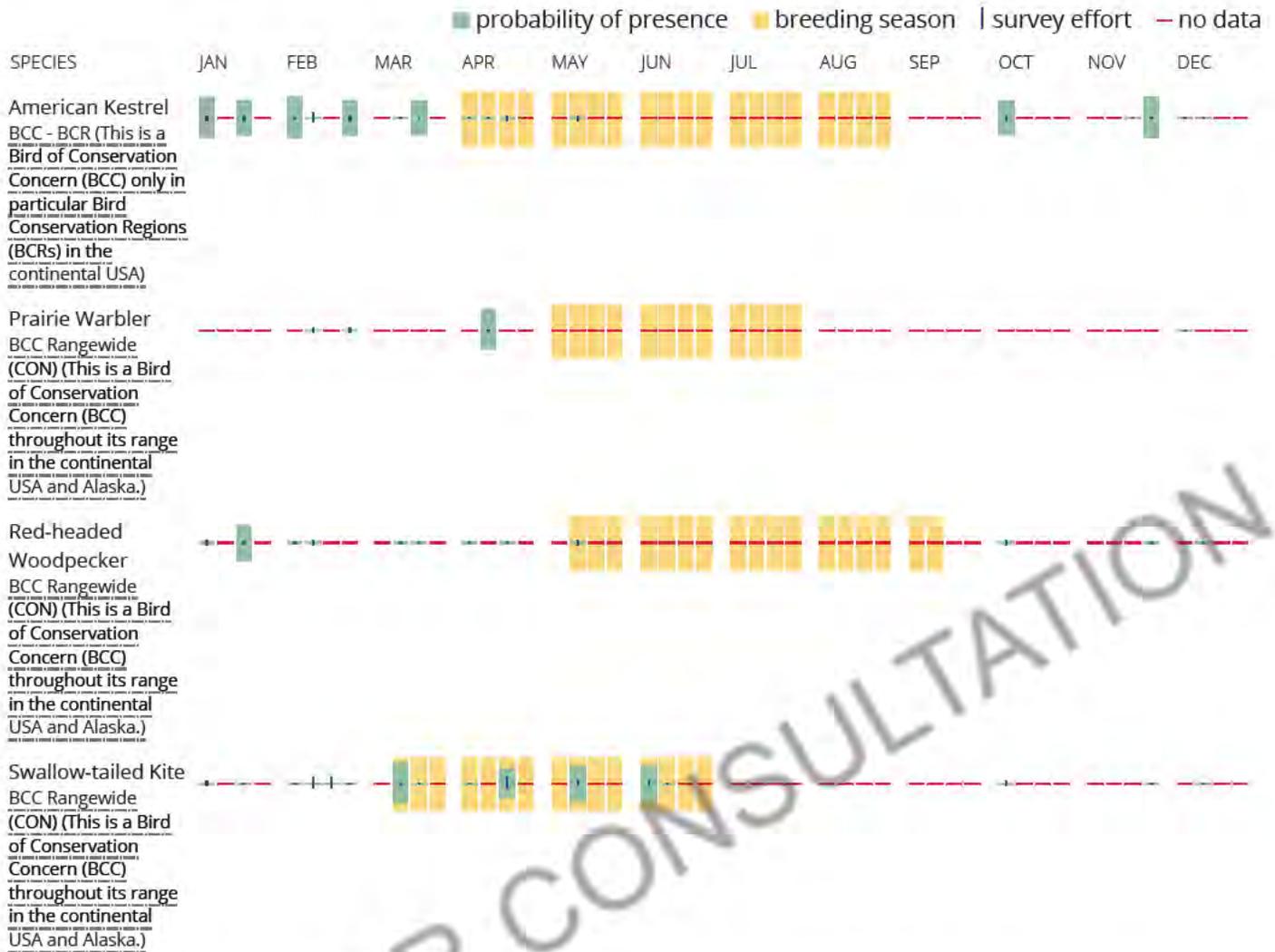
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

[PEM1C](#)

[PEM1F](#)

[PEM1Cd](#)

FRESHWATER FORESTED/SHRUB WETLAND

[PFO1C](#)

[PFO1B](#)

[PFO4B](#)

[PFO7B](#)

[PFO3/1B](#)

[PFO3B](#)

[PFO1/4Bd](#)

[PFO1/3B](#)

[PFO6Fd](#)

[PFO4/1C](#)

[PFO4Bd](#)

[PSS1Bd](#)

[PFO4/1Bd](#)

[PFO6F](#)

[PFO1/3Bd](#)

[PFO6C](#)

[PSS1C](#)

[PSS7B](#)

[PFO1/4B](#)

[PSS1Cd](#)

[PFO3Bd](#)

[PFO3Cd](#)

[PFO1Cd](#)

[PFO4/1A](#)

[PFO1A](#)

[PSS7C](#)

[PFO4A](#)

[PFO4C](#)

[PSS4Cd](#)

[PFO1/4C](#)

FRESHWATER POND

[PUBHx](#)

RIVERINE

[R5UBH](#)[R4SBCx](#)[R4SBC](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.