

RECEIVED

JUL 11 2022

PUBLIC SERVICE
COMMISSION

From: [REDACTED]
To: [Chandler, Kent \(PSC\)](#)
Subject: 2021-00235
Date: Sunday, July 10, 2022 11:40:29 AM
Attachments: [image0.png](#)



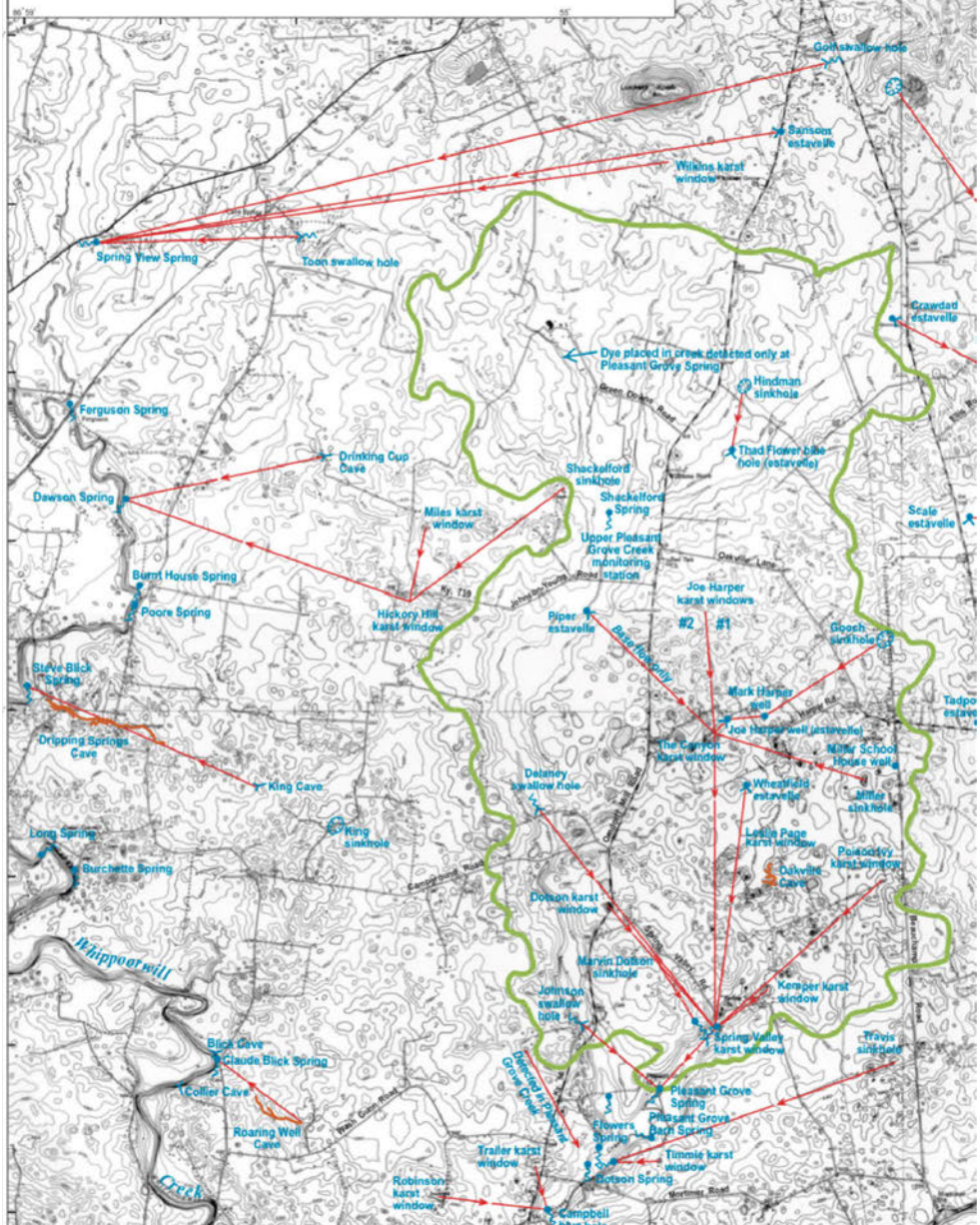
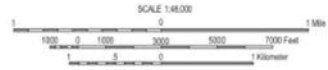
From: [REDACTED]
To: [Chandler, Kent \(PSC\)](#)
Subject: 2021-00235
Date: Sunday, July 10, 2022 11:39:06 AM
Attachments: [image0.png](#)



Karst Features and Ground-Water Dye-Trace Vectors

Pleasant Grove Spring Karst Ground-Water Drainage Basin, Logan County, Kentucky

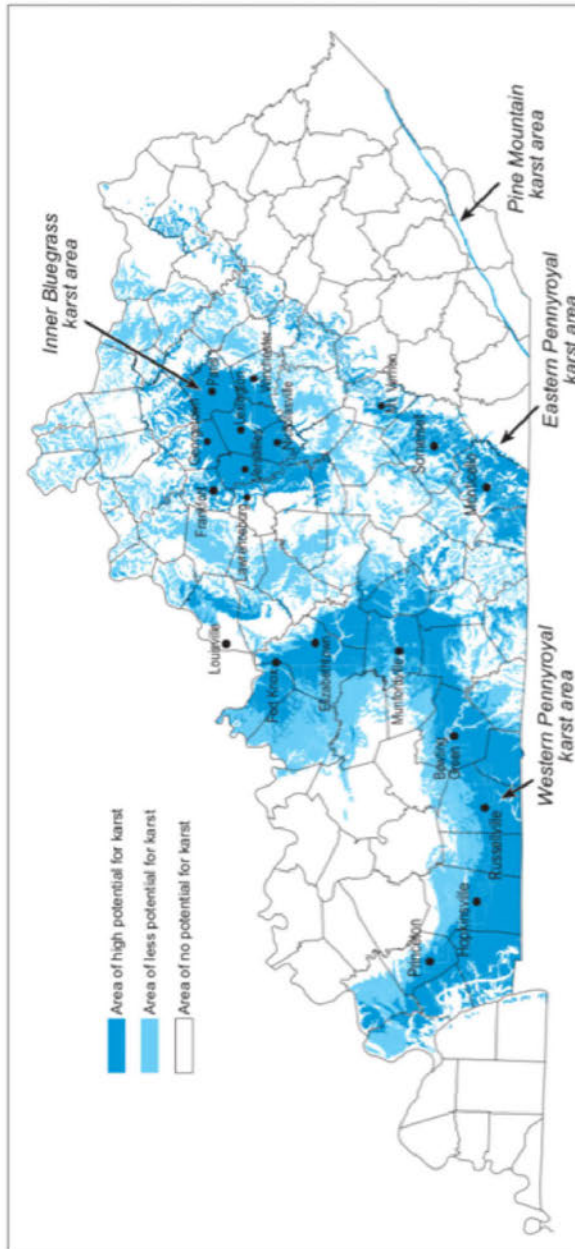
- EXPLANATION
- Spring
 - Swallow hole
 - Cave
 - Estavelle
 - Karst window
 - Sinkhole
 - Mapped cave
 - Ground-water dye-trace vector
 - Surface stream course
 - Ground-water basin boundary
 - Drilled well



From: [REDACTED]
To: [Chandler, Kent \(PSC\)](#)
Subject: 2021-00235
Date: Monday, July 11, 2022 7:21:30 AM
Attachments: [IMG_0948.PNG](#)



Sent from my iPhone



Areas in Kentucky underlain by limestone and other carbonate rocks. The darker areas are more subject to the development of sinkholes, caves, and springs.

The karst of Kentucky occurs in five principal regions, but also in many scattered locations. The largest area is the Western Pennyroyal, which sweeps in an arc from the Ohio River, near Fort Knox, south to the state's southern border, then west past Hopkinsville and north again back to the Ohio River. Bowling Green and several other major cities are in this region. Many of the state's longest caves, and landscapes most densely pocked with sinkholes, are in this region. The next largest expanse of karst is the Inner Bluegrass, surrounding Lexington in central Kentucky. The Eastern Pennyroyal lies along the western edge of the Cumberland Plateau in eastern Kentucky, extending from the state's

From: [REDACTED]
To: [Chandler, Kent \(PSC\)](#)
Subject: 2021-00235
Date: Monday, July 11, 2022 10:02:14 AM

Linda Campbell
4945 Schley rd
Adairville Ky 52202

I have sent previous maps To the file Showing Krast Areas in Logan County and how they flow to the Red River. Silicon ranch Russellville Solar Identifies in the below pictures that Red river is the anchor water from these streams and krast. Farmers in Logan County use the Red River to irrigate crops which eventually become food for America. Logan County is blessed to have this river flow through the land. I am asking the board To review these attachments and please Consider how much damage Could be affected by these waterways in the flow into Red River. Please vote no for recipe for Russellville Solar project. Thank you Linda Campbell



Sent from my iPhone

	(ACRES)	CLASSIFICATION		JURISDICTIONAL
A	0.95	PFO	Precipitation, Surface Runoff	Yes; adjacent to off-site stream
B	1.11	PEM	Precipitation, Surface Runoff	Yes; adjacent to Stream 1
C	0.88	PFO	Precipitation, Surface Runoff	Yes; neighboring Stream 2
D	0.09	PEM	Precipitation, Surface Runoff	Yes; neighboring Stream 2

8

Reliable ■ Responsive ■ Reliable

Wetland Delineation Report
 Russellville Solar ■ Russellville, Kentucky
 July 31, 2019 ■ Terracon Project: N1197212



E	0.14	PEM	Precipitation, Surface Runoff	Yes; neighboring Stream 2
F	1.84	PFO	Precipitation, Surface Runoff, Streams 4 and 10, Pond 7	Yes; adjacent to Streams 4 and 9
G	0.18	PEM	Precipitation, Surface Runoff, Pond 8	Yes; neighboring Streams 4 and 9
H	0.08	PEM/PSS	Precipitation, Surface Runoff	Yes; neighboring Stream 13
I	0.03	PEM/PSS	Precipitation, Surface Runoff	Yes; adjacent to Stream 13
J	3.27	PFO	Precipitation, Surface Runoff	Yes; neighboring Stream 12
K	1.22	PFO	Precipitation, Surface Runoff	Yes; neighboring Stream 12
L	0.74	PEM	Precipitation, Surface Runoff, Stream 14	Yes; adjacent to Stream 14
M	0.05	PEM	Precipitation, Surface Runoff	Yes; neighboring Stream 2
TOTAL	10.58 acres			

PEM - Palustrine emergent wetland; PSS - Palustrine scrub-shrub wetland; PFO - Palustrine forested wetland

... these on-site wetlands jurisdictional based on their adjacent and neighboring

Wetland Delineation Report
 Russellville Solar ■ Russellville, Kentucky
 July 31, 2019 ■ Terracon Project: N1197212



STREAM	LENGTH (LINEAR FEET)	FLOW REGIME	AVERAGE STREAM WIDTH AT TOP OF BANK (FEET)
14	325	Ephemeral	2-4
TOTAL	10,582 ft		

Streams 2, 5, 6, 7, 8, 9, and 10 are drained by karst features, sinkholes leading to underground drainage systems. Due to their neighboring and adjacent locations to on-site waters and significant nexus to the off-site anchor water, Red River, Terracon considers these streams jurisdictional. Additionally, Terracon considers the remaining on-site streams jurisdictional based on their connection, as tributaries, to an off-site anchor water, Red River.

5.4 Other Waters

Other waters (ponds) were observed at the project site during the site reconnaissance:

POND	SIZE (ACRES)	COWARDIN CLASSIFICATION	WATER SOURCES	USACE JURISDICTIONAL
				No

Wetland Delineation Report

Russellville Solar ■ Russellville, Kentucky
July 31, 2019 ■ Terracon Project: N1197212



14	0.35	PUB	Precipitation, Surface Runoff	No
15	0.74	PUB	Precipitation, Surface Runoff	Yes; neighboring Stream 2
TOTAL	7.36 ac			

Terracon considers Ponds 6, 7, 8, 9, 11, 12, and 15 jurisdictional based on their neighboring and adjacent locations to waters on-site, which connect to an off-site anchor water, Red River. Ponds 1, 2, 3, 4, 5, 10, 13, and 14 are considered non-jurisdictional as they do not have a significant connection to any on-site waters.

Additionally, eleven karst features (five standalone and six associated with streams) were observed on-site during the site reconnaissance. These features are connected to sinkholes which connect to underground drainage systems. These features are not considered jurisdictional.

6.0 SUMMARY AND CONCLUSIONS OF FIELD OBSERVATIONS

A wetland delineation of an approximate 1,600-acre site located in Russellville, Kentucky was conducted on July 9 and 10, 2019. A review of the project site was conducted utilizing readily available information including, but not limited to, topographical, aerial and wetland data. In

observed on-site during the site reconnaissance. These features are connected to sinkholes which connect to underground drainage systems. These features are not considered jurisdictional.

6.0 SUMMARY AND CONCLUSIONS OF FIELD OBSERVATIONS

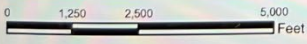
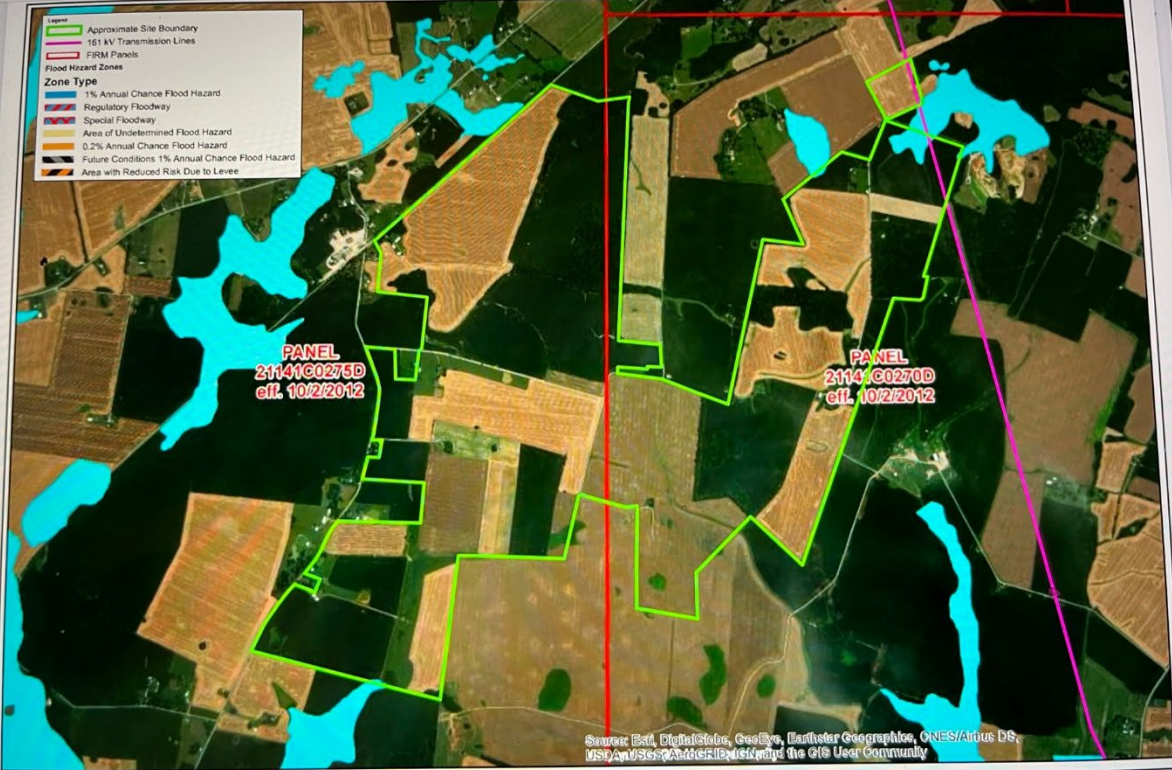
A wetland delineation of an approximate 1,600-acre site located in Russellville, Kentucky was conducted on July 9 and 10, 2019. A review of the project site was conducted utilizing readily available information including, but not limited to, topographical, aerial and wetland data. In addition, a preliminary site visit was performed to characterize the existing site conditions and observe the project site for suspect waterbodies and wetlands (if any). A summary of field observations and conclusions concerning jurisdictional status is outlined in the following sections.

6.1 Wetlands

Thirteen wetlands, totaling 10.58 acres, were observed on the project site. It is Terracon's opinion that these on-site wetlands jurisdictional based on their adjacent and neighboring locations to tributaries of an off-site anchor water, Red River.

6.2 Streams

Fifteen streams, totaling 10,582 linear feet, were observed on the project site during the site reconnaissance. Terracon considers the on-site streams jurisdictional based on their connection to an off-site anchor water, Red River.



Project No. N1197212
 Drawn By: MDP
 Approved By: SEW

Terracon
 Consulting Engineers & Scientists
 811 Lunken Park Drive Cincinnati, Ohio 45226

FEMA Flood Insurance Rate Map (FIRM)
 Russellville Solar Project
 Watermelon Road
 Russellville, Logan County, Kentucky

Exhibit
 5