

Map Source: Missouri Dept. of Conservation, Missouri DNR, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, Esri, NASA, NGA, USGS, Esri Community Maps Contributors, Missouri Dept. of Conservation, Missouri DNR, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatasysteen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

Critical Infrastructure Overview Map

Pensacola Dam
GRAND RIVER DAM AUTHORITY
September 2021

Overview Map Legend

- 1:24,000-scale Map Sheet

1:12,000-scale Detail Sheet

State Boundary

County Boundary

Municipality
- Unincorporated

Road Class

Interstate

US Highway

Critical Infrastructure Symbols *

- Airport/Heliport

Bridge,Off-sys

Bridge,On-sys

Bridge,RR

Cell Tower

Hospital

Fire Station
- Law Enforcement

Church

Park

School

Shelter - Both

Shelter - Evac Only

Shelter - Post-Event Only
- Power Plant

Substation

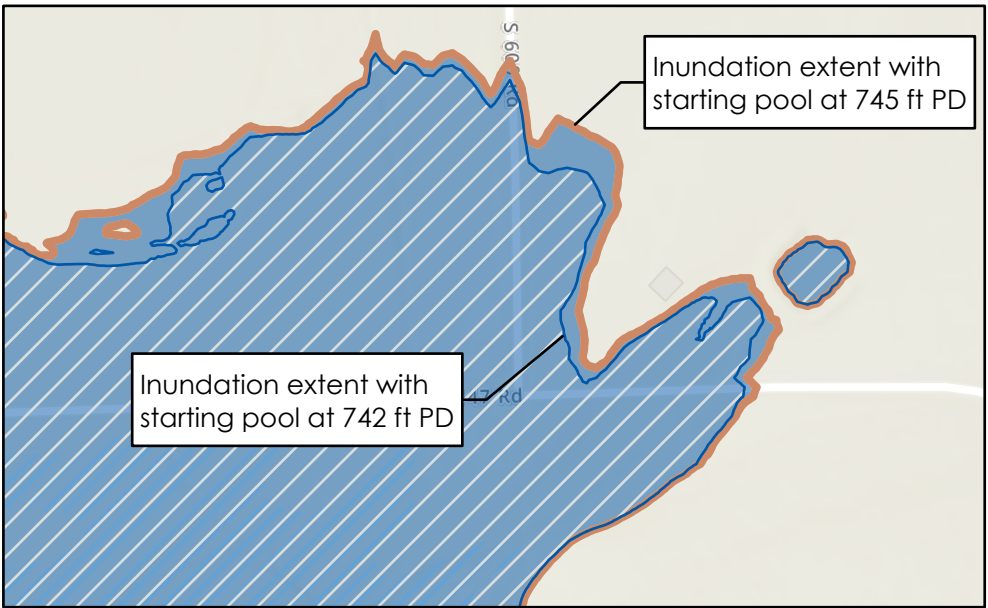
Transmission TAP

Wastewater Treatment

Water Treatment

* Due to space constraints on the individual map sheets, the Critical Infrastructure symbols are provided here. Refer to this Overview Map when using the individual map sheets.

Inundation Scenario Mapping



Mapping shows the extent of inundation for the selected hydraulic event under two different starting pool elevations: 742 ft PD and 745 ft PD.

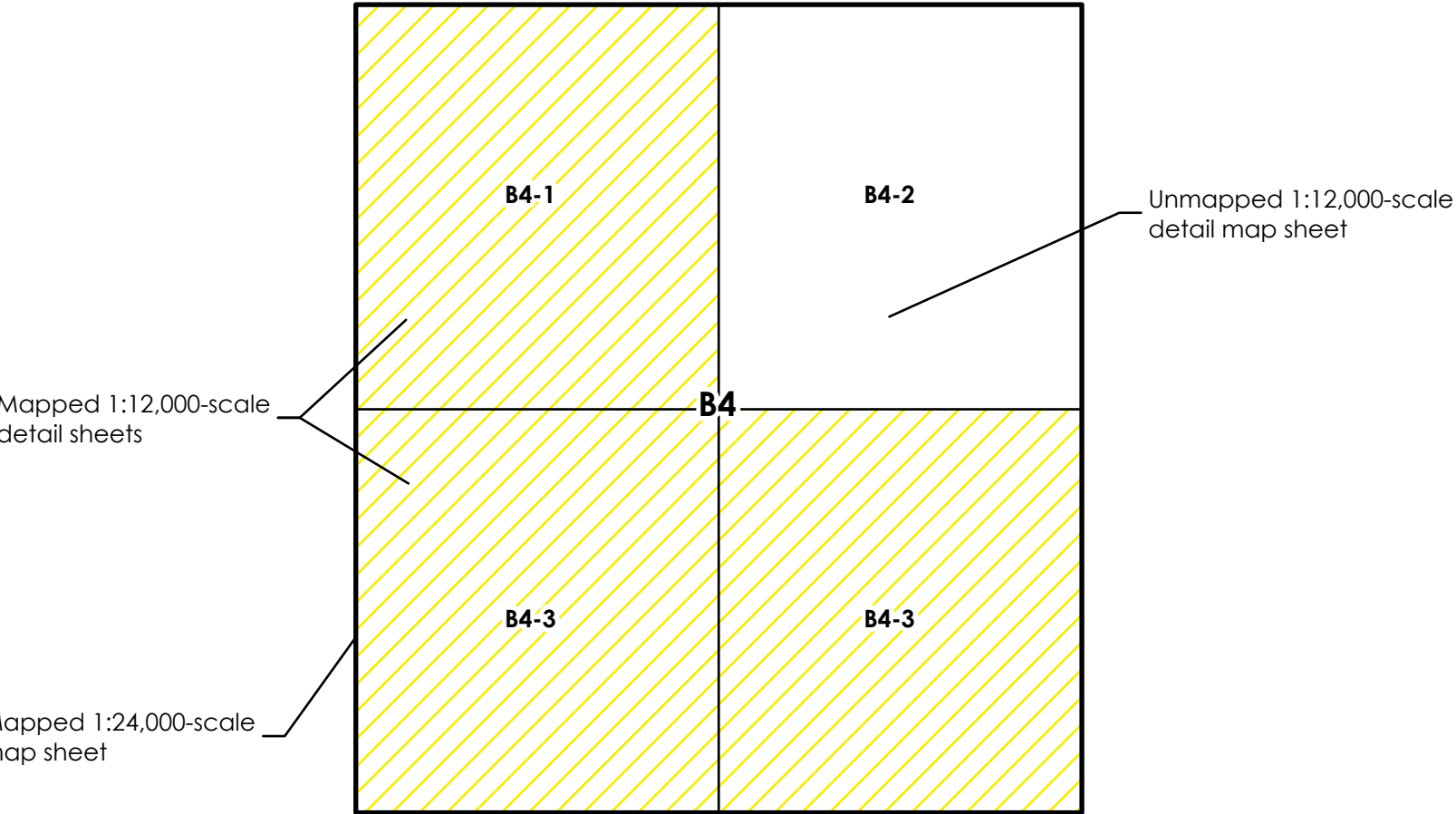
Each map series shows inundation extents for one of three hydraulic events:

July 2007
September 1993
December 2015

- Inundation with the starting pool elevation of 742 ft PD

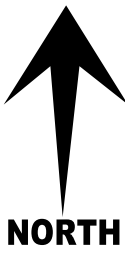
Inundation with the starting pool elevation of 745 ft PD

Map Sheet Organization



1:24,000 sheet is subdivided into four 1:12,000-scale sheets as needed.

0 1.25 2.5 5 7.5 10 Miles



Map Notes

Data Sources for Infrastructure Maps:

- Base map images from https://gis.apfo.usda.gov/arcgis/services/NAIP/USDA_CONUS_PRIME/ImageServer; 2019
- Transportation network (major roads, local roads, and railroads) and county boundaries obtained from the Oklahoma Office of Geographic Information (<http://okmaps.org/og/search.aspx>).

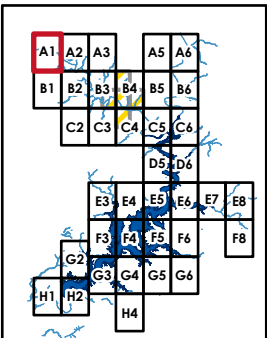


A2

Image credits: https://gis.apfo.usda.gov/arcgis/services/NAIP/USDA_CONUS_PRIME/ImageServer, 2019

SEPTEMBER 1993 INUNDATION SCENARIO

0 500 1,000 2,000 3,000 4,000 Feet
1 inch = 2,000 feet



Legend *

INUNDATION

- Starting pool elevation of 742 ft PD
- Starting pool elevation of 745 ft PD
- Stream
- County Boundary
- Municipal Boundary

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

ROAD CLASS

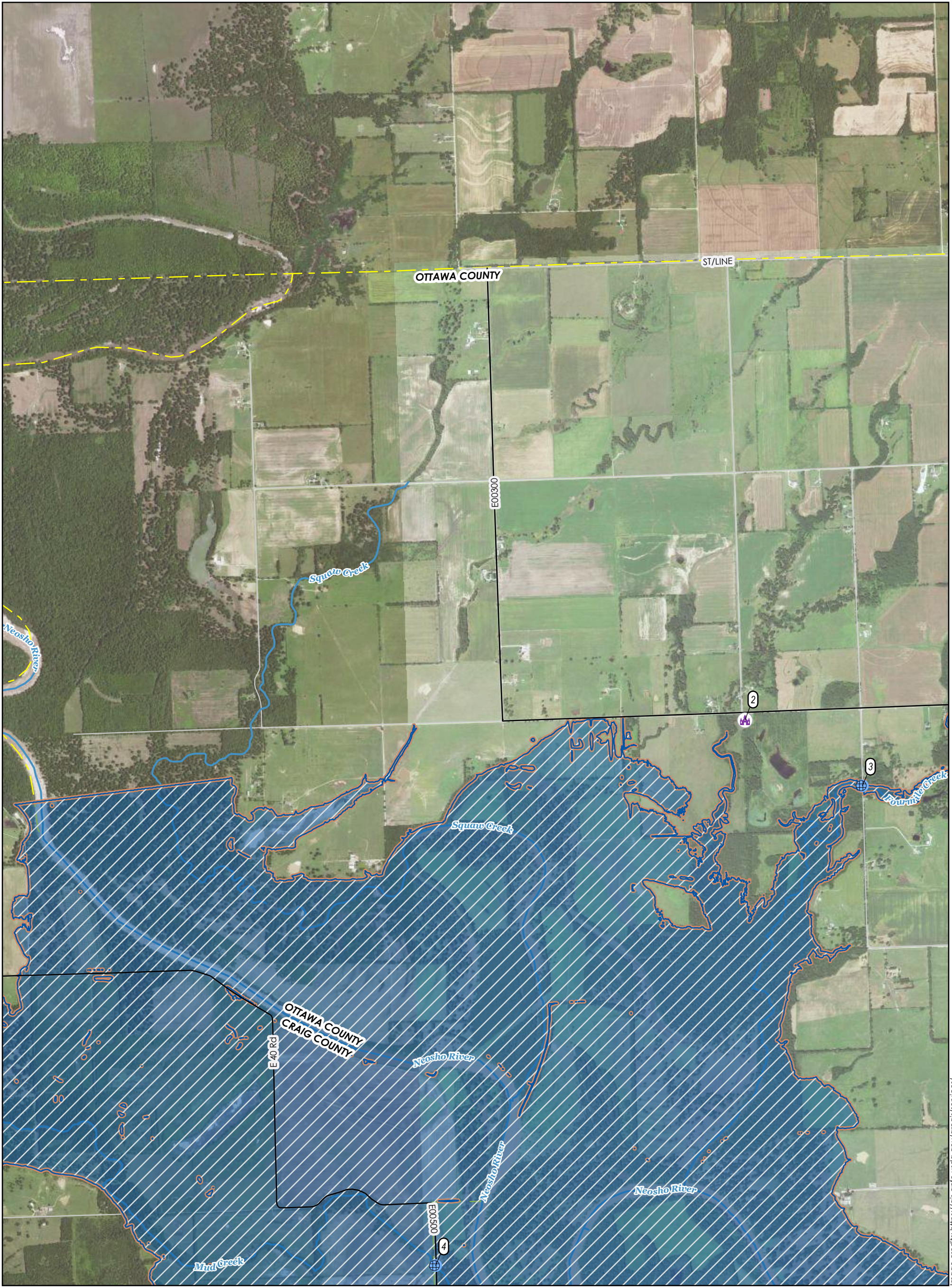
- Interstate
- State Highway
- US Highway
- Major Collector
- Local Road
- Railroad

PENSACOLA DAM GRAND RIVER DAM AUTHORITY

MAP: A1

CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA

FERC No. 1494
September 2021



SEPTEMBER 1993 INUNDATION SCENARIO

05001,0002,0003,0004,000

Feet

1 inch = 2,000 feet

NORTH

A1A2A3A5A6

B1B2B3B4B5B6

C2C3C4C5C6

D5D6

E3E4E5E6E7E8

F3F4F5F6

G2G3G4G5G6

H1H2H4

A2

B3

C4

D5

E4

F4

G3

H2

Legend *

INUNDATION

Starting pool elevation of 742 ft PD

Starting pool elevation of 745 ft PD

Stream

County Boundary

Municipal Boundary

ROAD CLASS

Interstate

State Highway

US Highway

Major Collector

Local Road

Railroad

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

PENSACOLA DAM

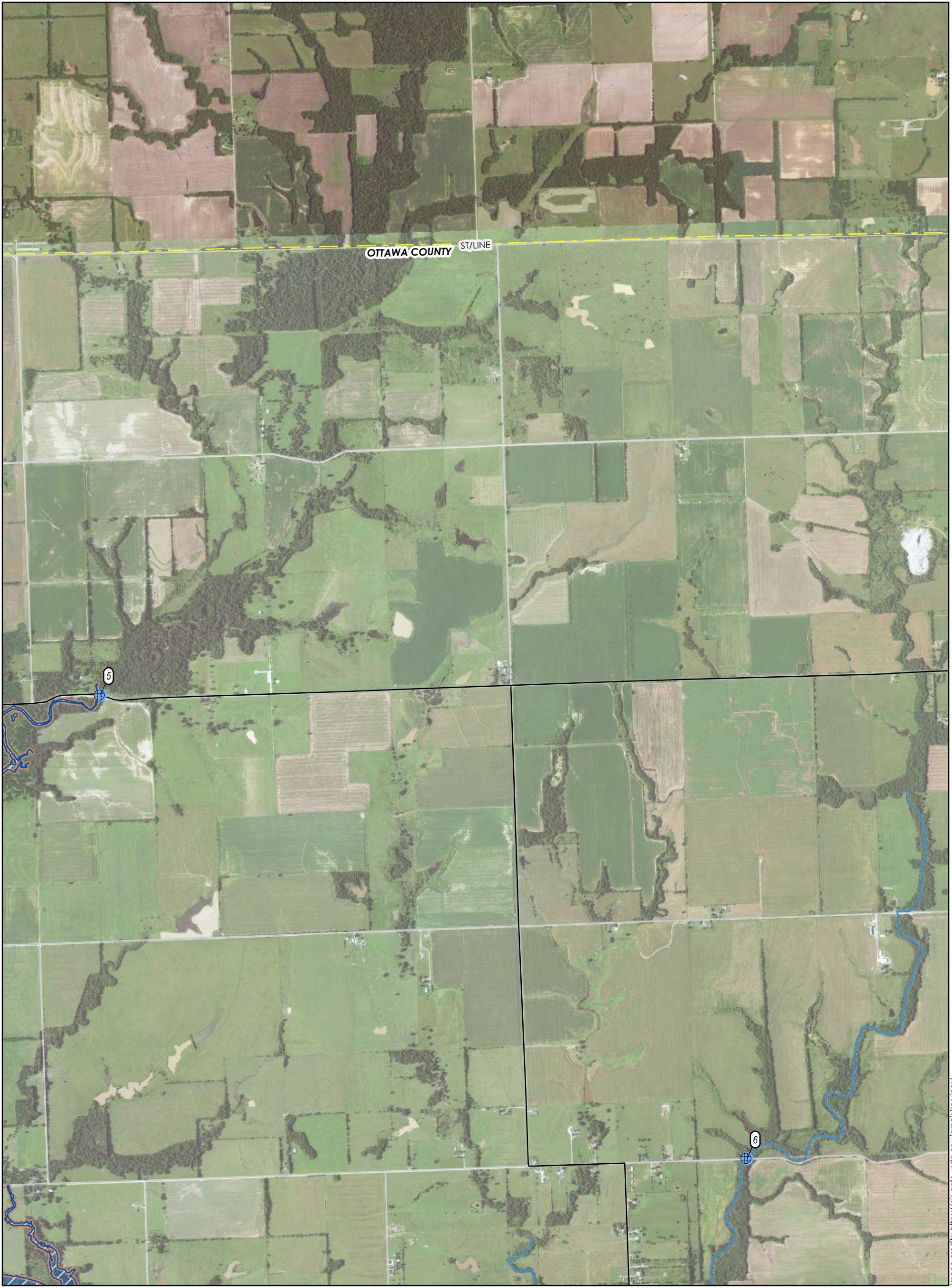
GRAND RIVER DAM AUTHORITY

MAP: A2

CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA

FERC No. 1494
September 2021

Image credits: https://gis.apfo.usda.gov/arcgis/services/NAIP/USDA_CONUS_PRIME/ImageServer, 2019



SEPTEMBER 1993 INUNDATION SCENARIO

05001,0002,0003,0004,000

Feet

1 inch = 2,000 feet

NORTH

A1A2A3A5A6
B1B2B3B4B5B6
C2C3C4C5C6
D5D6
E3E4E5E6E7E8
F3F4F5F6
G2G3G4G5G6
H1H2H4

Legend *

INUNDATION
Starting pool elevation of 742 ft PD
Starting pool elevation of 745 ft PD
Stream
County Boundary
Municipal Boundary

ROAD CLASS
Interstate
State Highway
US Highway
Major Collector
Local Road
Railroad

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

PENSACOLA DAM

GRAND RIVER DAM AUTHORITY

MAP: A3

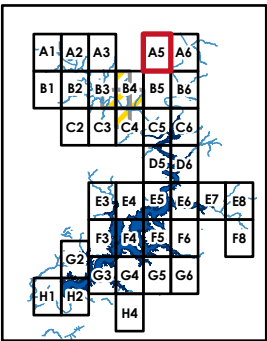
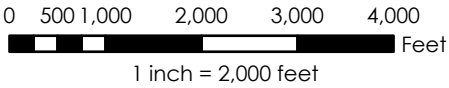
CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA

FERC No. 1494
September 2021

Image credits: https://gis.apfo.usda.gov/arcgis/services/NAIP/USDA_CONUS_PRIME/ImageServer, 2019



**SEPTEMBER 1993
INUNDATION SCENARIO**



Legend *

INUNDATION

- Starting pool elevation of 742 ft PD
- Starting pool elevation of 745 ft PD
- Stream
- County Boundary
- Municipal Boundary

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

ROAD CLASS

- Interstate
- State Highway
- US Highway
- Major Collector
- Local Road
- Railroad

PENSACOLA DAM
GRAND RIVER DAM AUTHORITY

MAP: A5

CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA

FERC No. 1494
September 2021

Image credits: https://gis.apfo.usda.gov/arcgis/services/NAIP/USDA_CONUS_PRIME/ImageServer, 2019

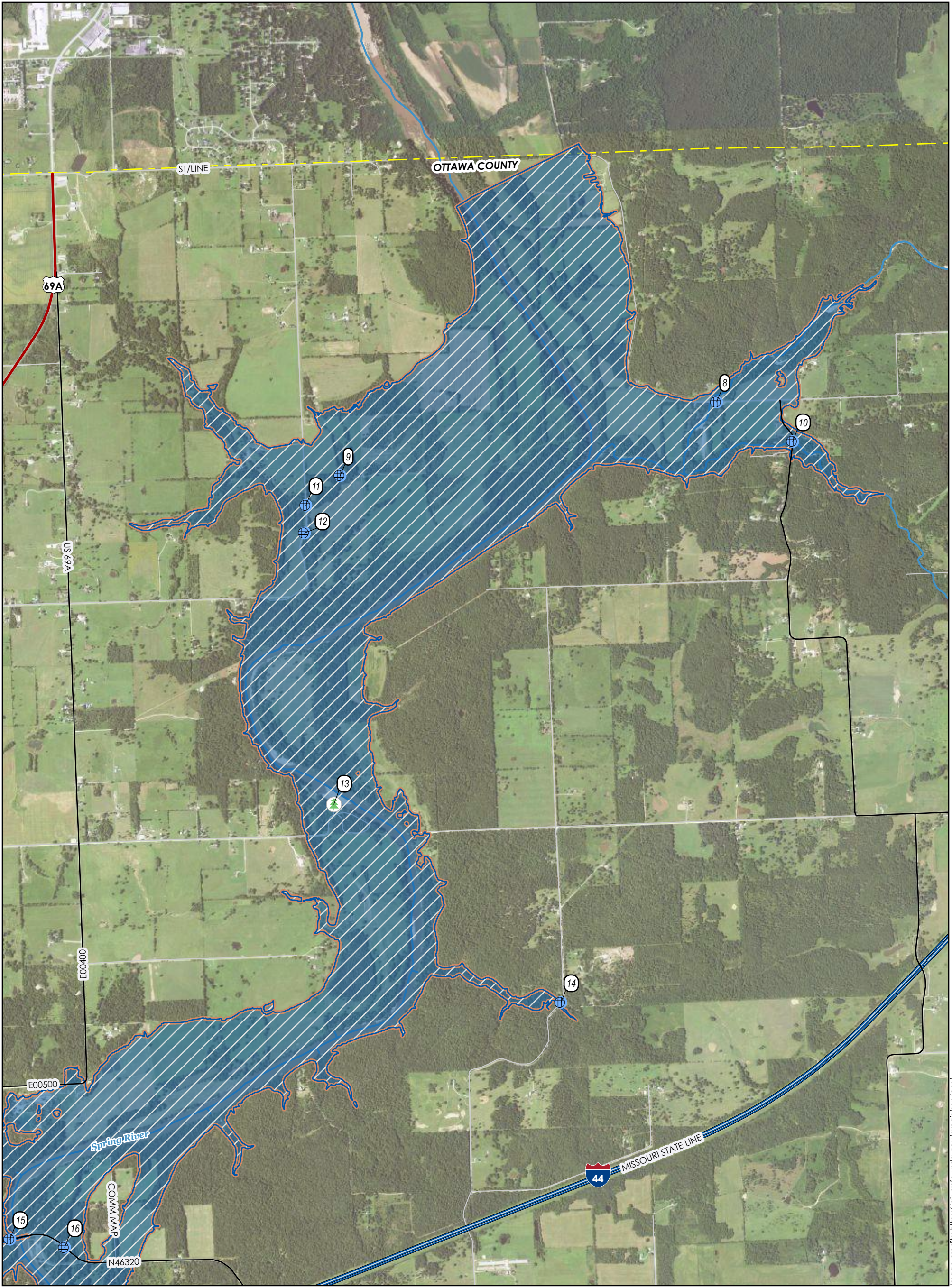
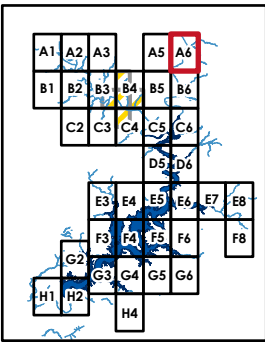
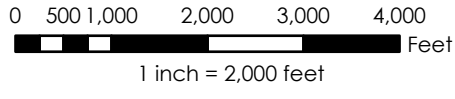


Image credits: https://gis.apfo.usda.gov/arcgis/services/NAIP/USDA_CONUS_PRIME/ImageServer, 2019

SEPTEMBER 1993 INUNDATION SCENARIO



Legend *

INUNDATION

- Starting pool elevation of 742 ft PD
- Starting pool elevation of 745 ft PD
- Stream
- County Boundary
- Municipal Boundary

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

ROAD CLASS

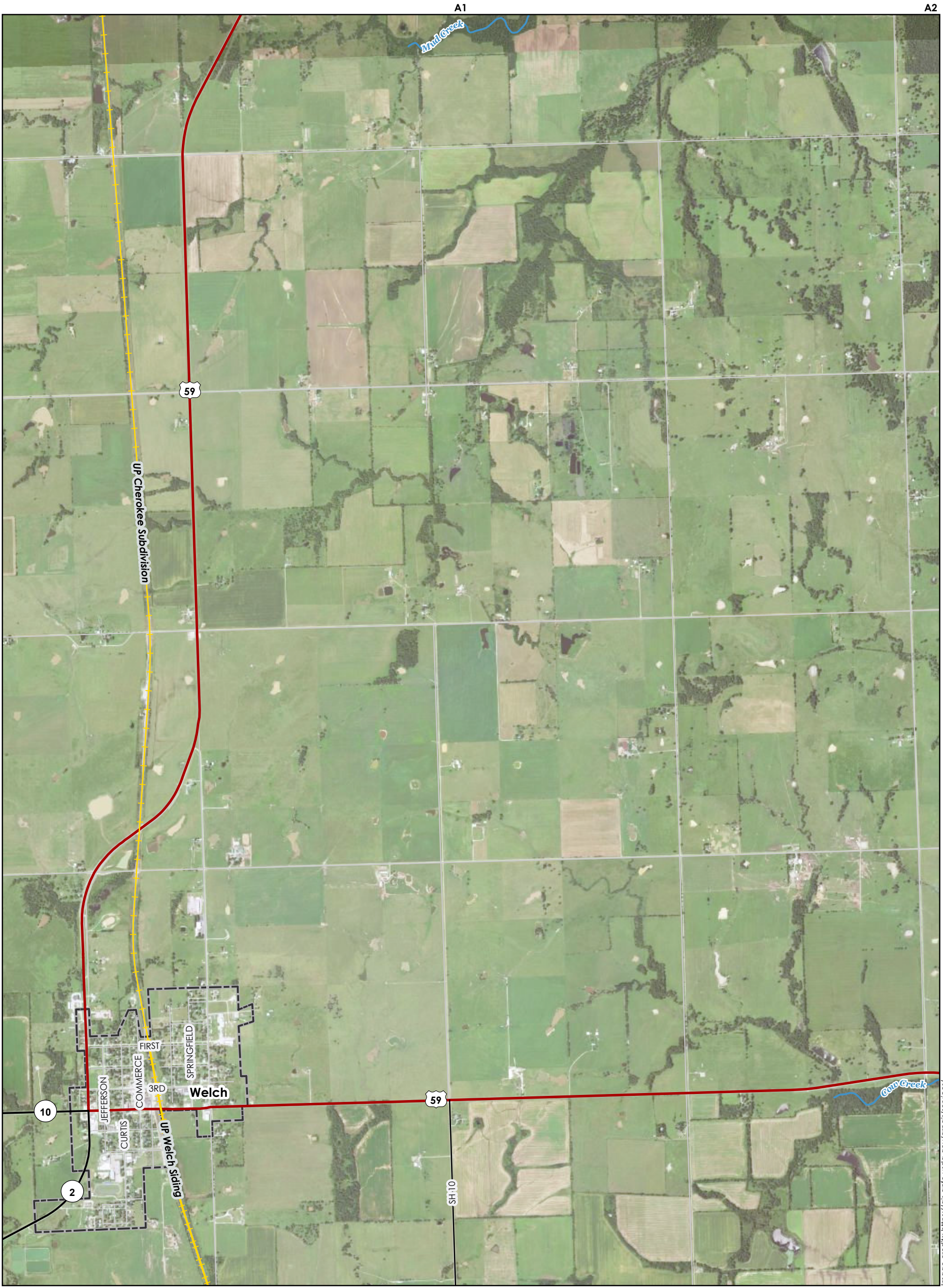
- Interstate
- State Highway
- US Highway
- Major Collector
- Local Road
- Railroad

PENSACOLA DAM GRAND RIVER DAM AUTHORITY

MAP: A6

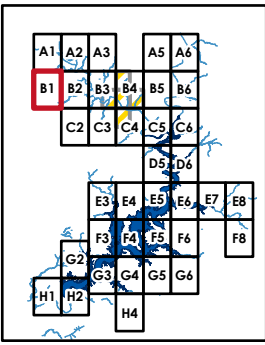
CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA

FERC No. 1494
September 2021



SEPTEMBER 1993 INUNDATION SCENARIO

0 500 1,000 2,000 3,000 4,000 Feet
1 inch = 2,000 feet



Legend *

INUNDATION

- Starting pool elevation of 742 ft PD
- Starting pool elevation of 745 ft PD
- Stream
- County Boundary
- Municipal Boundary

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

ROAD CLASS

- Interstate
- State Highway
- US Highway
- Major Collector
- Local Road
- Railroad

PENSACOLA DAM GRAND RIVER DAM AUTHORITY

MAP: B1

CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA

FERC No. 1494
September 2021

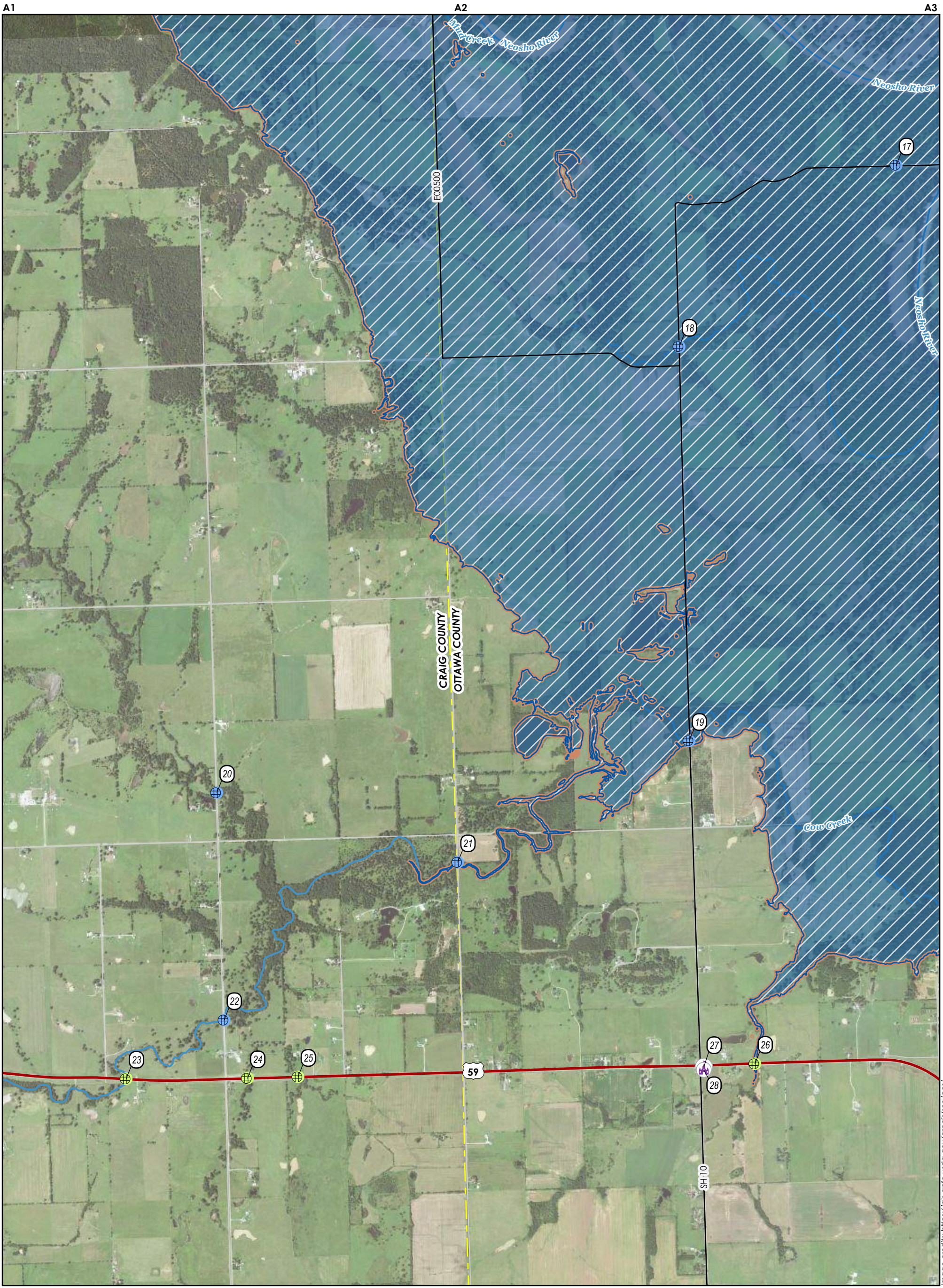
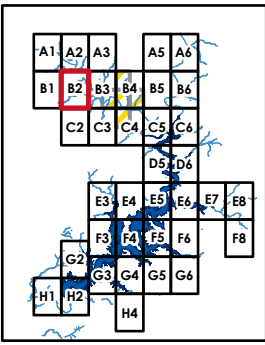
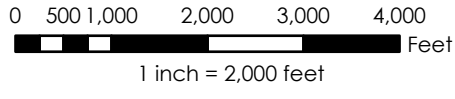


Image credits: https://gis.apfo.usda.gov/arcgis/services/NAIP/USDA_CONUS_PRIME/ImageServer, 2019

SEPTEMBER 1993 INUNDATION SCENARIO



Legend *

INUNDATION

- Starting pool elevation of 742 ft PD
- Starting pool elevation of 745 ft PD
- Stream
- County Boundary
- Municipal Boundary

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

ROAD CLASS

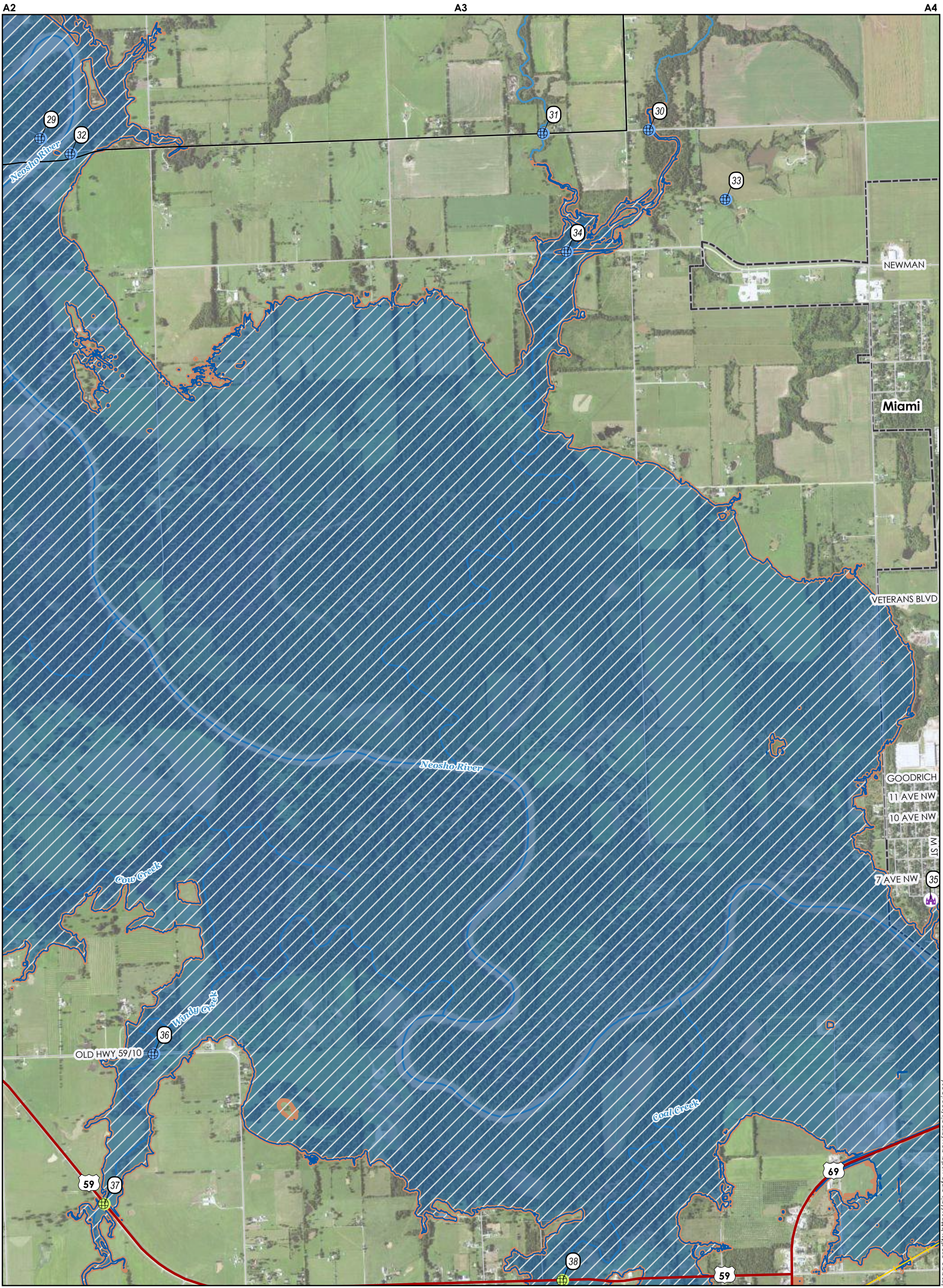
- Interstate
- State Highway
- US Highway
- Major Collector
- Local Road
- Railroad

PENSACOLA DAM GRAND RIVER DAM AUTHORITY

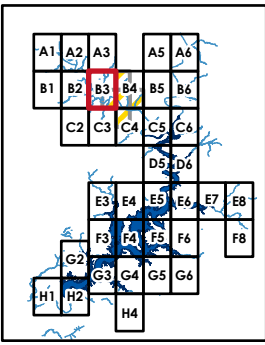
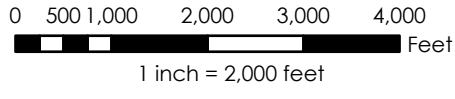
MAP: B2

CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA

FERC No. 1494
September 2021



**SEPTEMBER 1993
INUNDATION SCENARIO**



Legend *

INUNDATION

- Starting pool elevation of 742 ft PD
- Starting pool elevation of 745 ft PD
- Stream
- County Boundary
- Municipal Boundary

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

ROAD CLASS

- Interstate
- State Highway
- US Highway
- Major Collector
- Local Road
- Railroad

**PENSACOLA DAM
GRAND RIVER DAM AUTHORITY**

MAP: B3

CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA

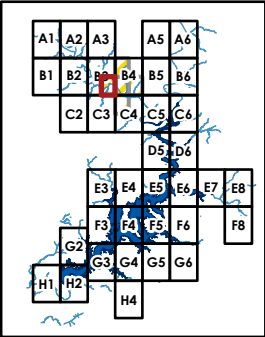
FERC No. 1494
September 2021

Image credits: https://gis.apfo.usda.gov/arcgis/services/NAIP/USDA_CONUS_PRIME/ImageServer, 2019



Image Credits: <https://gis.apfo.usda.gov/arcgis/services/NAIP/>
USDA_CONUS_PRIME/ImageServer, 2019

SEPTEMBER 1993 INUNDATION SCENARIO



0 250 500 1,000 1,500 2,000 Feet
1 inch = 1,000 feet



Legend *

INUNDATION

- Starting pool elevation of 742 ft PD
- Starting pool elevation of 745 ft PD
- Stream
- County Boundary
- Municipal Boundary

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

ROAD CLASS

- Interstate
- State Highway
- US Highway
- Major Collector
- Local Road
- Railroad

PENSACOLA DAM GRAND RIVER DAM AUTHORITY

MAP: B3-4

CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA

FERC No. 1494
September 2021

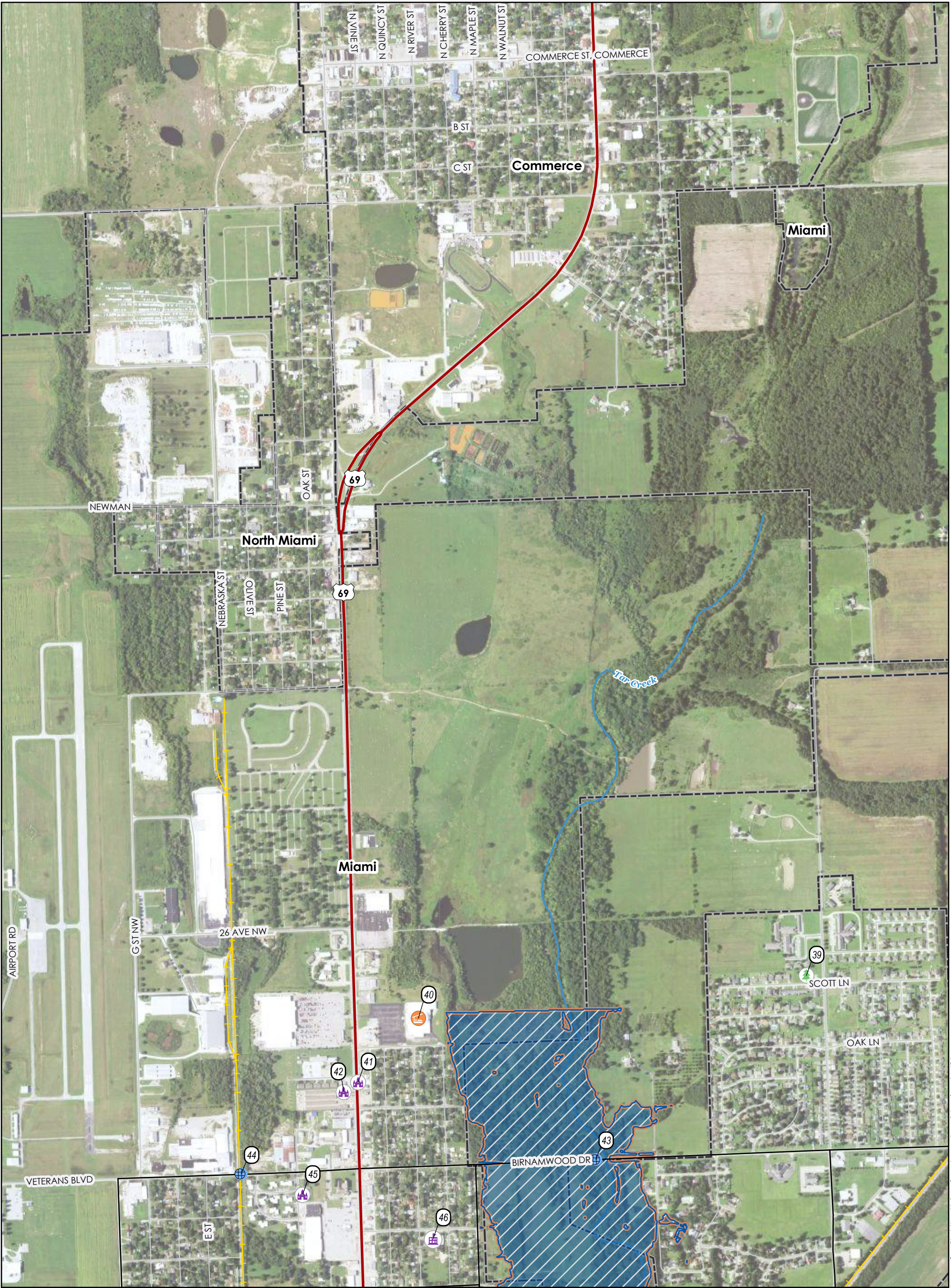
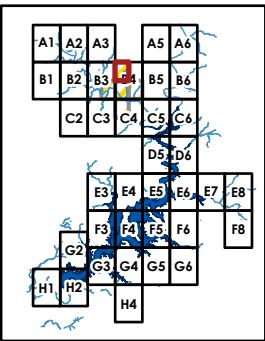


Image Credits: <https://gis.apfo.usda.gov/arcgis/services/NAIP/>
USDA_CONUS_PRIME/ImageServer, 2019

SEPTEMBER 1993 INUNDATION SCENARIO



Legend *

INUNDATION

- Starting pool elevation of 742 ft PD
- Starting pool elevation of 745 ft PD
- Stream
- County Boundary
- Municipal Boundary

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

ROAD CLASS

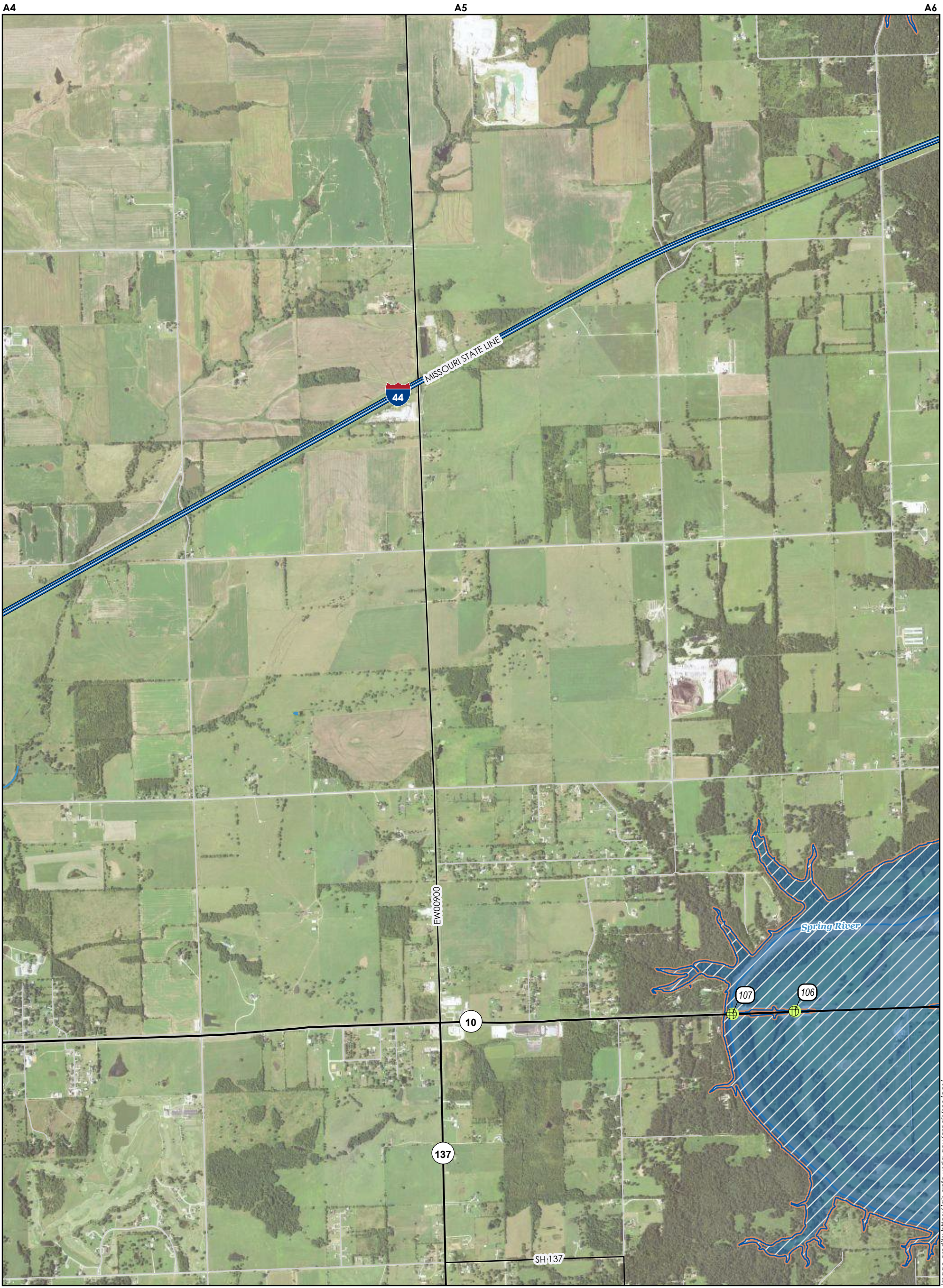
- Interstate
- State Highway
- US Highway
- Major Collector
- Local Road
- Railroad

PENSACOLA DAM GRAND RIVER DAM AUTHORITY

MAP: B4-1

CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA

FERC No. 1494
September 2021



SEPTEMBER 1993 INUNDATION SCENARIO

0 500 1,000 2,000 3,000 4,000 Feet
1 inch = 2,000 feet

NORTH

A1 A2 A3 A4 A5 A6
B1 B2 B3 B4 B5 B6
C2 C3 C4 C5 C6
D5 D6
E3 E4 E5 E6 E7 E8
F3 F4 F5 F6
G2 G3 G4 G5 G6
H1 H2 H3 H4

Legend *

INUNDATION

- Starting pool elevation of 742 ft PD
- Starting pool elevation of 745 ft PD
- Stream
- County Boundary
- Municipal Boundary

ROAD CLASS

- Interstate
- State Highway
- US Highway
- Major Collector
- Local Road
- Railroad

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

PENSACOLA DAM

GRAND RIVER DAM AUTHORITY

MAP: B5

CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA

FERC No. 1494
September 2021

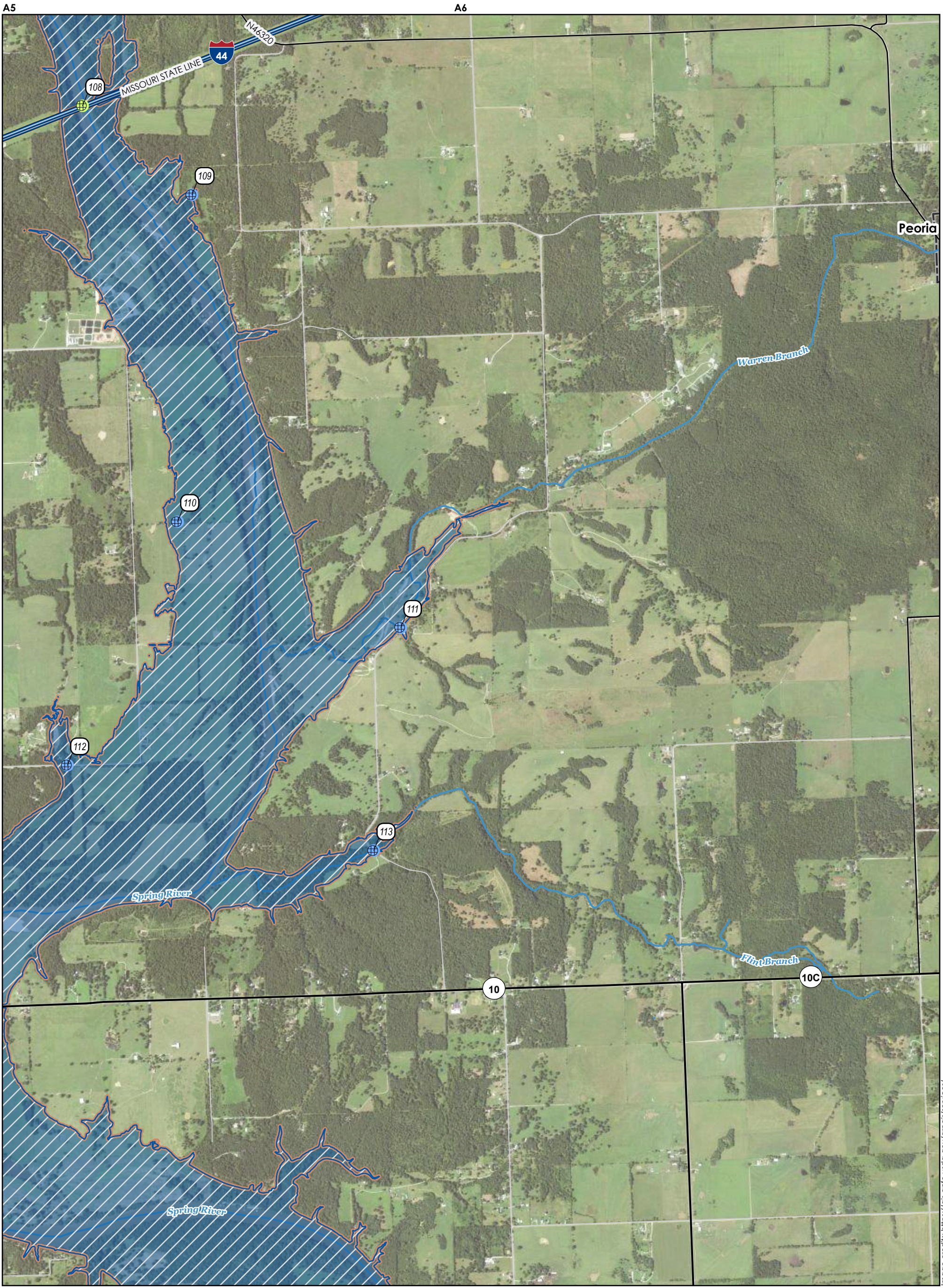
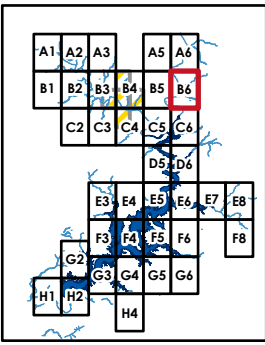
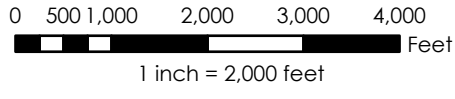


Image credits: https://gis.apfo.usda.gov/arcgis/services/NAIP/USDA_CONUS_PRIME/ImageServer, 2019

SEPTEMBER 1993 INUNDATION SCENARIO



Legend *

INUNDATION

- Starting pool elevation of 742 ft PD
- Starting pool elevation of 745 ft PD
- Stream
- County Boundary
- Municipal Boundary

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

ROAD CLASS

- Interstate
- State Highway
- US Highway
- Major Collector
- Local Road
- Railroad

PENSACOLA DAM GRAND RIVER DAM AUTHORITY

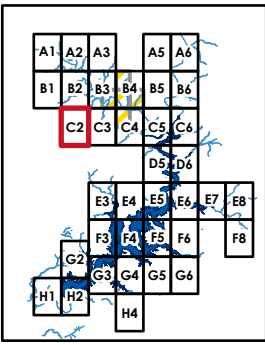
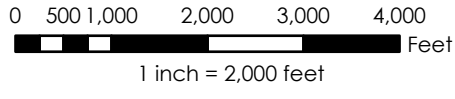
MAP: B6

CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA
FERC No. 1494
September 2021



Image credits: https://gis.apfo.usda.gov/arcgis/services/NAIP/USDA_CONUS_PRIME/ImageServer, 2019

SEPTEMBER 1993 INUNDATION SCENARIO



Legend *

INUNDATION

- Starting pool elevation of 742 ft PD
- Starting pool elevation of 745 ft PD
- Stream
- County Boundary
- Municipal Boundary

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

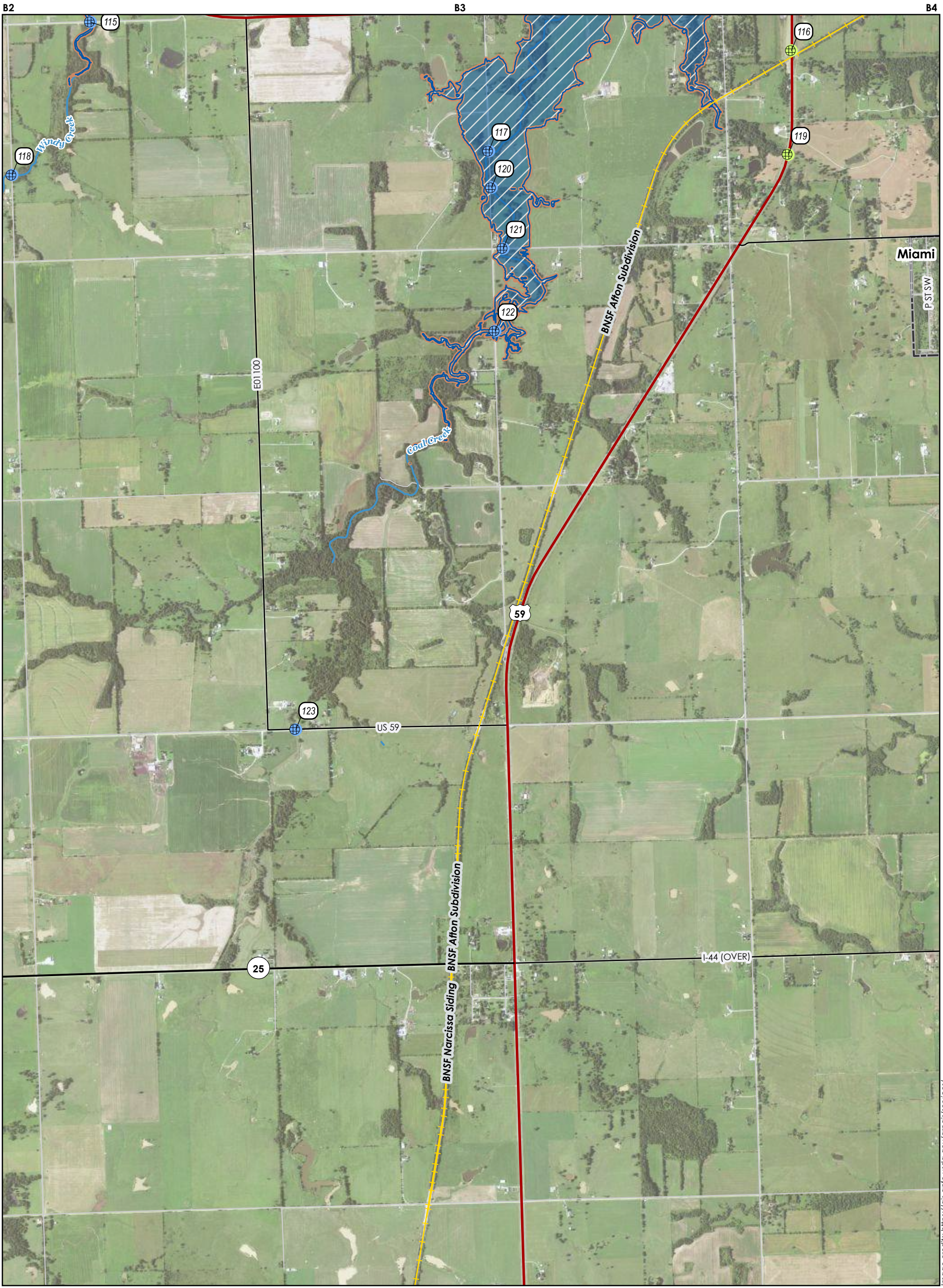
ROAD CLASS

- Interstate
- State Highway
- US Highway
- Major Collector
- Local Road
- Railroad

PENSACOLA DAM GRAND RIVER DAM AUTHORITY

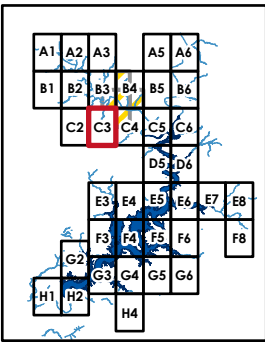
MAP: C2

CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA
FERC No. 1494
September 2021



SEPTEMBER 1993 INUNDATION SCENARIO

0 500 1,000 2,000 3,000 4,000 Feet
1 inch = 2,000 feet



Legend *

INUNDATION

- Starting pool elevation of 742 ft PD
- Starting pool elevation of 745 ft PD
- Stream
- County Boundary
- Municipal Boundary

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

ROAD CLASS

- Interstate
- State Highway
- US Highway
- Major Collector
- Local Road
- Railroad

PENSACOLA DAM GRAND RIVER DAM AUTHORITY

MAP: C3

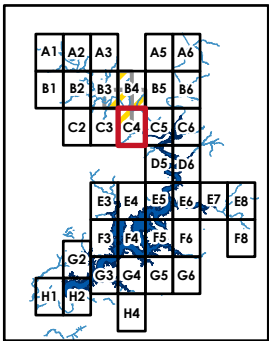
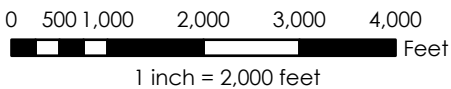
CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA

FERC No. 1494
September 2021

Image credits: https://gis.apfo.usda.gov/arcgis/services/NAIP/USDA_CONUS_PRIME/ImageServer, 2019



**SEPTEMBER 1993
INUNDATION SCENARIO**



Legend *

INUNDATION

- Starting pool elevation of 742 ft PD
- Starting pool elevation of 745 ft PD
- Stream
- County Boundary
- Municipal Boundary

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

ROAD CLASS

- Interstate
- State Highway
- US Highway
- Major Collector
- Local Road
- Railroad

PENSACOLA DAM
GRAND RIVER DAM AUTHORITY

MAP: C4

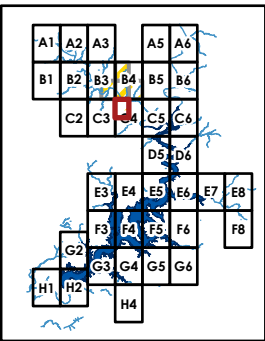
CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA

FERC No. 1494
September 2021



Image Credits: <https://gis.apfo.usda.gov/arcgis/services/NAIP/>
USDA_CONUS_PRIME/ImageServer, 2019

SEPTEMBER 1993 INUNDATION SCENARIO



Legend *

INUNDATION

- Starting pool elevation of 742 ft PD
- Starting pool elevation of 745 ft PD
- Stream
- County Boundary
- Municipal Boundary

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

ROAD CLASS

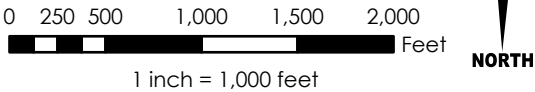
- Interstate
- State Highway
- US Highway
- Major Collector
- Local Road
- Railroad

PENSACOLA DAM GRAND RIVER DAM AUTHORITY

MAP: C4-1

CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA

FERC No. 1494
September 2021





SEPTEMBER 1993 INUNDATION SCENARIO

05001,0002,0003,0004,000

Feet

1 inch = 2,000 feet

NORTH

A1A2A3A4A5A6

B1B2B3B4B5B6

C2C3C4C5C6

D5D6

E3E4E5E6E7E8

F3F4F5F6

G2G3G4G5G6

H1H2H3H4

C4

C5

D5

E5

F5

G5

H5

Legend *

INUNDATION

Starting pool elevation of 742 ft PD

Starting pool elevation of 745 ft PD

Stream

County Boundary

Municipal Boundary

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

ROAD CLASS

Interstate

State Highway

US Highway

Major Collector

Local Road

Railroad

PENSACOLA DAM

GRAND RIVER DAM AUTHORITY

MAP: C5

CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA

FERC No. 1494
September 2021

Image credits: https://gis.apfo.usda.gov/arcgis/services/NAIP/USDA_CONUS_PRIME/ImageServer, 2019

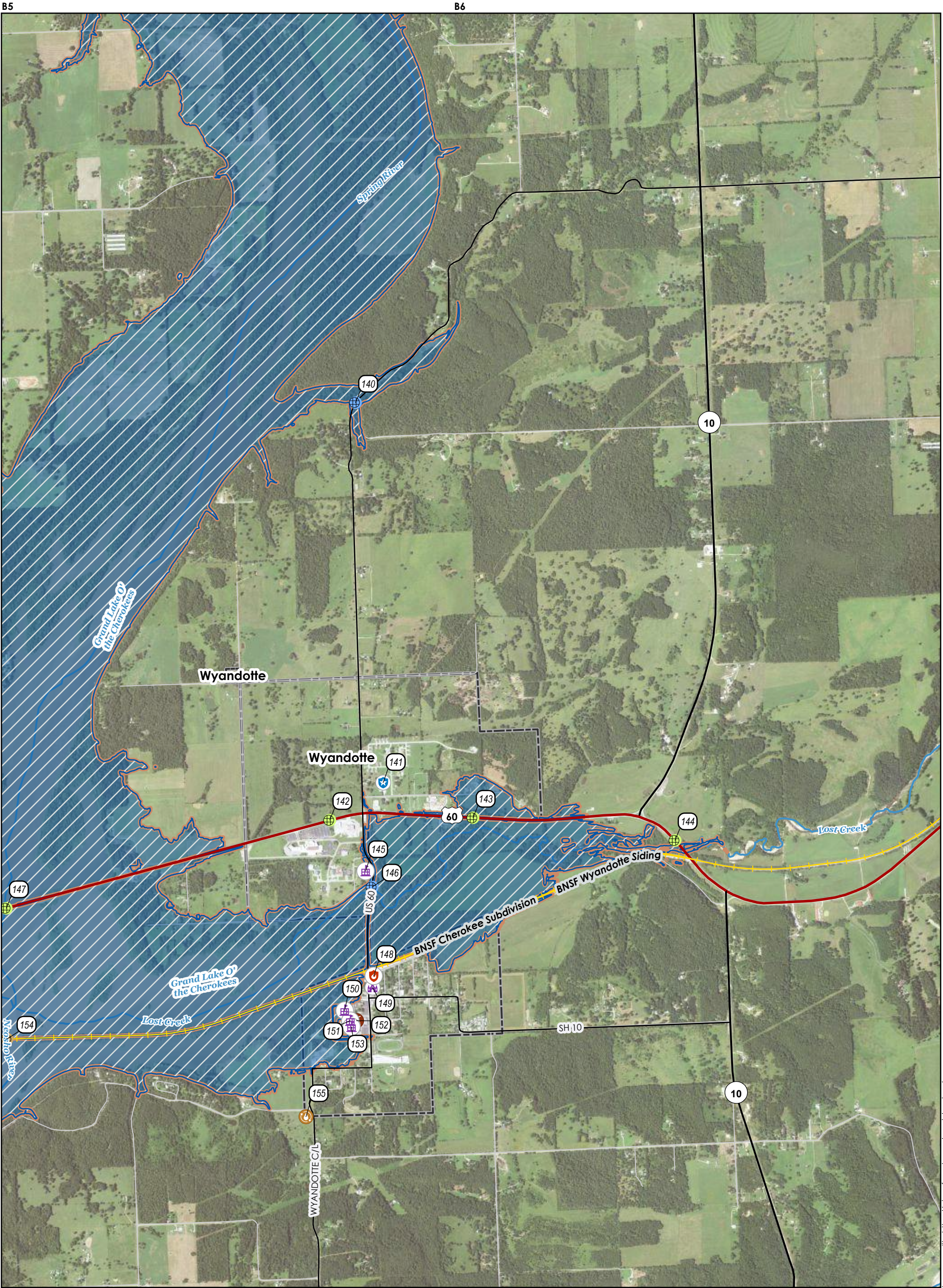
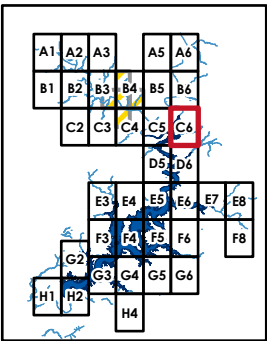
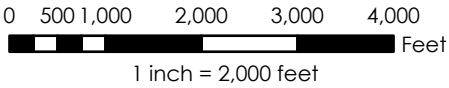


Image credits: https://gis.apfo.usda.gov/arcgis/services/NAIP/USDA_CONUS_PRIME/ImageServer, 2019

SEPTEMBER 1993
INUNDATION SCENARIO



Legend *

INUNDATION

- Starting pool elevation of 742 ft PD
- Starting pool elevation of 745 ft PD
- Stream
- County Boundary
- Municipal Boundary

LEGEND NOTES

* Refer to the Overview Map for explanation of inundation scenario mapping and the Critical Infrastructure symbols.

ROAD CLASS

- Interstate
- State Highway
- US Highway
- Major Collector
- Local Road
- Railroad

PENSACOLA DAM
GRAND RIVER DAM AUTHORITY

MAP: C6

CRAIG, DELAWARE, MAYES, AND
OTTAWA COUNTIES, OKLAHOMA

FERC No. 1494
September 2021