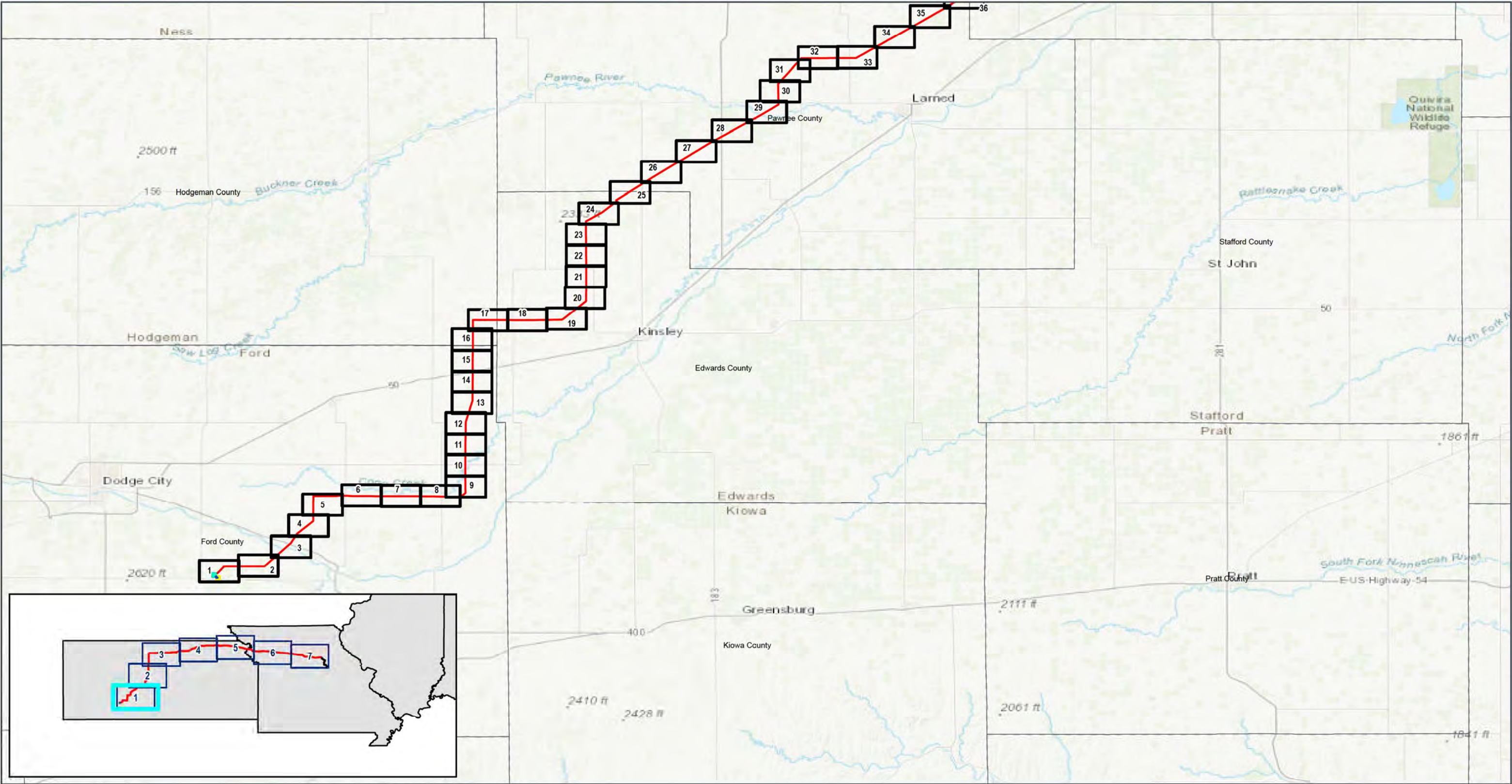


# **Grain Belt Express Transmission Line Environmental Impact Statement**

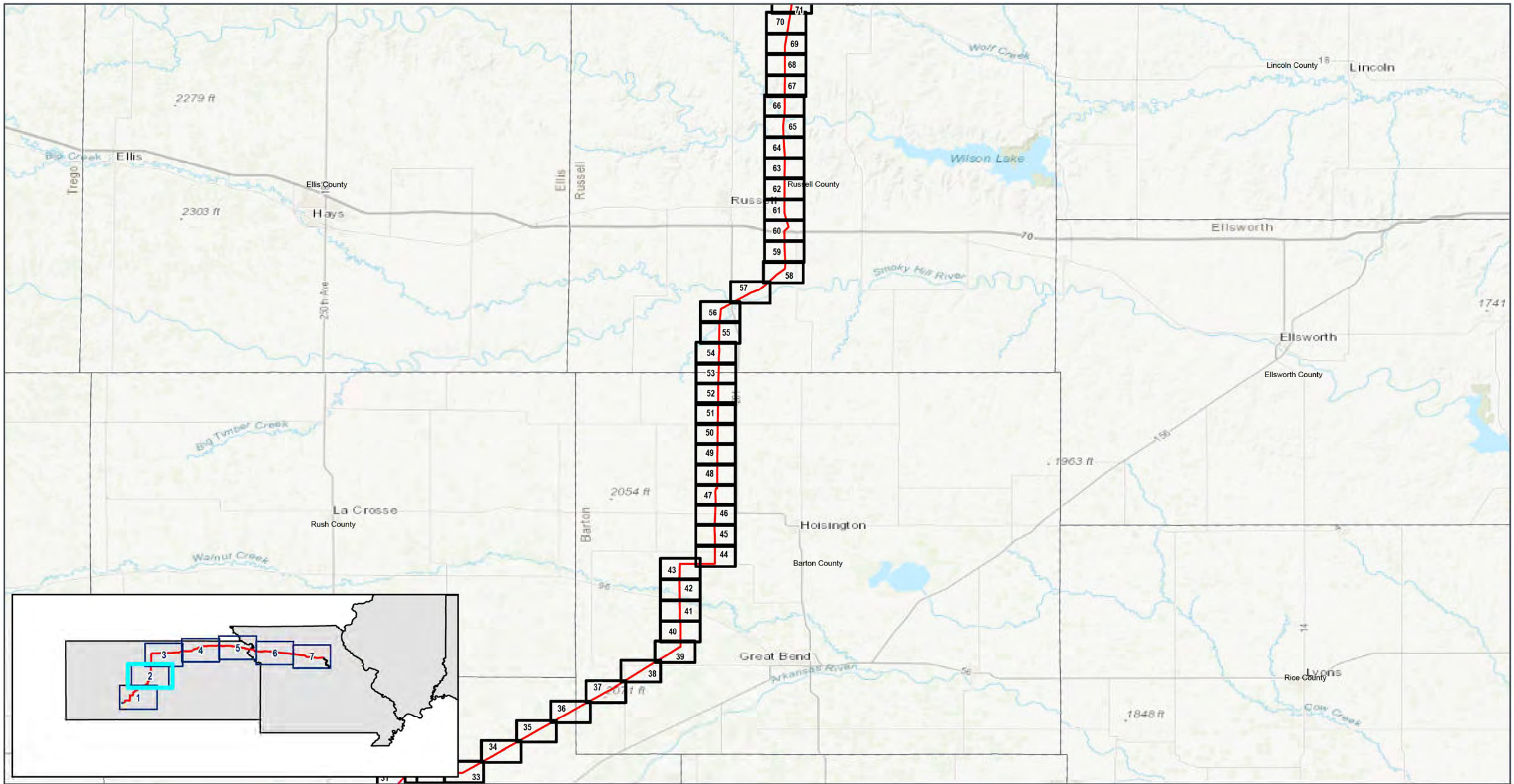
## **Appendix 3.4: Wetlands and Waters Maps**



GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**WETLAND SHEET MAP INDEX**  
Sheet 1 of 7

- Proposed Grain Belt Express Phase 1 HVDC Line
- Proposed Grain Belt Express Phase 1 Tiger Connector
- Proposed Grain Belt Express Phase 1 Ford County Interconnect
- Proposed Grain Belt Express Phase 1 Converter Station
- Existing McCredie Substation
- Existing Burns Substation
- Existing Saddle Substation
- Mapbook Index





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**WETLAND SHEET MAP INDEX**  
Sheet 2 of 7

- Proposed Grain Belt Express Phase 1 HVDC Line
- Proposed Grain Belt Express Phase 1 Tiger Connector
- Proposed Grain Belt Express Phase 1 Ford County Interconnect
- Proposed Grain Belt Express Phase 1 Converter Station
- Existing McCredie Substation
- Existing Burns Substation
- Existing Saddle Substation
- Mapbook Index

Kansas and Missouri  
GCS North American 1983  
38.6716°N 98.8257°W

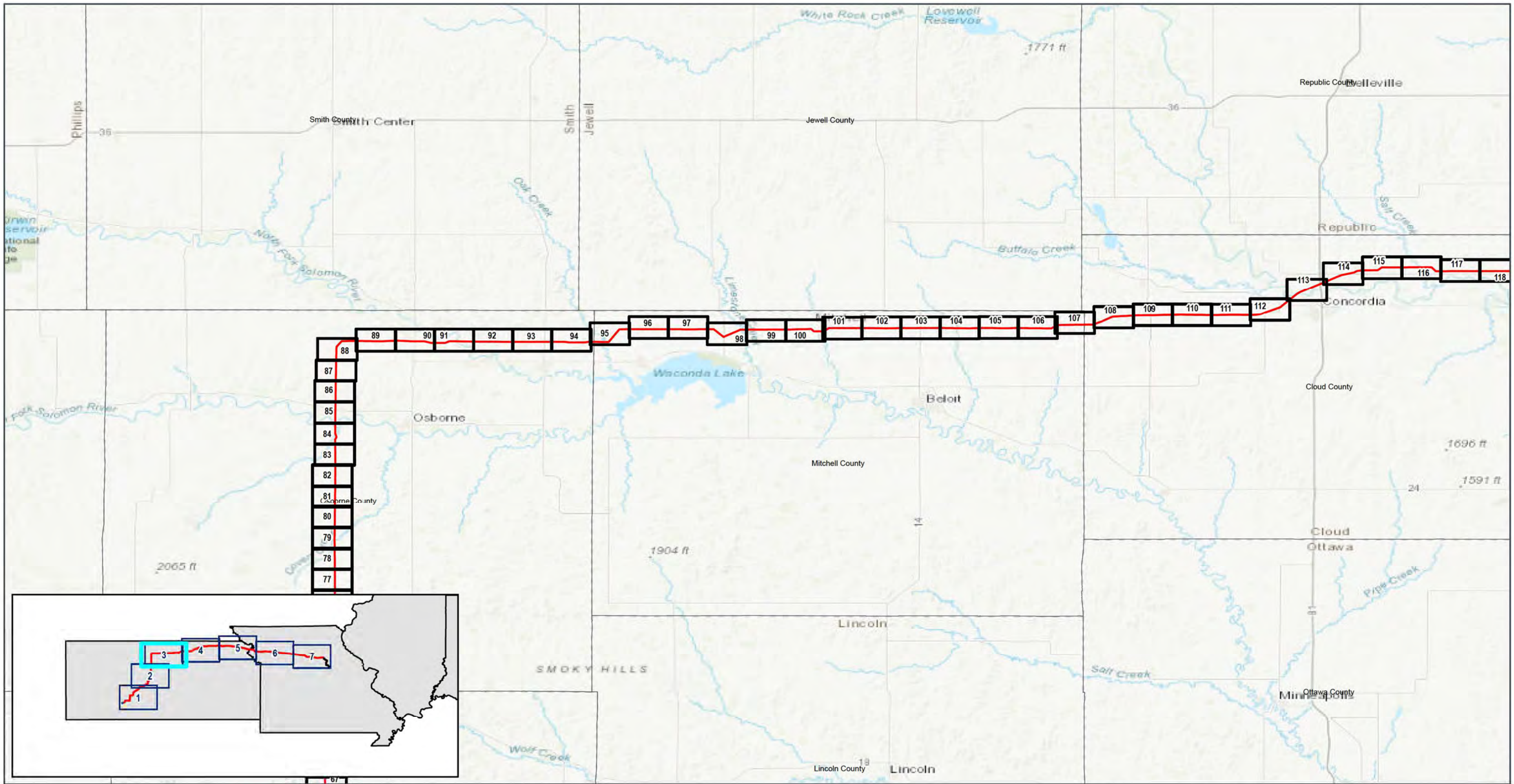
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Updated: 11/25/2024  
Project No. 60694559  
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Aprx: GBX\_Mapbook\_Index

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1:463,636



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0 5 10  
Miles  
Kilometers

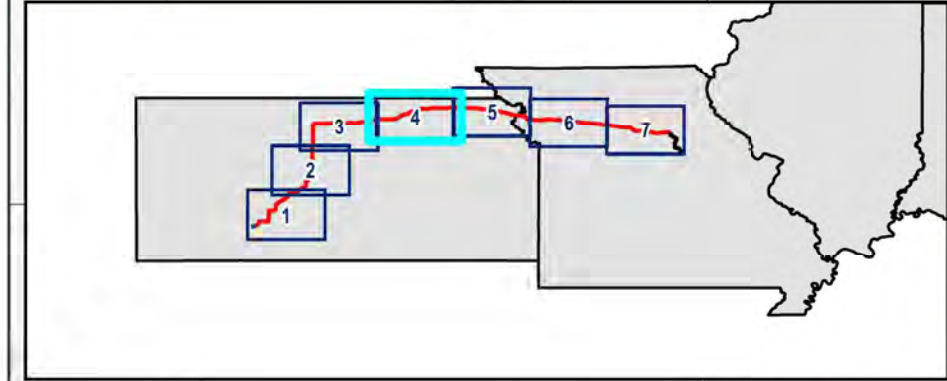
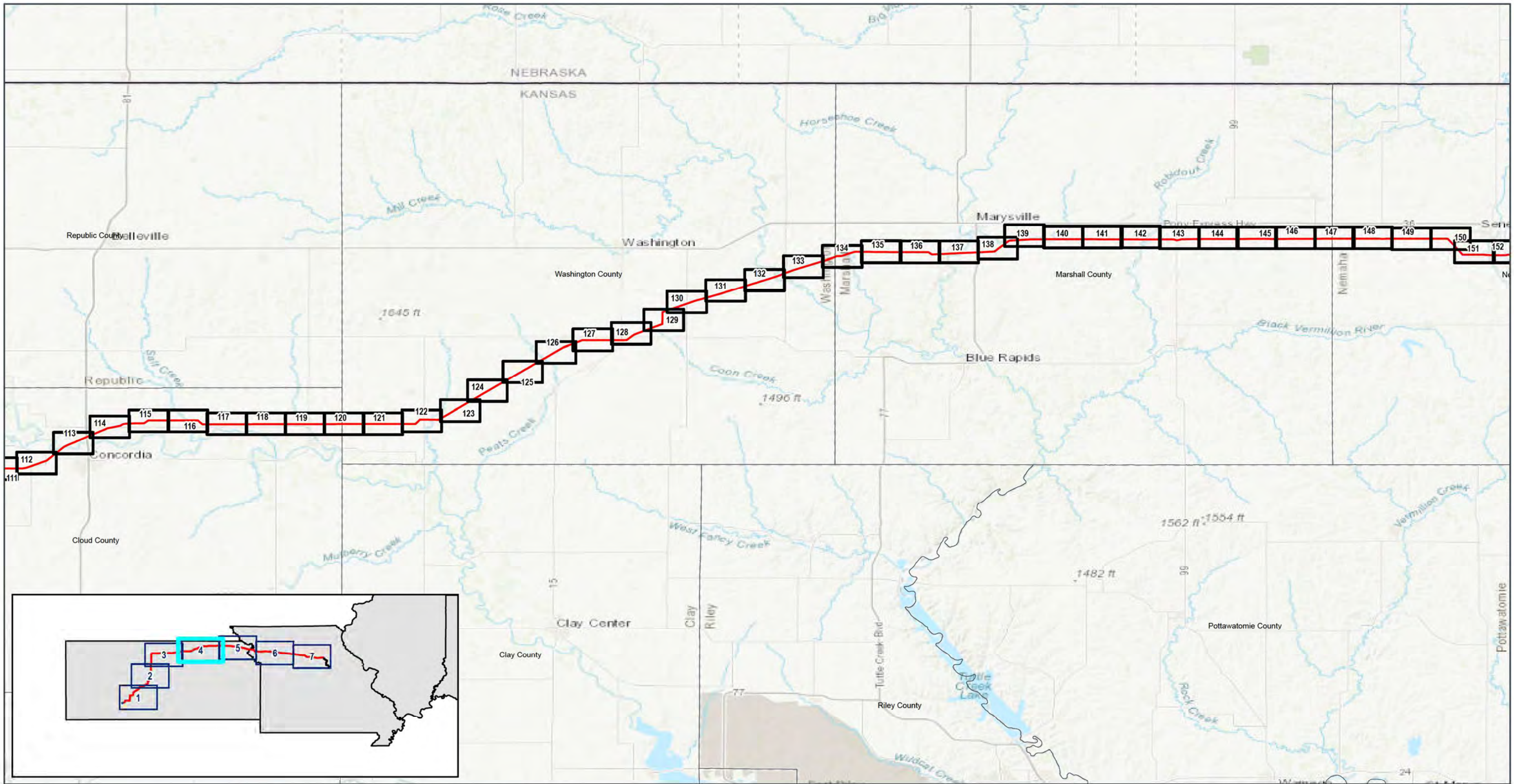




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**WETLAND SHEET MAP INDEX**  
Sheet 3 of 7

- Proposed Grain Belt Express Phase 1 HVDC Line
- Proposed Grain Belt Express Phase 1 Tiger Connector
- Proposed Grain Belt Express Phase 1 Ford County Interconnect
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GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**WETLAND SHEET MAP INDEX**  
Sheet 4 of 7

- Proposed Grain Belt Express Phase 1 HVDC Line
- Proposed Grain Belt Express Phase 1 Tiger Connector
- Proposed Grain Belt Express Phase 1 Ford County Interconnect
- Proposed Grain Belt Express Phase 1 Converter Station
- Existing McCredie Substation
- Existing Burns Substation
- Existing Saddle Substation
- Mapbook Index

Kansas and Missouri  
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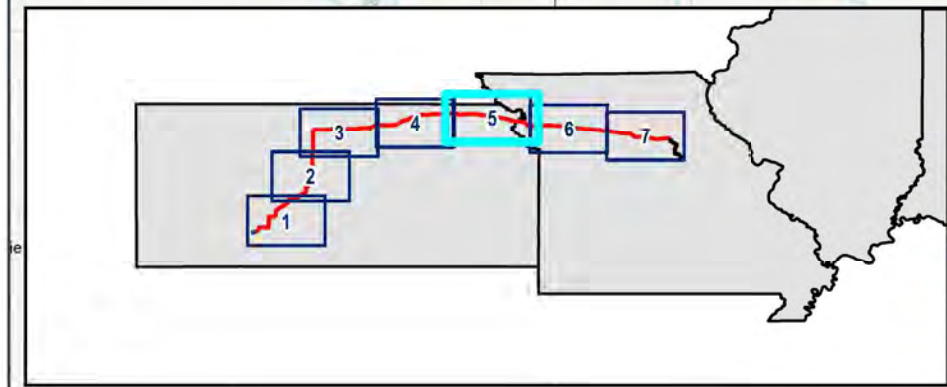
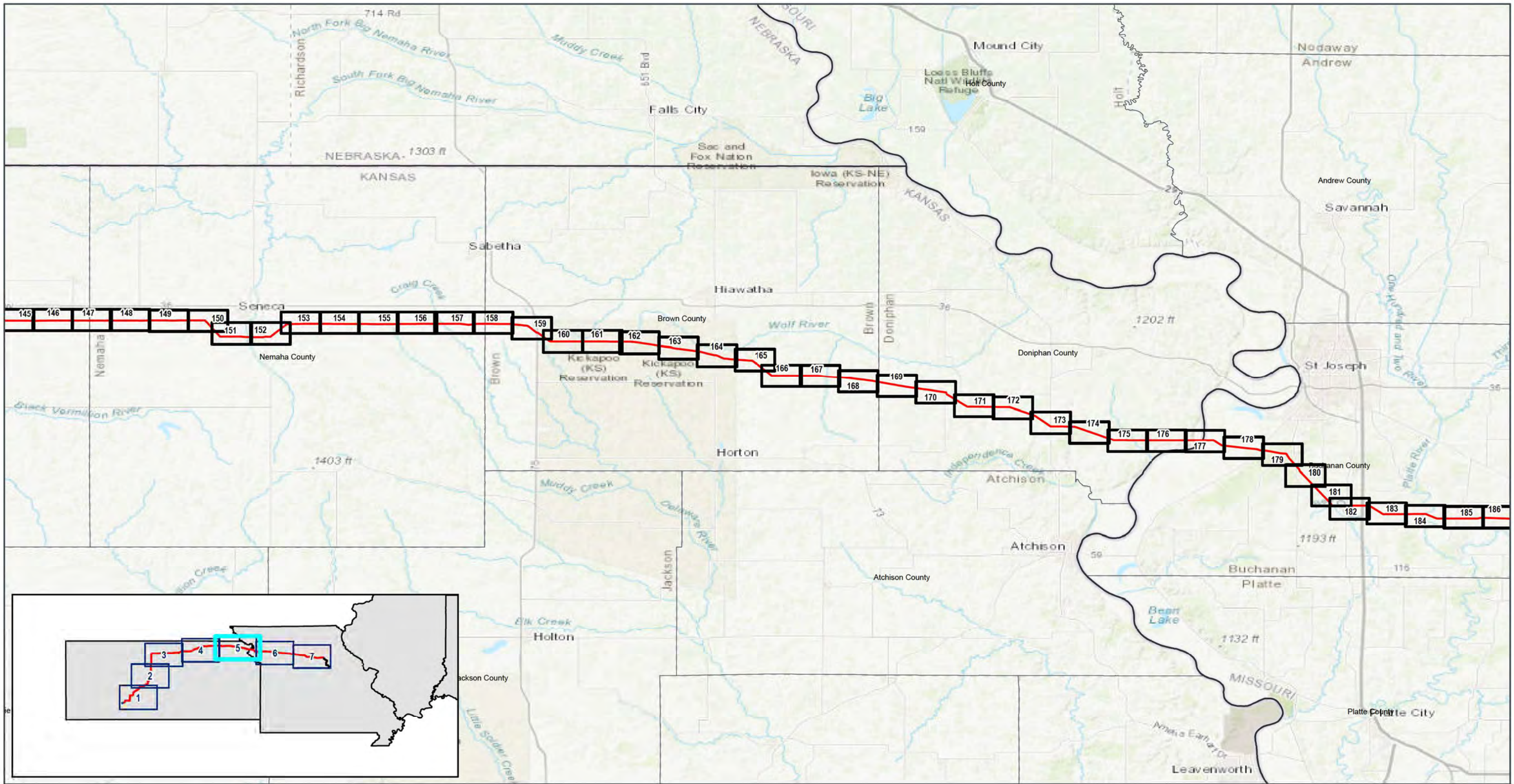
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0 5 10 Miles  
0 5 10 Kilometers





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**WETLAND SHEET MAP INDEX**  
Sheet 5 of 7

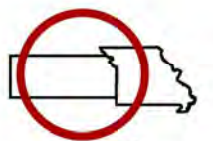
- Proposed Grain Belt Express Phase 1 HVDC Line
- Proposed Grain Belt Express Phase 1 Tiger Connector
- Proposed Grain Belt Express Phase 1 Ford County Interconnect
- Proposed Grain Belt Express Phase 1 Converter Station
- Existing McCredie Substation
- Existing Burns Substation
- Existing Saddle Substation
- Mapbook Index

Kansas and Missouri

GCS North American 1983  
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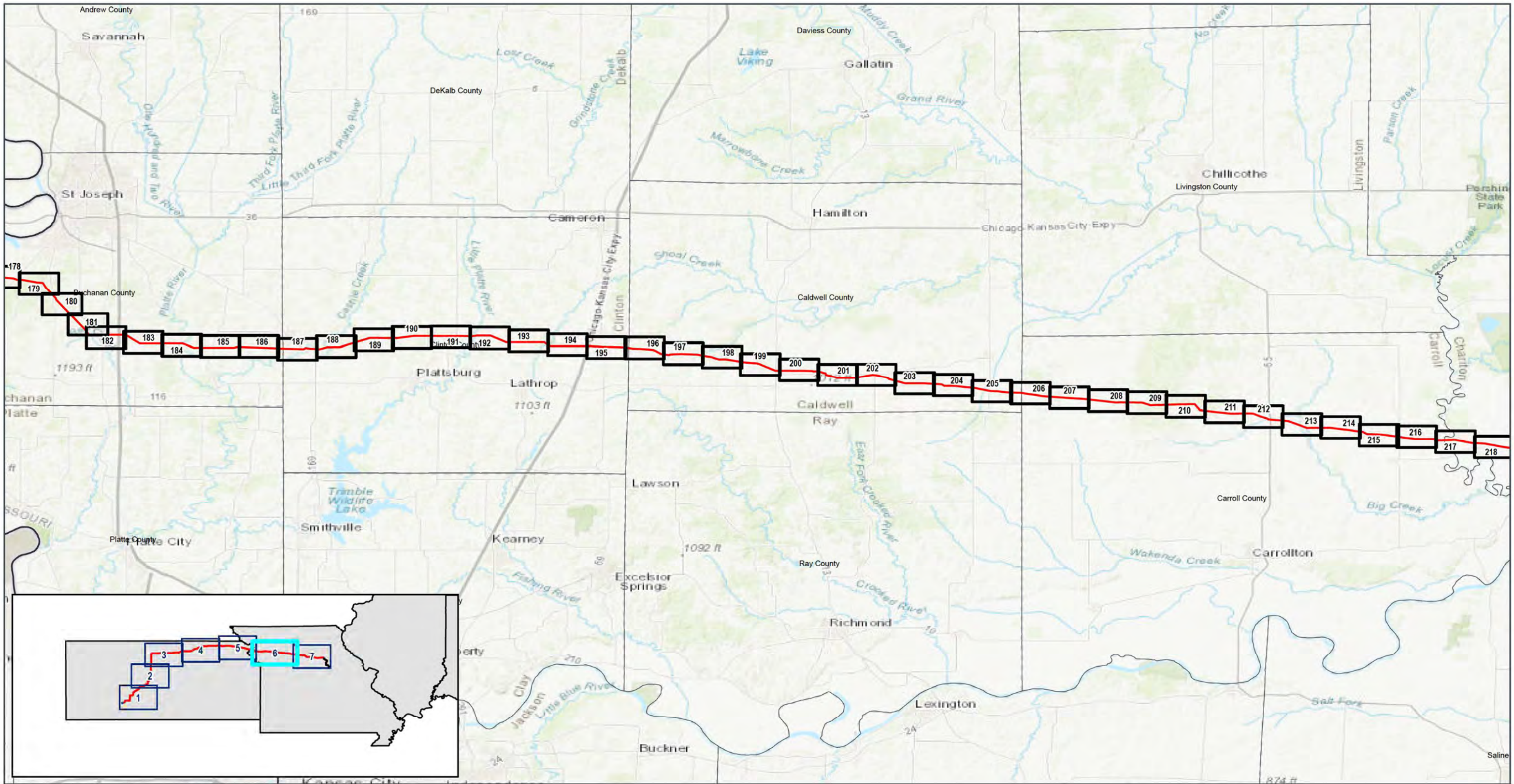


Kansas &  
Missouri

Base Map: Esri ArcGIS Online,  
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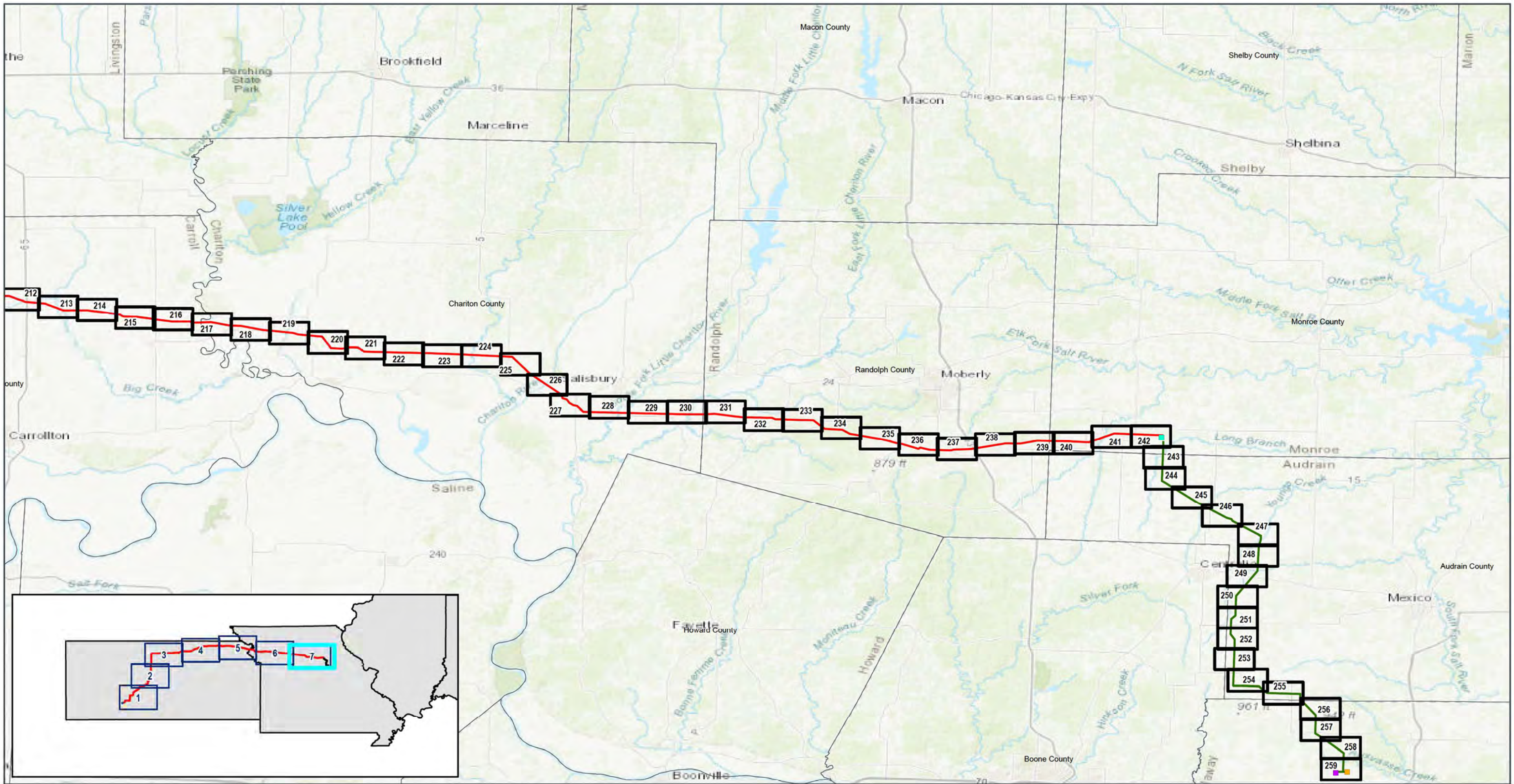




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**WETLAND SHEET MAP INDEX**  
Sheet 6 of 7

- Proposed Grain Belt Express Phase 1 HVDC Line
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- Existing Burns Substation
- Existing Saddle Substation
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GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**WETLAND SHEET MAP INDEX**  
Sheet 7 of 7

- Proposed Grain Belt Express Phase 1 HVDC Line
- Proposed Grain Belt Express Phase 1 Tiger Connector
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- Existing Burns Substation
- Existing Saddle Substation
- Mapbook Index

Kansas and Missouri  
GCS North American 1983  
39.4117°N 92.6427°W

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1:463,636



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0 5 10  
Miles  
Kilometers

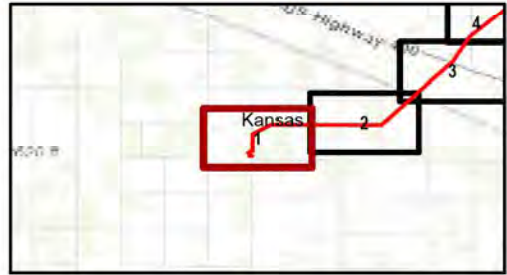




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 1 of 259

- |  |   |   |
|--|---|---|
| <ul style="list-style-type: none"><li>Existing Saddle Substation</li><li>ROW</li><li><b>Permanent Project Component</b></li><li>Transmission Structure</li><li>Converter Station</li></ul> | <b>Habitat Conversion</b> <ul style="list-style-type: none"><li>Vegetation Clearing</li></ul> <b>Temporary Project Component</b> <ul style="list-style-type: none"><li>Access Road</li><li>Converter Station</li><li>Pull Site/Tension Site</li></ul> | <b>Hydrology</b> <ul style="list-style-type: none"><li>Delineated Stream</li><li>PLJV Playa</li><li><b>Delineated Wetland</b></li><li>Palustrine Emergent (PEM)</li></ul> |
|--|---|---|

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
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From: WetlandMapBook\_12k

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0 400 800 Feet  
0 100 200 Meters

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Kansas and Missouri



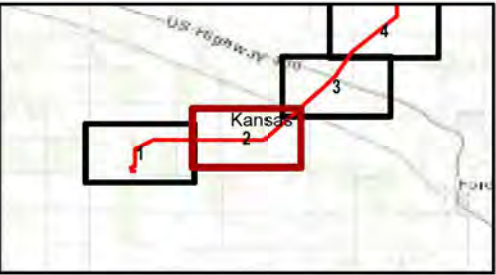


GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 2 of 259

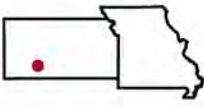
**Permanent Project Component**  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

**Temporary Project Component**  
Access Road  
Pull Site/Tension Site

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



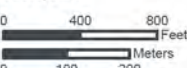
Kansas and Missouri  
GCS North American 1983  
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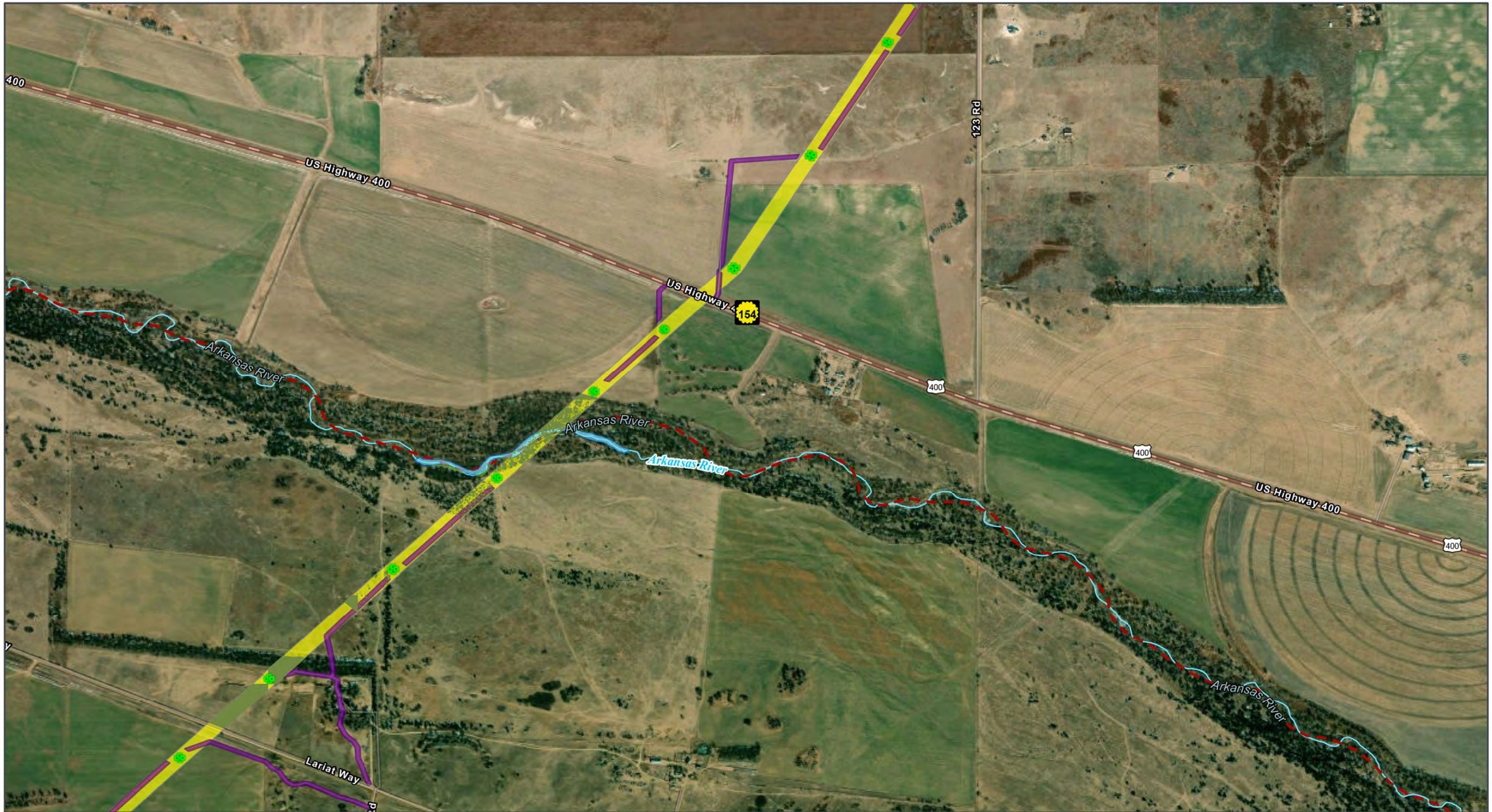
Kansas and Missouri

Base Map: Esri ArcGIS Online,  
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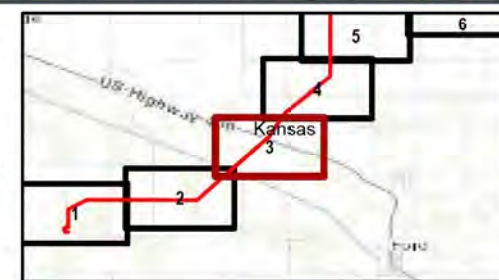


GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 3 of 259

- |   |  |
|---|--|
| <span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> ROW                        | <b>Temporary Project Component</b>   |
| <span style="background-color: green; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Permanent Project Component | <span style="background-color: purple; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Access Road |
| <span style="color: green;">■</span> Transmission Structure   | <b>Hydrology</b>   |
| <b>Habitat Conversion</b>   | <span style="color: blue;">—</span> NHD Stream/River   |
| <span style="background-color: brown; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Vegetation Clearing         | <span style="color: red;">- - -</span> Impaired Waterway (303d)  |

- |   |
|---|
| <span style="background-color: lightgreen; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Delineated Wetland       |
| <span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Palustrine Emergent (PEM) |
| <span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Delineated Waterbody      |
| <b>Transportation</b>   |
| <span style="border-bottom: 2px solid black; display: inline-block; width: 15px;"></span> State Highway   |

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
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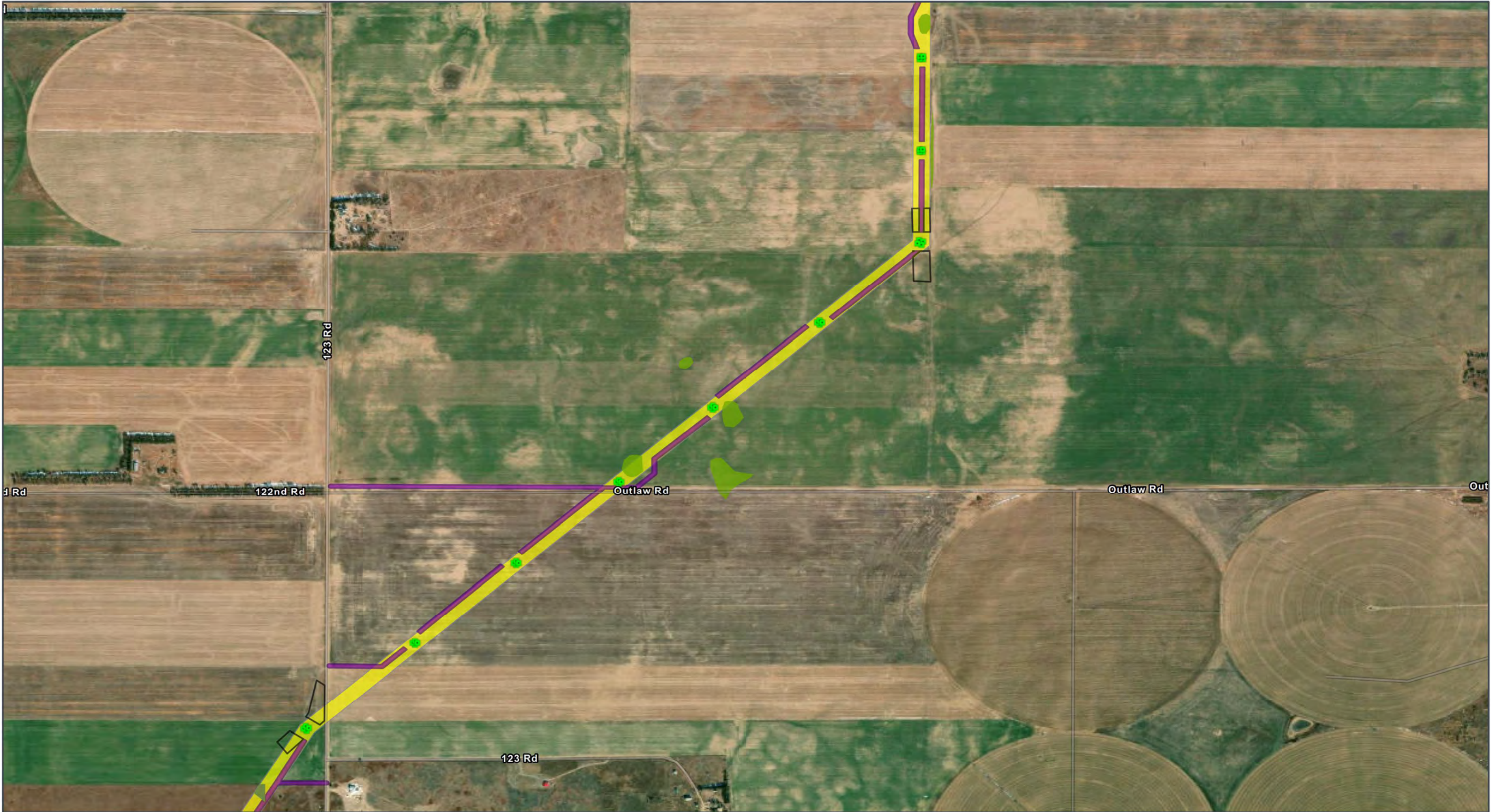
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N

Kansas and Missouri

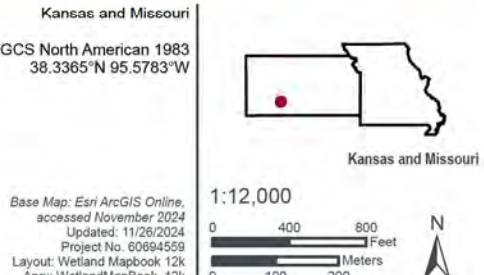
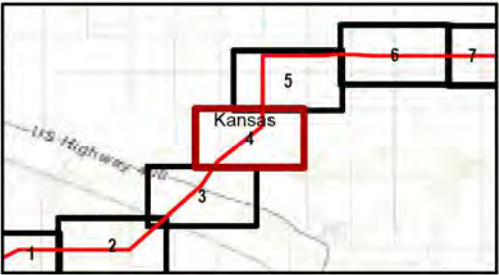




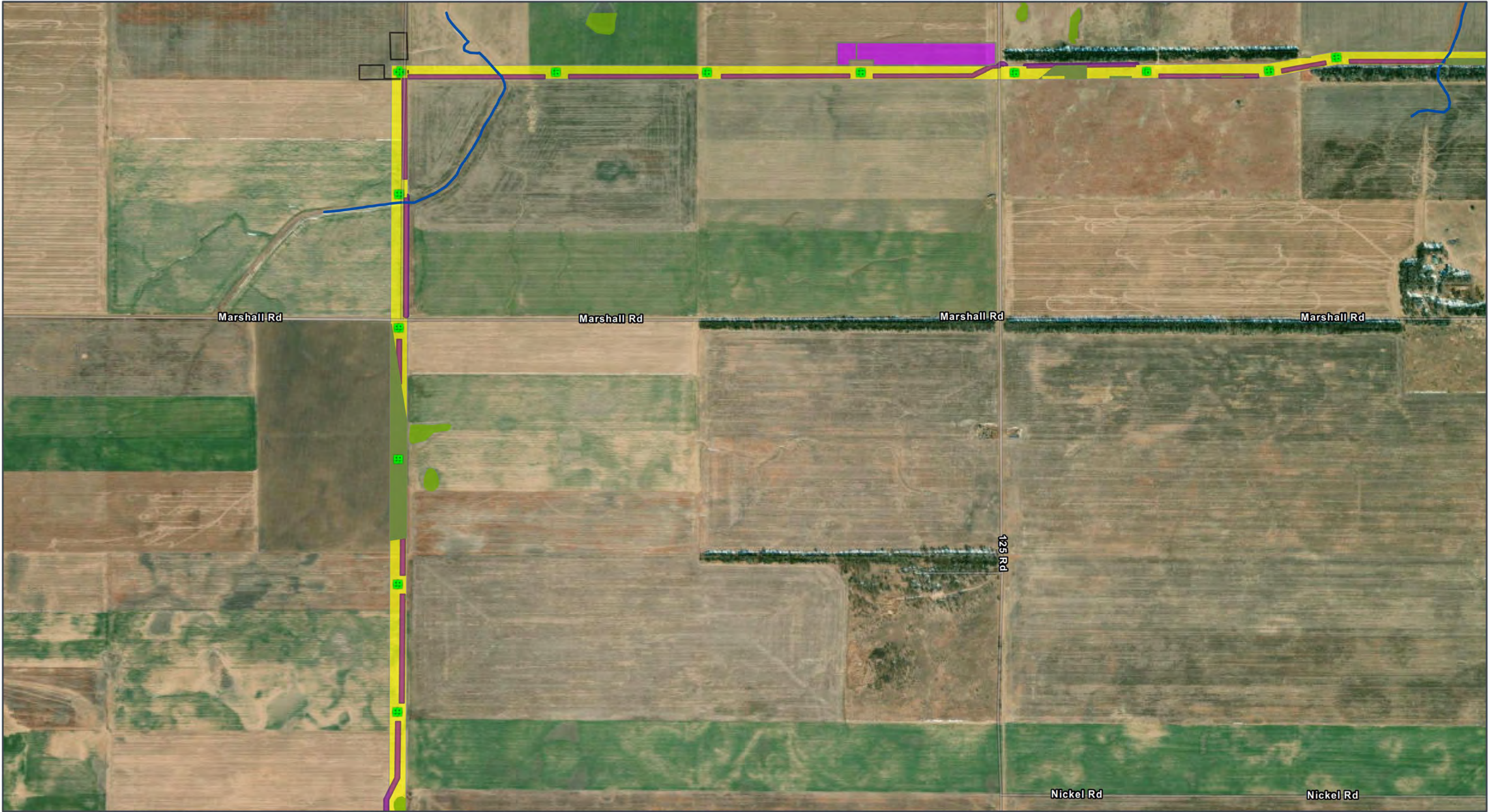
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 4 of 259

- |                           |                                    |                                    |
|---------------------------|------------------------------------|------------------------------------|
| <b>ROW</b>                | <b>Permanent Project Component</b> | <b>Temporary Project Component</b> |
| ROW                       | Transmission Structure             | Access Road                        |
| <b>Habitat Conversion</b> | Vegetation Clearing                | Pull Site/Tension Site             |
|                           |                                    | <b>Delineated Wetland</b>          |
|                           |                                    | Palustrine Emergent (PEM)          |

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented







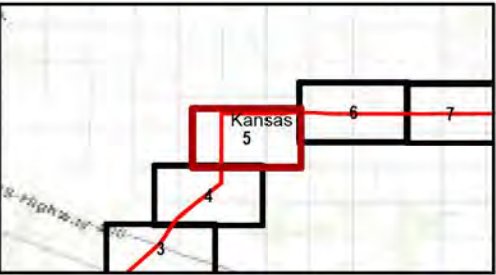
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 5 of 259

- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

- Temporary Project Component**
- Access Road
- Helipad / Fly Yard
- Pull Site/Tension Site

- Hydrology**
- Delineated Stream
- Delineated Wetland**
- Palustrine Emergent (PEM)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
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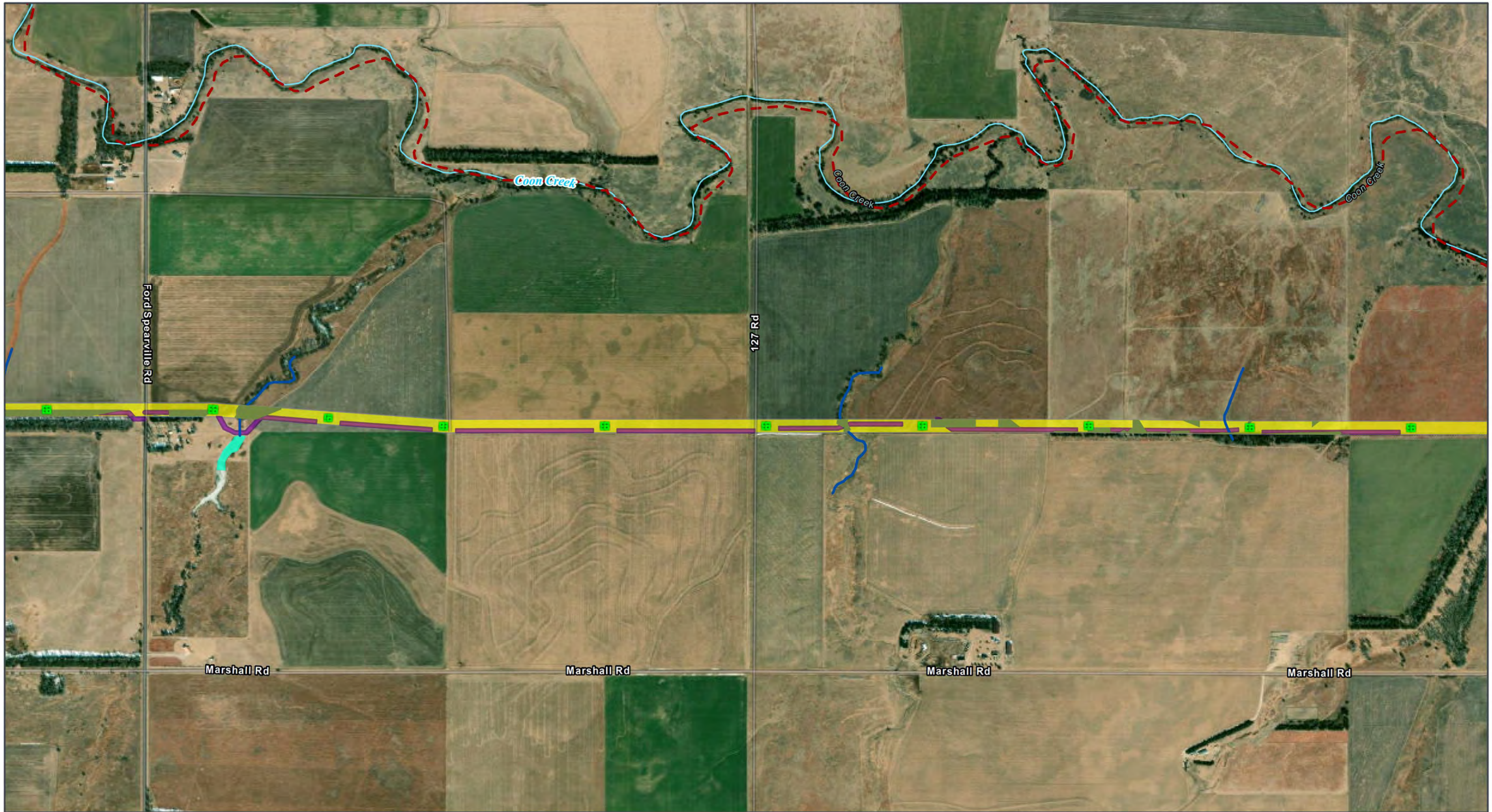
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Kansas and Missouri





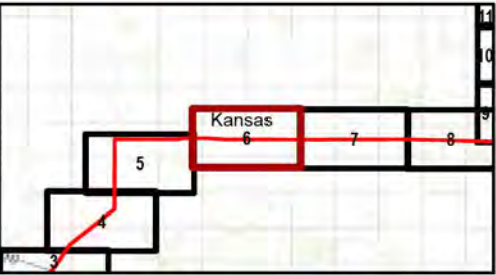
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 6 of 259

- ROW
- Permanent Project Component**
  - Transmission Structure
- Habitat Conversion**
  - Vegetation Clearing

- Temporary Project Component**
  - Access Road
- Hydrology**
  - Delineated Stream
  - NHD Stream/River

- Impaired Waterway (303d)
- Delineated Wetland**
  - Palustrine Aquatic Bed (PAB)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
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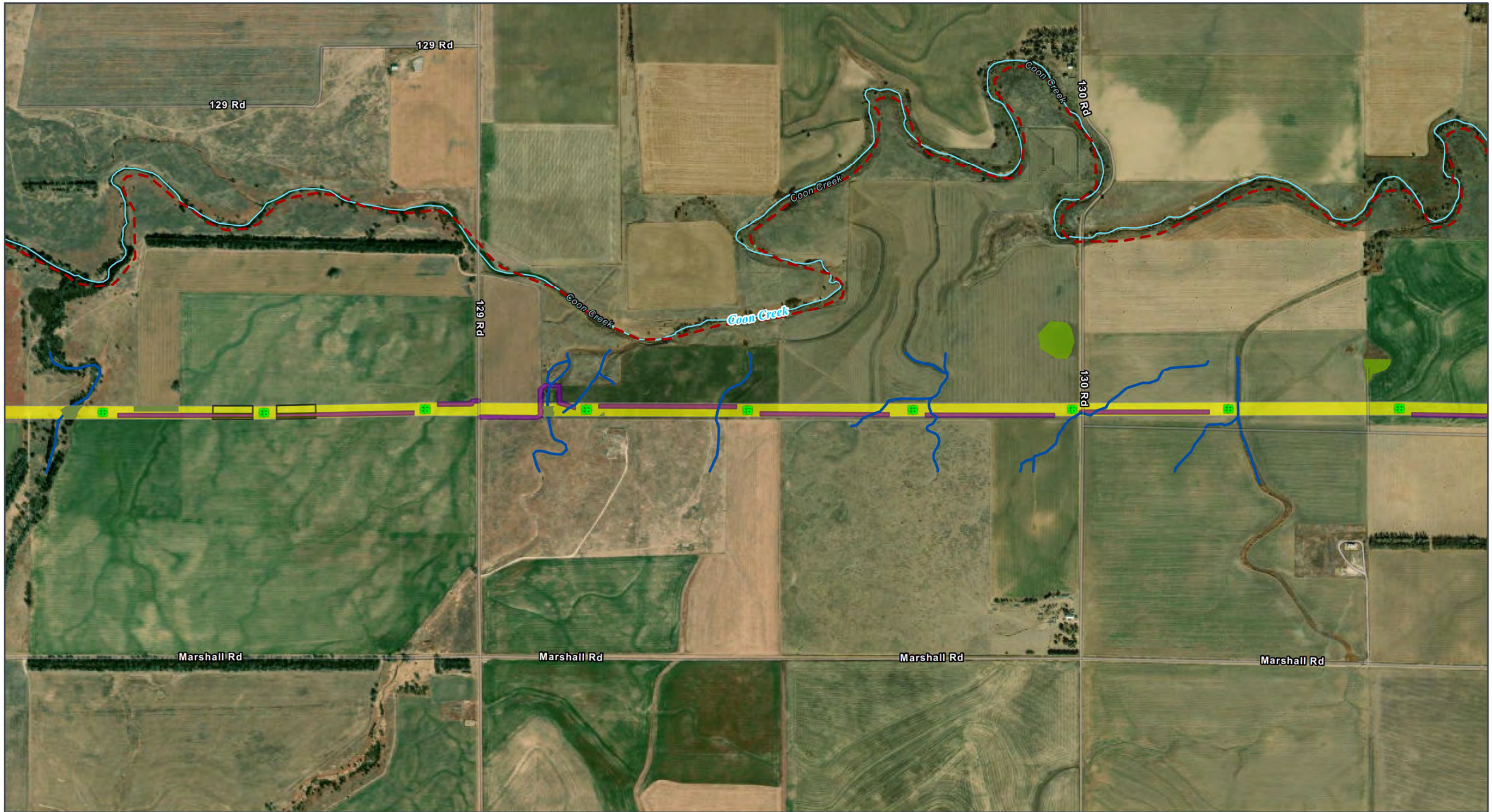
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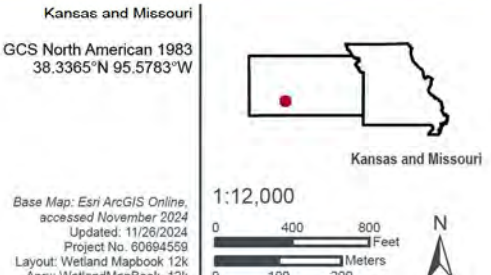
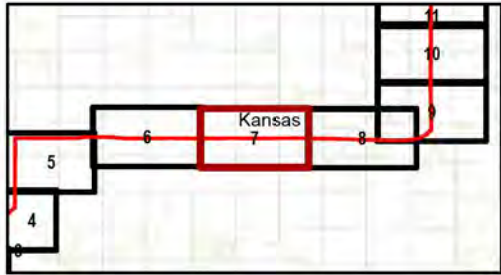
Kansas and Missouri



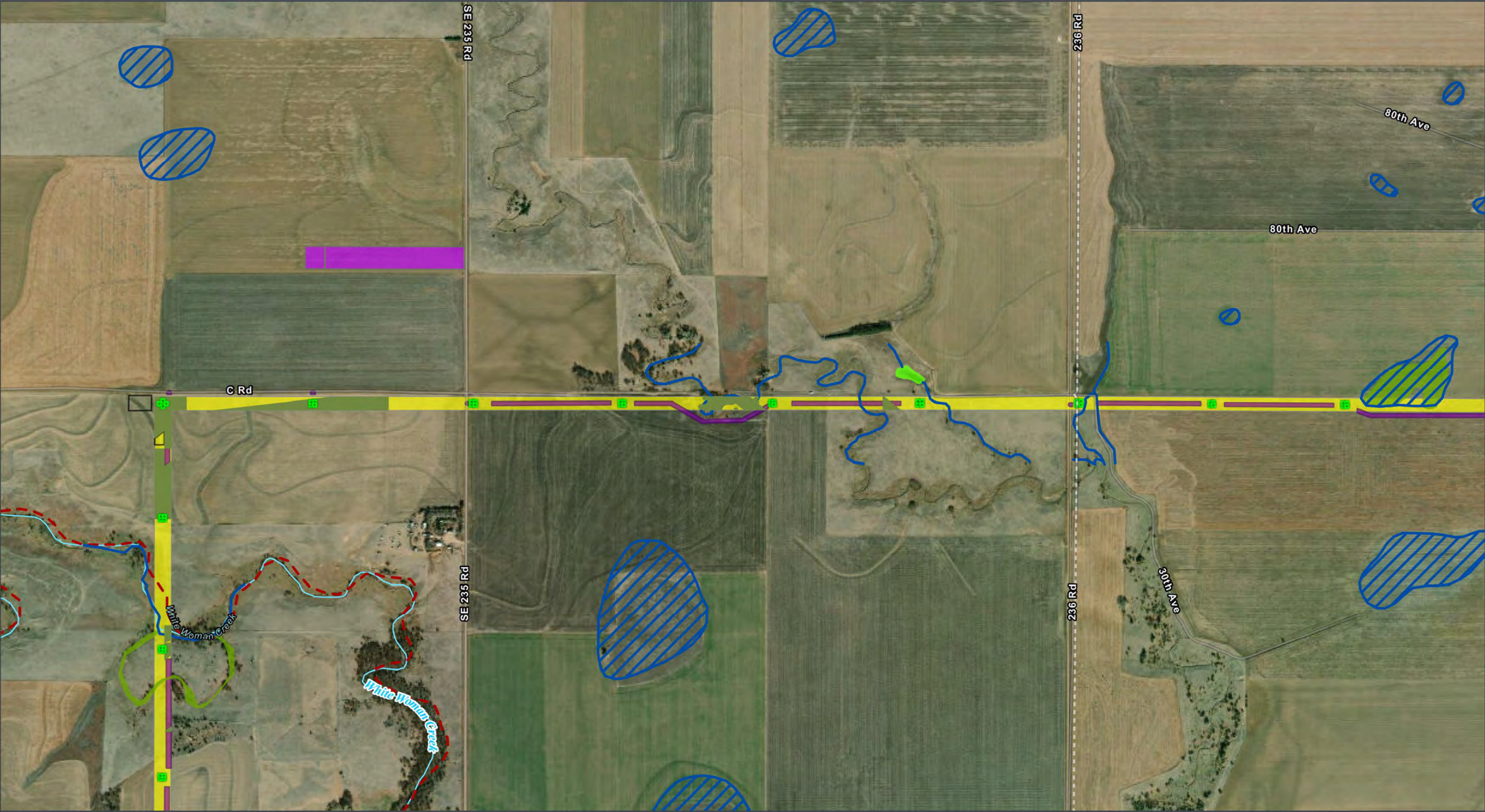


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|---|--|--|
| <b>Permanent Project Component</b><br>Transmission Structure<br>Habitat Conversion<br>Vegetation Clearing | <b>Temporary Project Component</b><br>Access Road<br>Pull Site/Tension Site<br><b>Hydrology</b><br>Delineated Stream | <b>Delineated Wetland</b><br>Palustrine Emergent (PEM) |
|---|--|--|

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



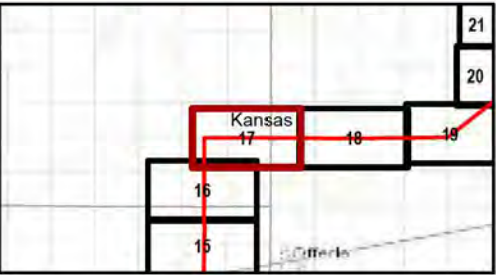




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 8 of 259

- |  |  |  |
|--|--|--|
| <b>ROW</b><br>Transmission Structure<br><b>Habitat Conversion</b><br>Vegetation Clearing | <b>Temporary Project Component</b><br>Access Road<br>Helipad / Fly Yard<br>Pull Site/Tension Site<br><b>Hydrology</b><br>Delineated Stream | <b>Delineated Wetland</b><br>Palustrine Emergent (PEM)<br>Palustrine Unconsolidated Bottom (PUB) |
|--|--|--|

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

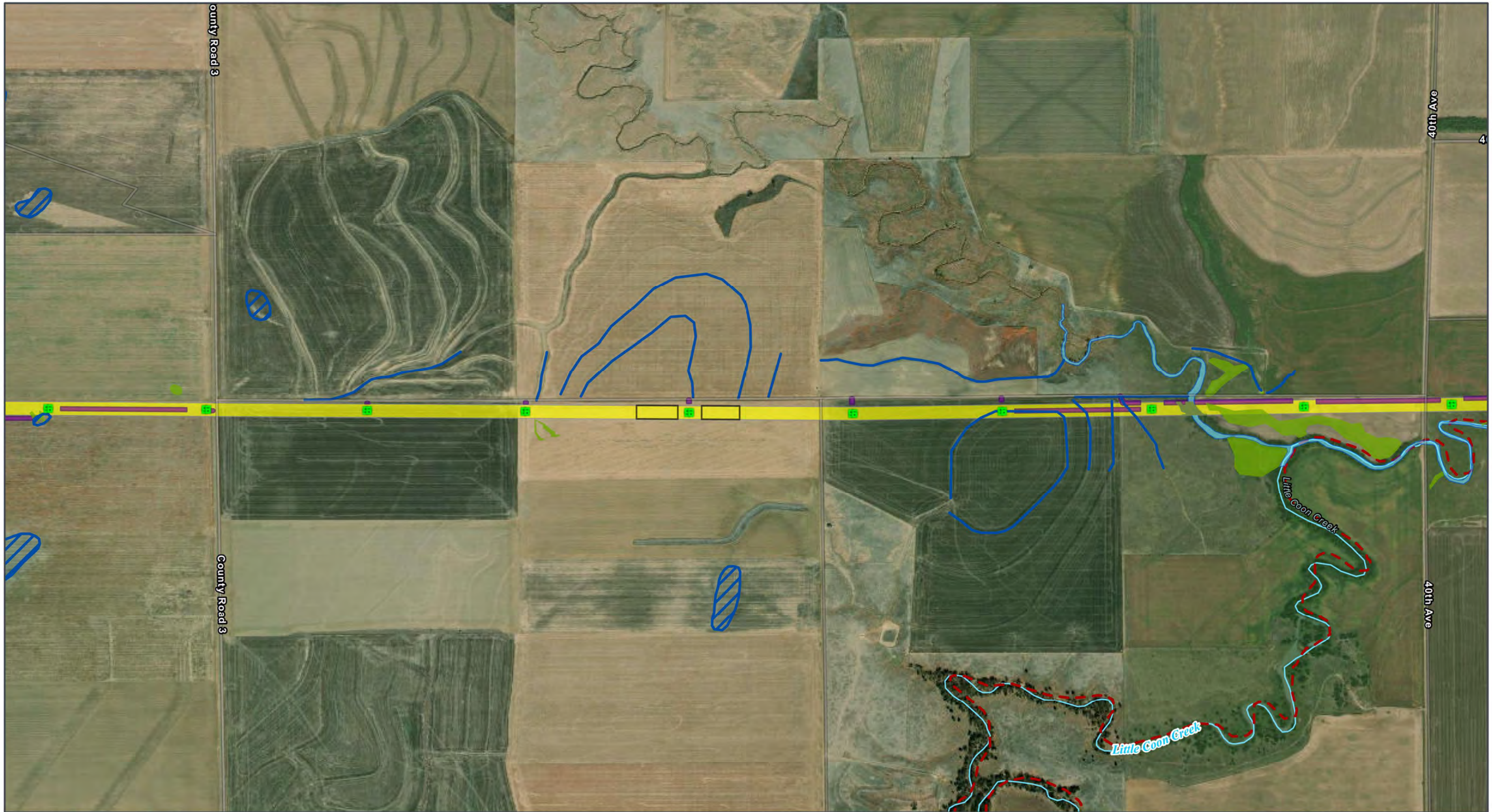
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accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
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Aron: WetlandMapBook\_12k

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0 100 200 Meters

Kansas and Missouri





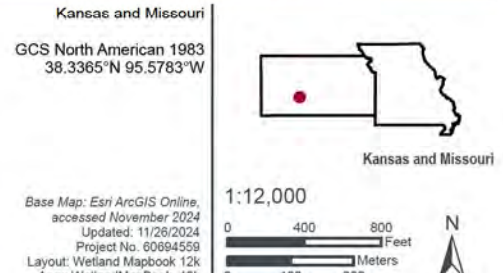
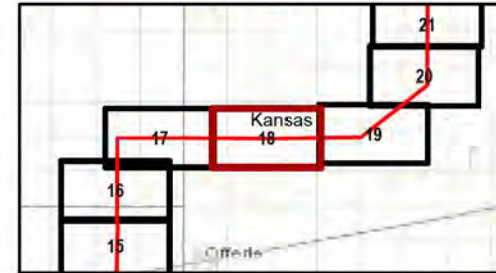
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 9 of 259

- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

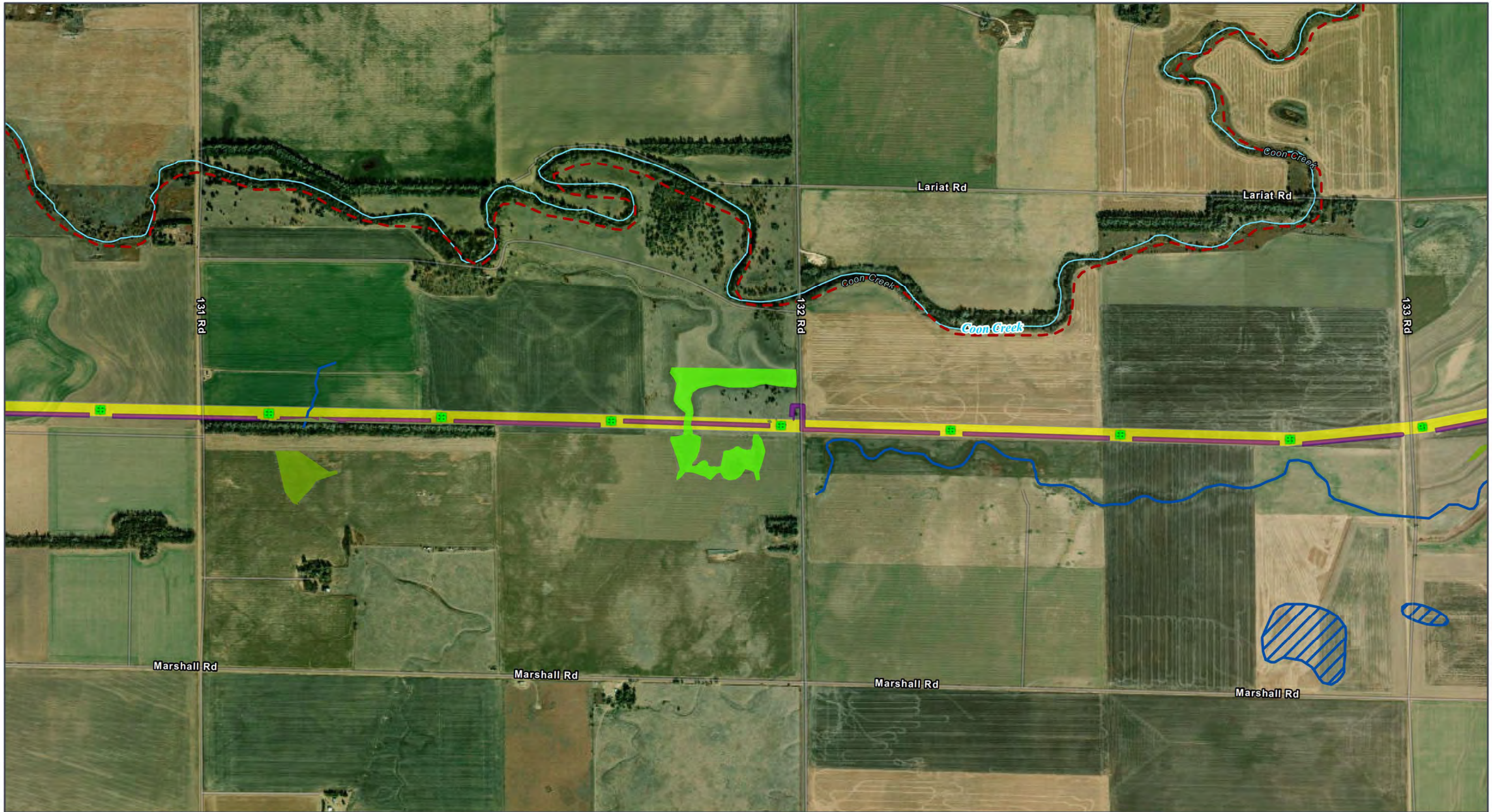
- Temporary Project Component**
- Access Road
- Pull Site/Tension Site
- Hydrology**
- Delineated Stream
- PLJV Playa

- NHD Stream/River
- Impaired Waterway (303d)
- Delineated Wetland**
- Palustrine Emergent (PEM)
- Delineated Waterbody

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented







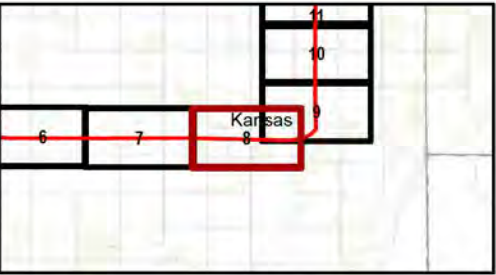
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 10 of 259

- Permanent Project Component**
- Transmission Structure
  - Habitat Conversion**
  - Vegetation Clearing

- Temporary Project Component**
- Access Road
  - Hydrology**
  - Delineated Stream
  - PLJV Playa

- NHD Stream/River
- Impaired Waterway (303d)
- Delineated Wetland**
- Palustrine Emergent (PEM)
- Palustrine Unconsolidated Bottom (PUB)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
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Updated: 11/26/2024  
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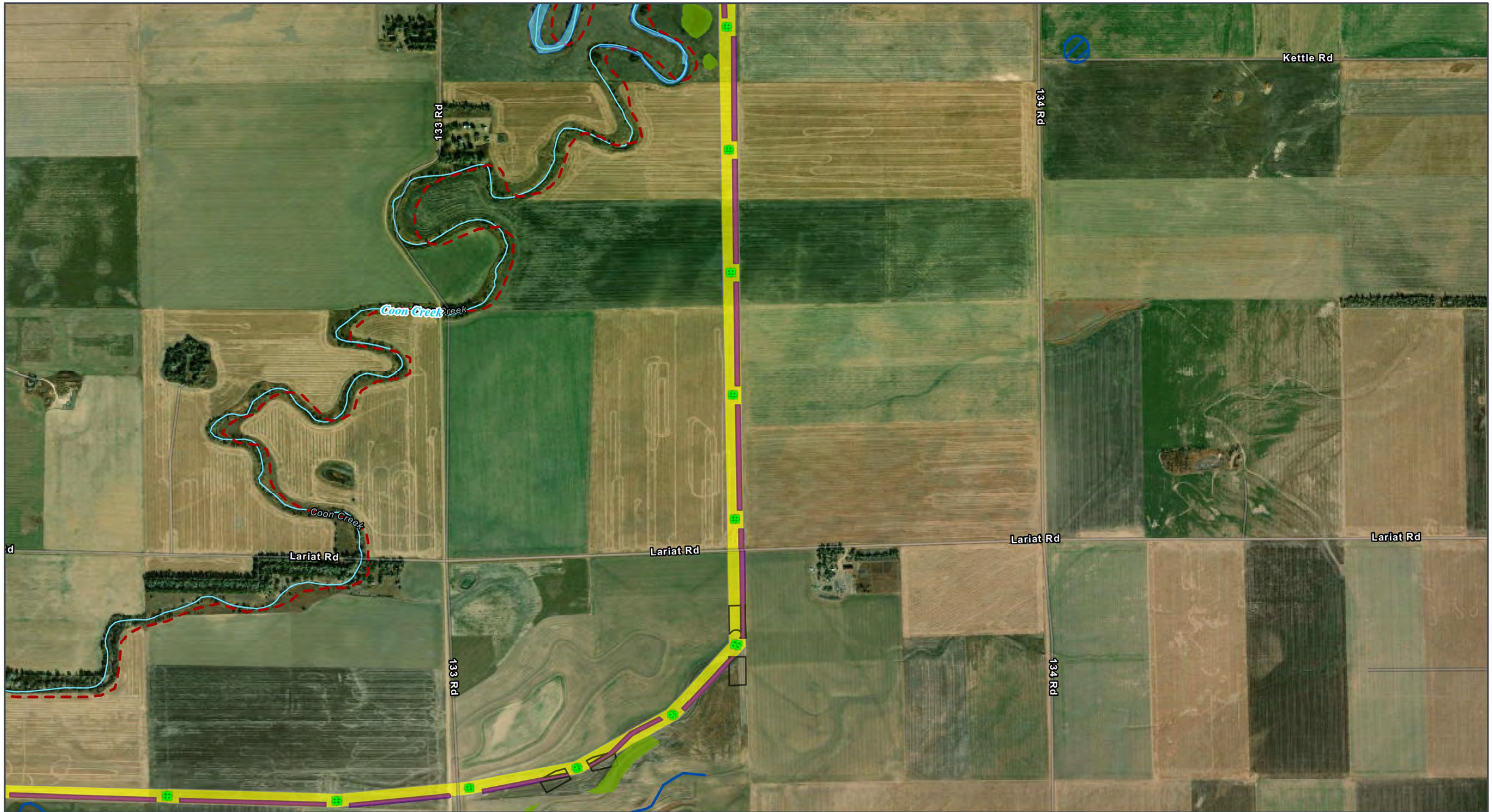
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Kansas and Missouri





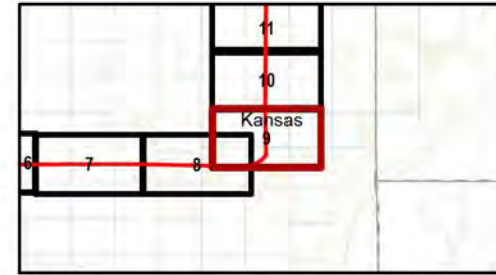
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 11 of 259

- Permanent Project Component**
- Transmission Structure
- Temporary Project Component**
- Access Road

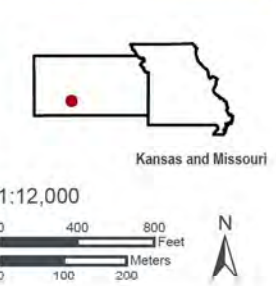
- Hydrology**
- Pull Site/Tension Site
  - Delineated Stream
  - PLJV Playa
  - NHD Stream/River

- Delineated Wetland**
- Impaired Waterway (303d)
  - Palustrine Emergent (PEM)
  - Delineated Waterbody

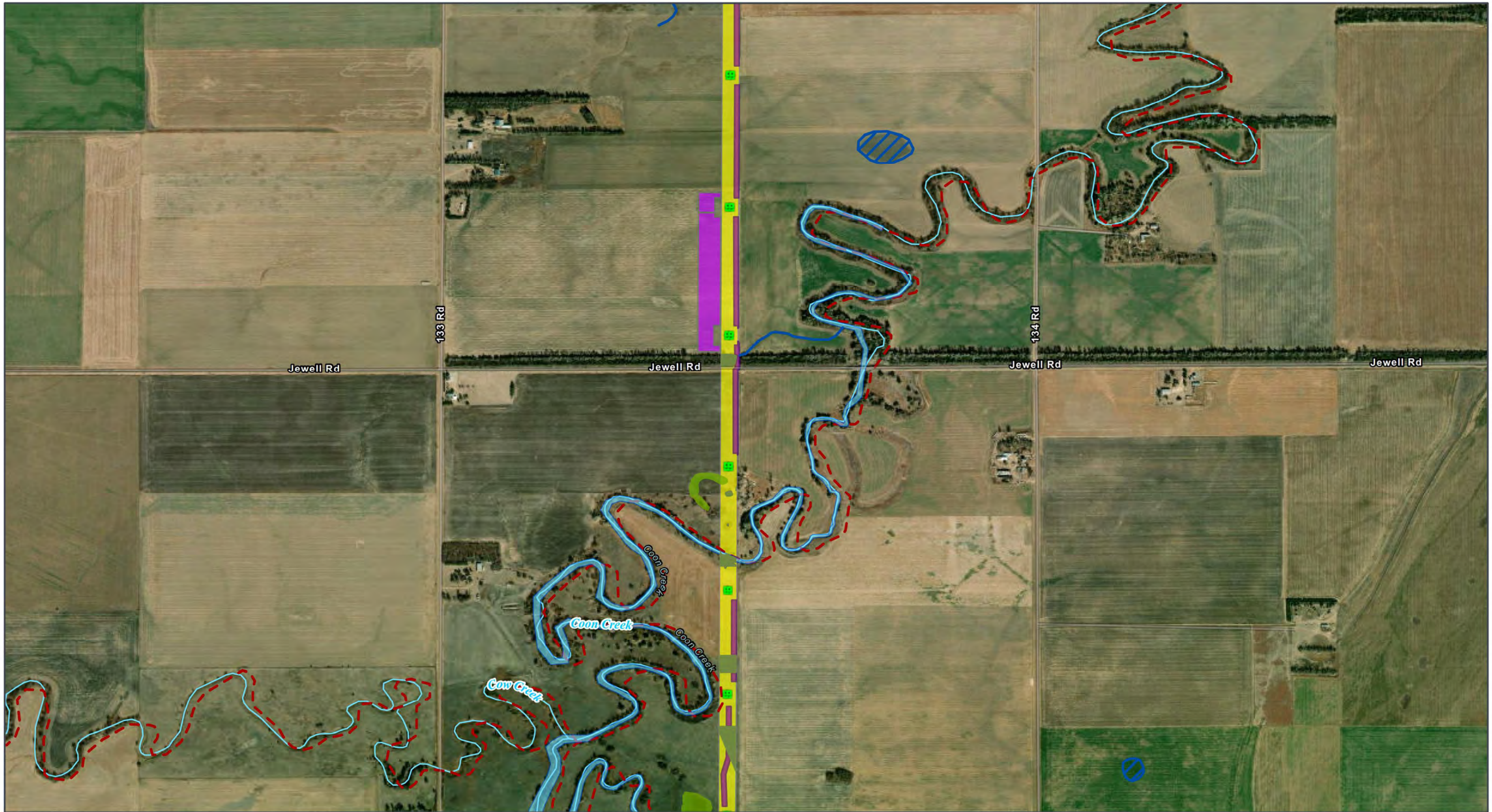
All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
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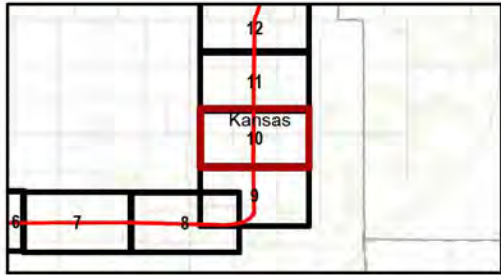
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 12 of 259

- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

- Temporary Project Component**
- Access Road
- Helipad / Fly Yard
- Hydrology**
- Delineated Stream
- PLJV Playa

- NHD Stream/River
- Impaired Waterway (303d)
- Delineated Wetland**
- Palustrine Emergent (PEM)
- Delineated Waterbody

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aero: WetlandMapBook\_12k

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0 100 200 Meters

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Kansas and Missouri





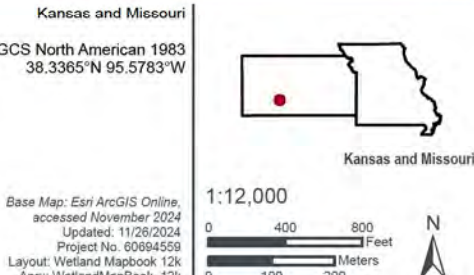
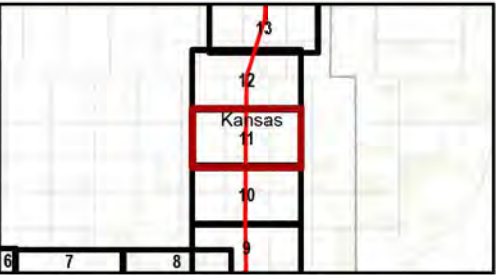
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 13 of 259

**Permanent Project Component**  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

**Temporary Project Component**  
Access Road  
**Hydrology**  
Delineated Stream  
PLJV Playa

NHD Stream/River  
Impaired Waterway (303d)  
**Delineated Wetland**  
Palustrine Emergent (PEM)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



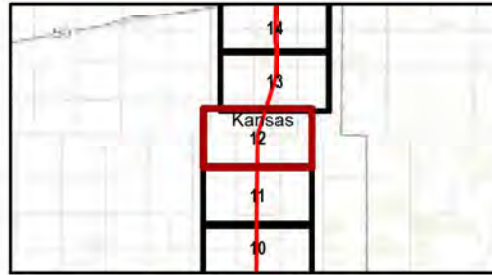




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 14 of 259

- ROW
- Permanent Project Component**
  - Transmission Structure
- Temporary Project Component**
  - Access Road
- Pull Site/Tension Site
- Hydrology**
  - Delineated Stream
  - PLJV Playa

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
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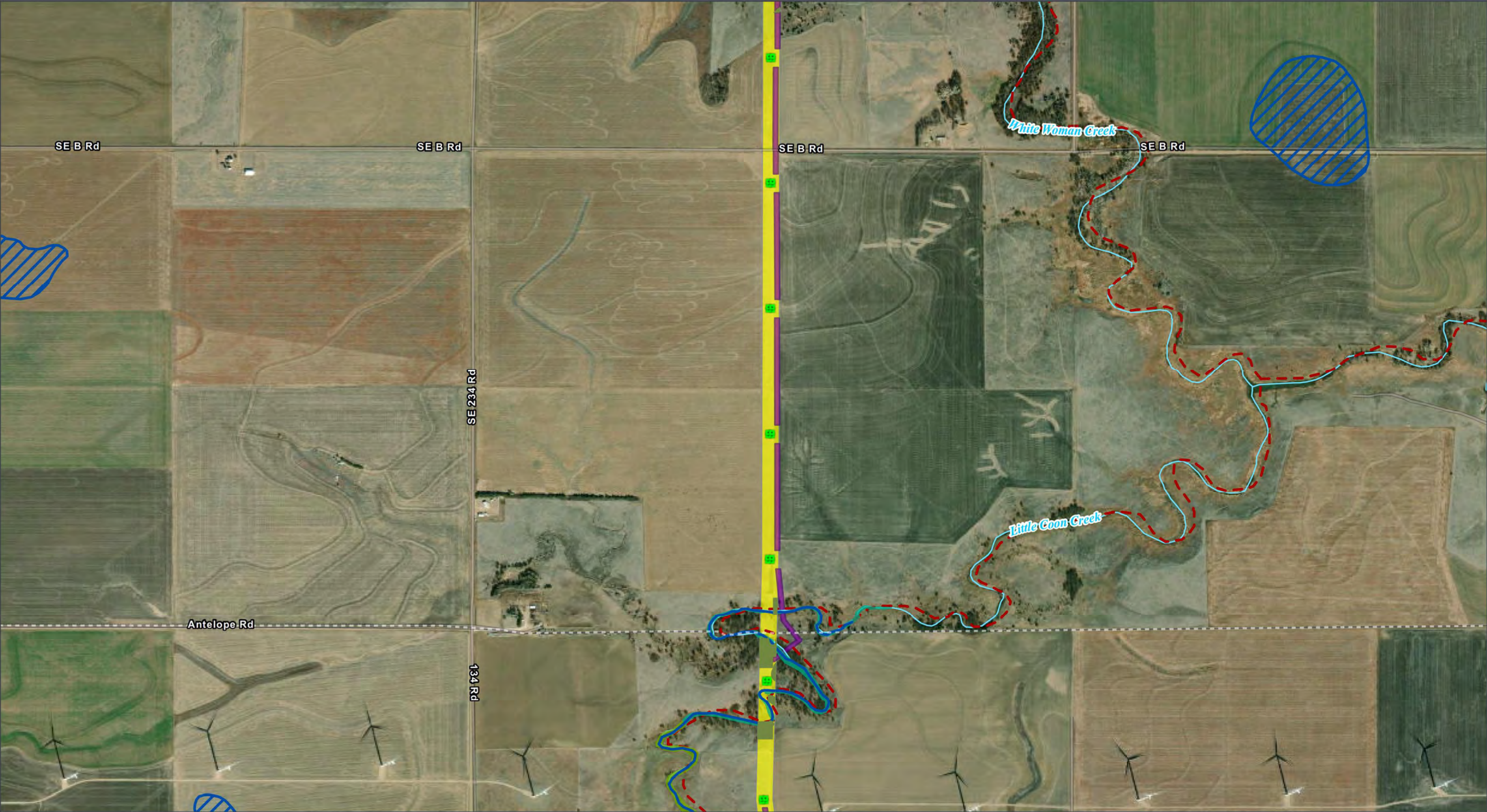
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Kansas and Missouri

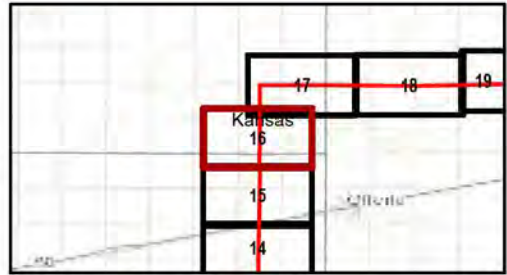




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 15 of 259

- |  |  |  |
|--|--|--|
| <b>ROW</b><br>Permanent Project Component<br>Transmission Structure<br>Habitat Conversion<br>Vegetation Clearing | <b>Temporary Project Component</b><br>Access Road<br><b>Hydrology</b><br>Delineated Stream<br>PLJV Playa | <b>NHD Stream/River</b><br>Impaired Waterway (303d)<br><b>Delineated Wetland</b><br>Palustrine Emergent (PEM)<br>Palustrine Forested (PFO) |
|--|--|--|

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aron: WetlandMapBook\_12k

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Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

**Wetlands Map Book**

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ROW

**Permanent Project Component**

Transmission Structure

**Habitat Conversion**

Vegetation Clearing

**Temporary Project Component**

Access Road

Pull Site/Tension Site

**Hydrology**

Delineated Stream

PLJV Playa

NHD Stream/River

Impaired Waterway (303d)

**Delineated Wetland**

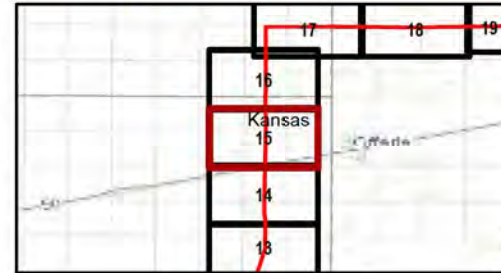
Palustrine Emergent (PEM)

**Transportation**

U.S. Highway

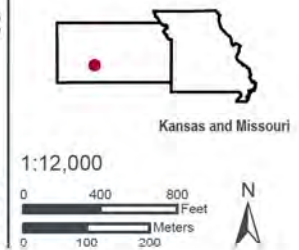
Railroad

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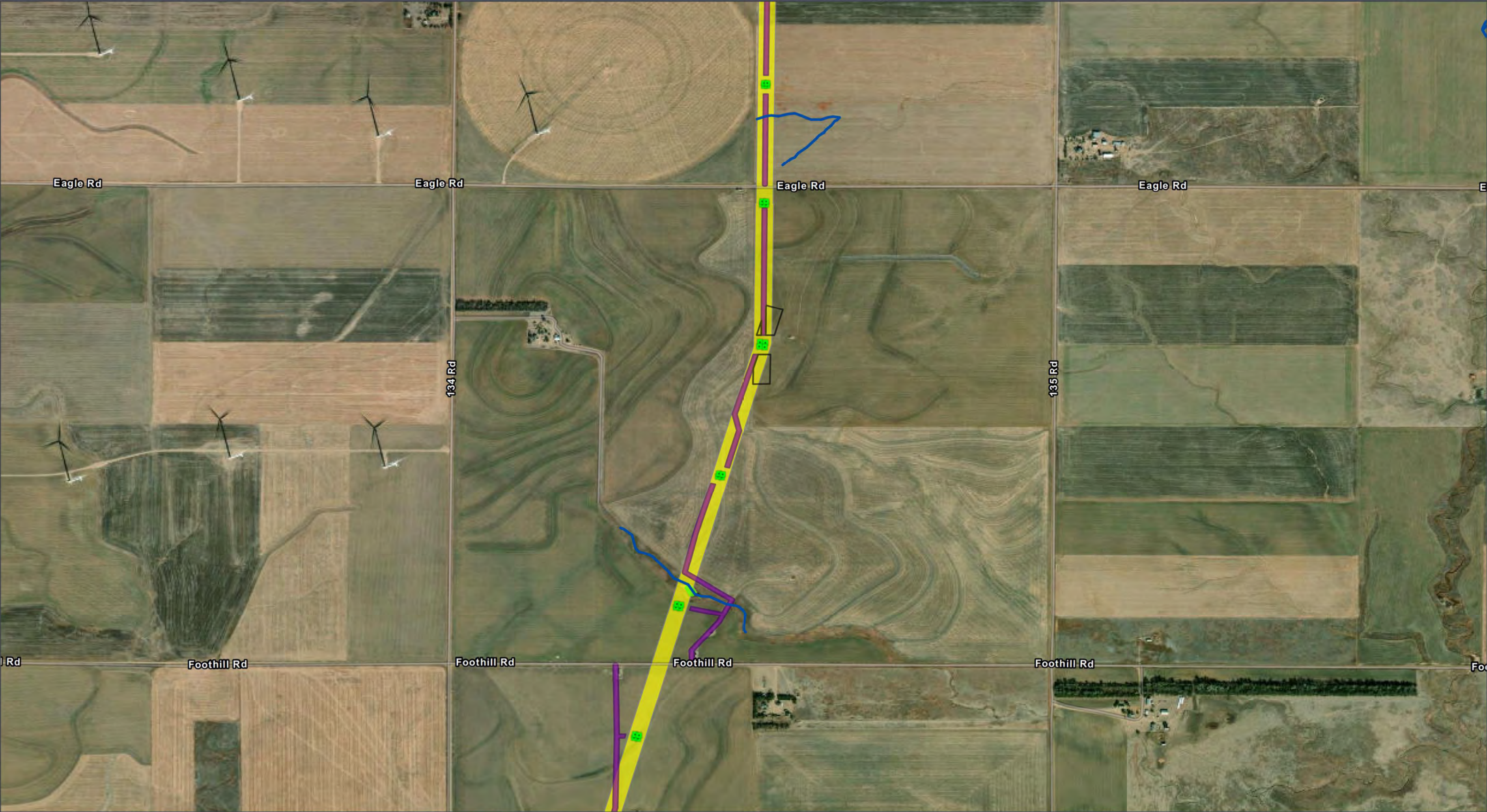


Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
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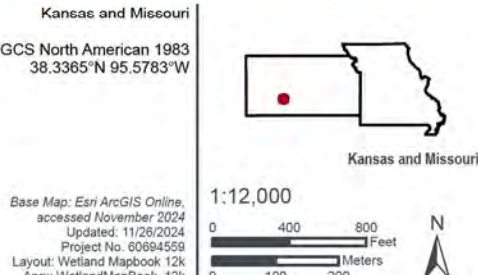
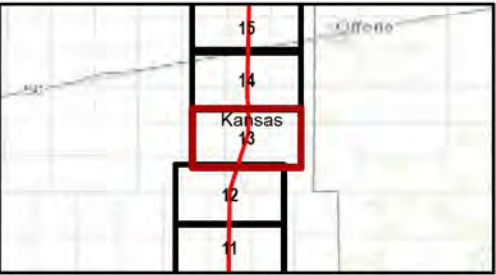
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 17 of 259

**Permanent Project Component**  
Transmission Structure

**Temporary Project Component**  
Access Road  
Pull Site/Tension Site  
**Hydrology**  
Delineated Stream

**Delineated Wetland**  
PLJV Playa  
Palustrine Emergent (PEM)  
Palustrine Unconsolidated Bottom (PUB)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented







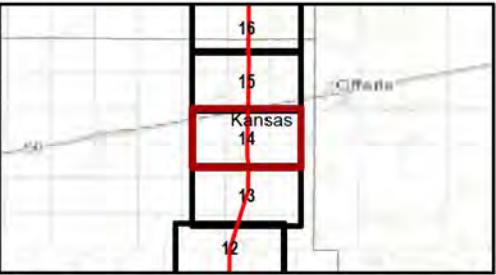
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 18 of 259

- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

- Temporary Project Component**
- Access Road
- Hydrology**
- Delineated Stream
- PLJV Playa
- Delineated Wetland**
- Palustrine Emergent (PEM)

- Palustrine Unconsolidated Bottom (PUB)
- Transportation**
- U.S. Highway
- Railroad

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
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Acrs: WetlandMapBook\_12k

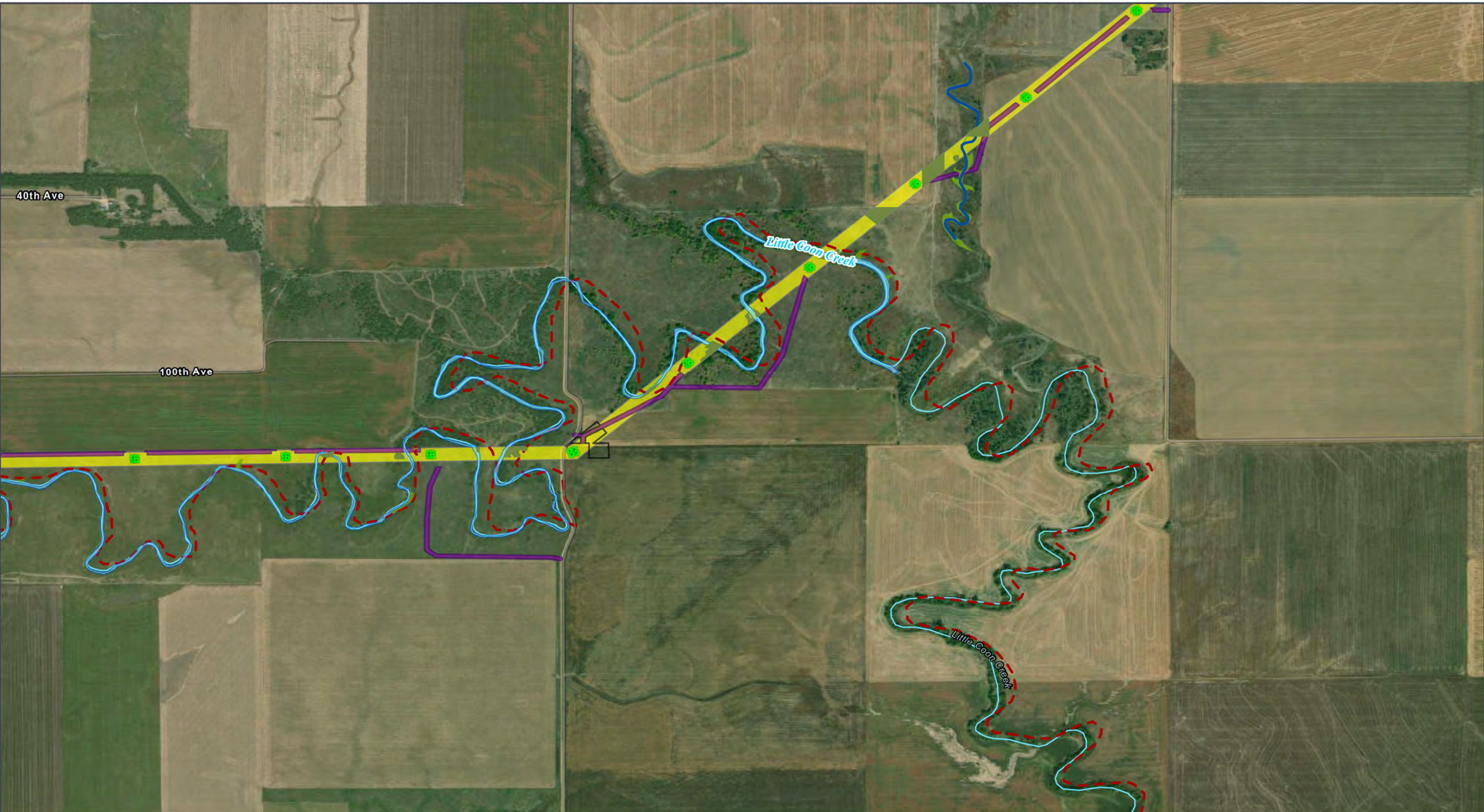
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Kansas and Missouri

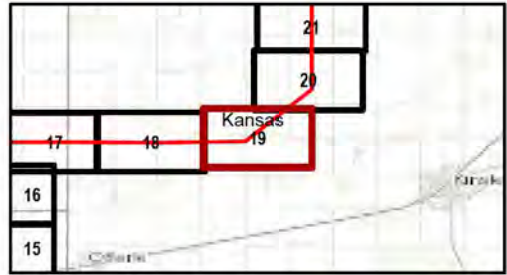




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 19 of 259

- |  |   |  |
|--|---|--|
| <b>ROW</b><br>Permanent Project Component<br>Transmission Structure<br>Habitat Conversion<br>Vegetation Clearing | <b>Temporary Project Component</b><br>Access Road<br>Pull Site/Tension Site<br>Hydrology<br>Delineated Stream | <b>Delineated Wetland</b><br>Palustrine Emergent (PEM)<br>Delineated Waterbody |
|--|---|--|

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
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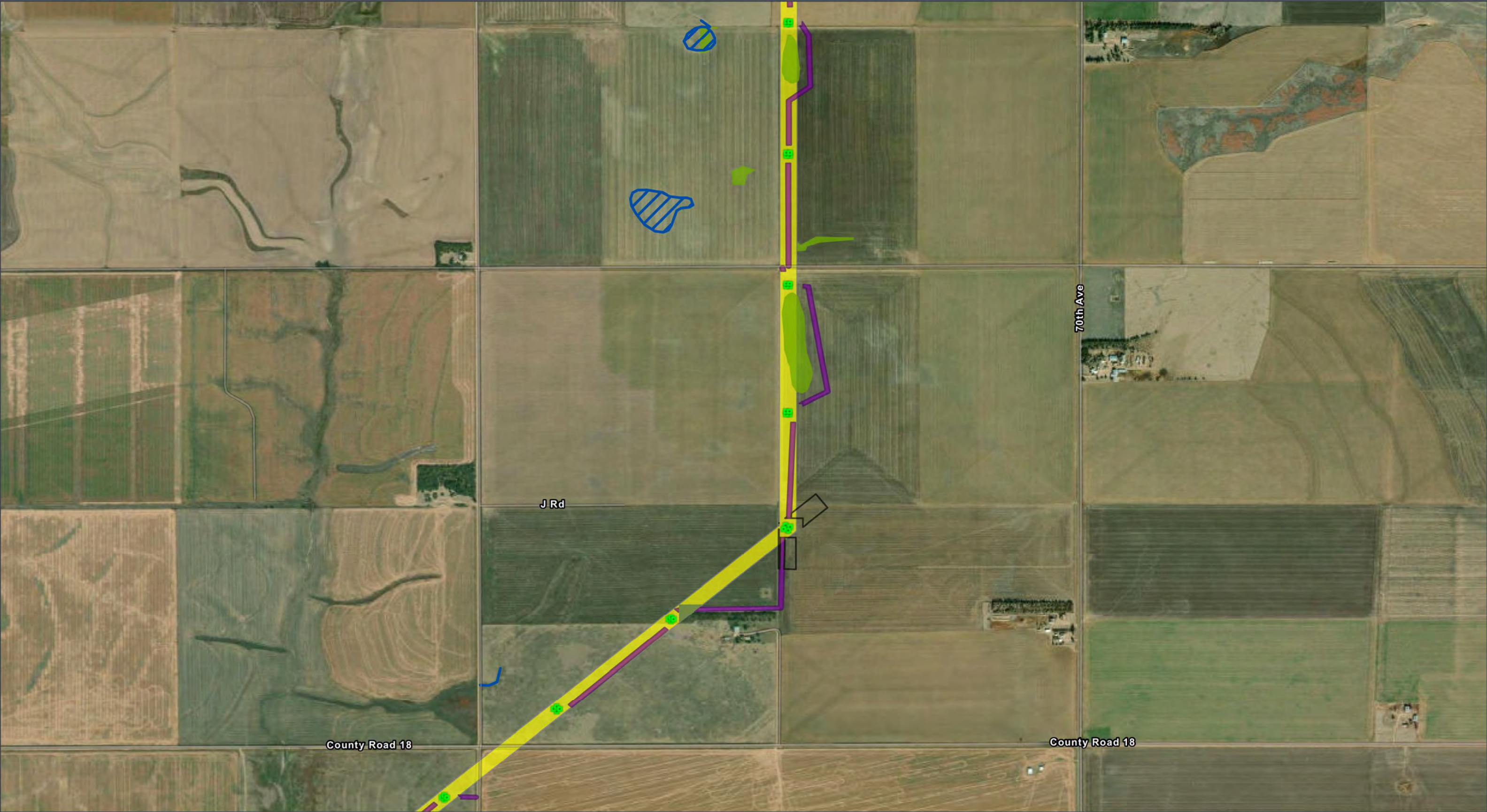
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Kansas and Missouri

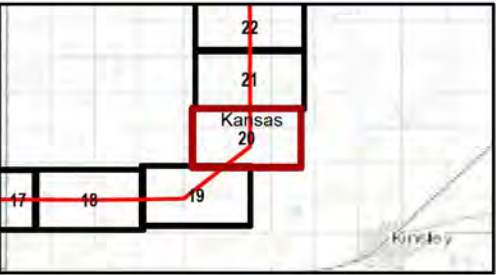




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 20 of 259

- |  |   |  |
|--|---|--|
| <b>ROW</b><br>Permanent Project Component<br>Transmission Structure<br>Habitat Conversion<br>Vegetation Clearing | <b>Temporary Project Component</b><br>Access Road<br>Pull Site/Tension Site<br>Hydrology<br>Delineated Stream | <b>Delineated Wetland</b><br>PLJV Playa<br>Palustrine Emergent (PEM) |
|--|---|--|

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aero: WetlandMapBook\_12k

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Kansas and Missouri



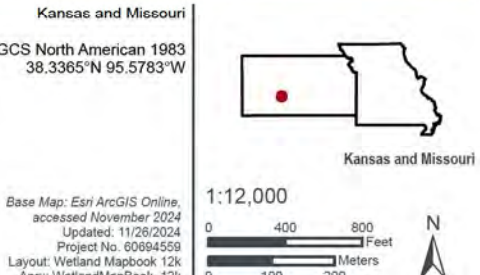
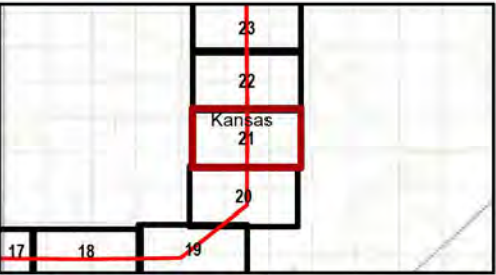


**ROW**  
Permanent Project Component  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

**Temporary Project Component**  
Access Road  
**Hydrology**  
Delineated Stream

**Delineated Wetland**  
Palustrine Emergent (PEM)  
Palustrine Unconsolidated Bottom (PUB)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented

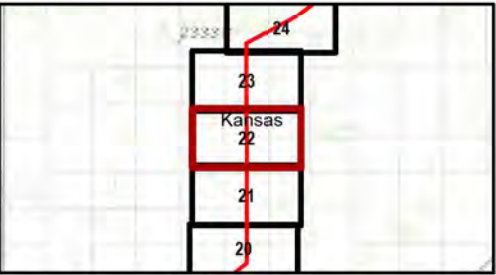






- |                                    |                           |
|------------------------------------|---------------------------|
| ROW                                | <b>Hydrology</b>          |
| <b>Permanent Project Component</b> | Delineated Stream         |
| Transmission Structure             | PLJV Playa                |
| <b>Temporary Project Component</b> | <b>Delineated Wetland</b> |
| Access Road                        | Palustrine Emergent (PEM) |
| Pull Site/Tension Site             |                           |

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

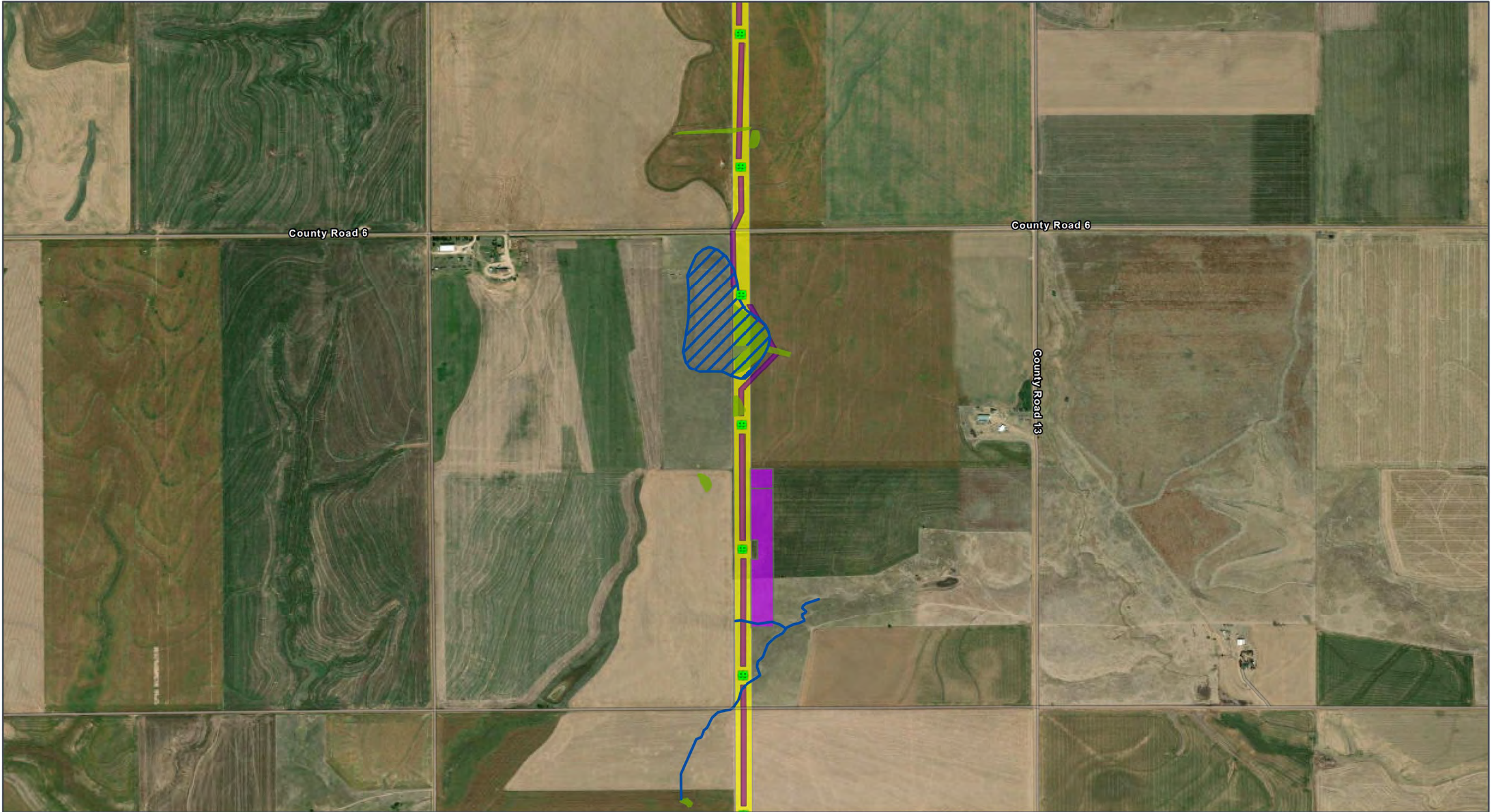
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Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Acrs: WetlandMapBook\_12k

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Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 23 of 259

ROW

**Permanent Project Component**

Transmission Structure

**Habitat Conversion**

Vegetation Clearing

**Temporary Project Component**

Access Road

Helipad / Fly Yard

**Hydrology**

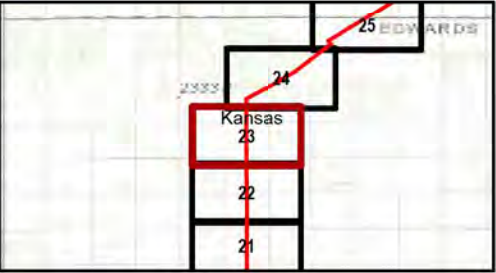
Delineated Stream

PLJV Playa

**Delineated Wetland**

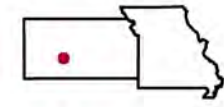
Palustrine Emergent (PEM)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented

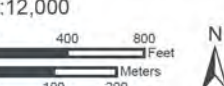


Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
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Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Acor: WetlandMapBook\_12k



Kansas and Missouri



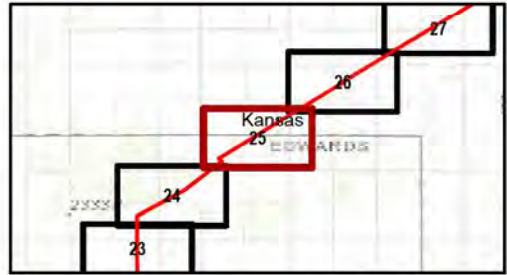




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 24 of 259

- |                                    |                                    |                           |
|------------------------------------|------------------------------------|---------------------------|
| <b>Permanent Project Component</b> | <b>Temporary Project Component</b> | <b>Delineated Wetland</b> |
| Transmission Structure             | Access Road                        | Palustrine Emergent (PEM) |
| Habitat Conversion                 | Pull Site/Tension Site             |                           |
| Vegetation Clearing                | Hydrology                          |                           |
|                                    | Delineated Stream                  |                           |

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aron: WetlandMapBook\_12k

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Kansas and Missouri





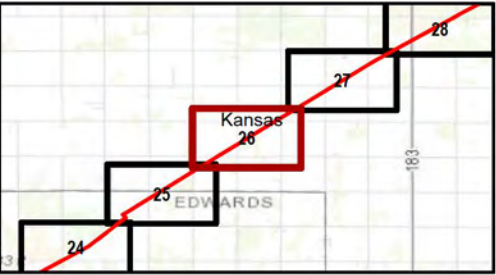
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 25 of 259

- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

- Temporary Project Component**
- Access Road
  - Pull Site/Tension Site
- Hydrology**
- Delineated Stream

- Delineated Wetland**
- PLJV Playa
  - Palustrine Emergent (PEM)

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
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Updated: 4/9/2025  
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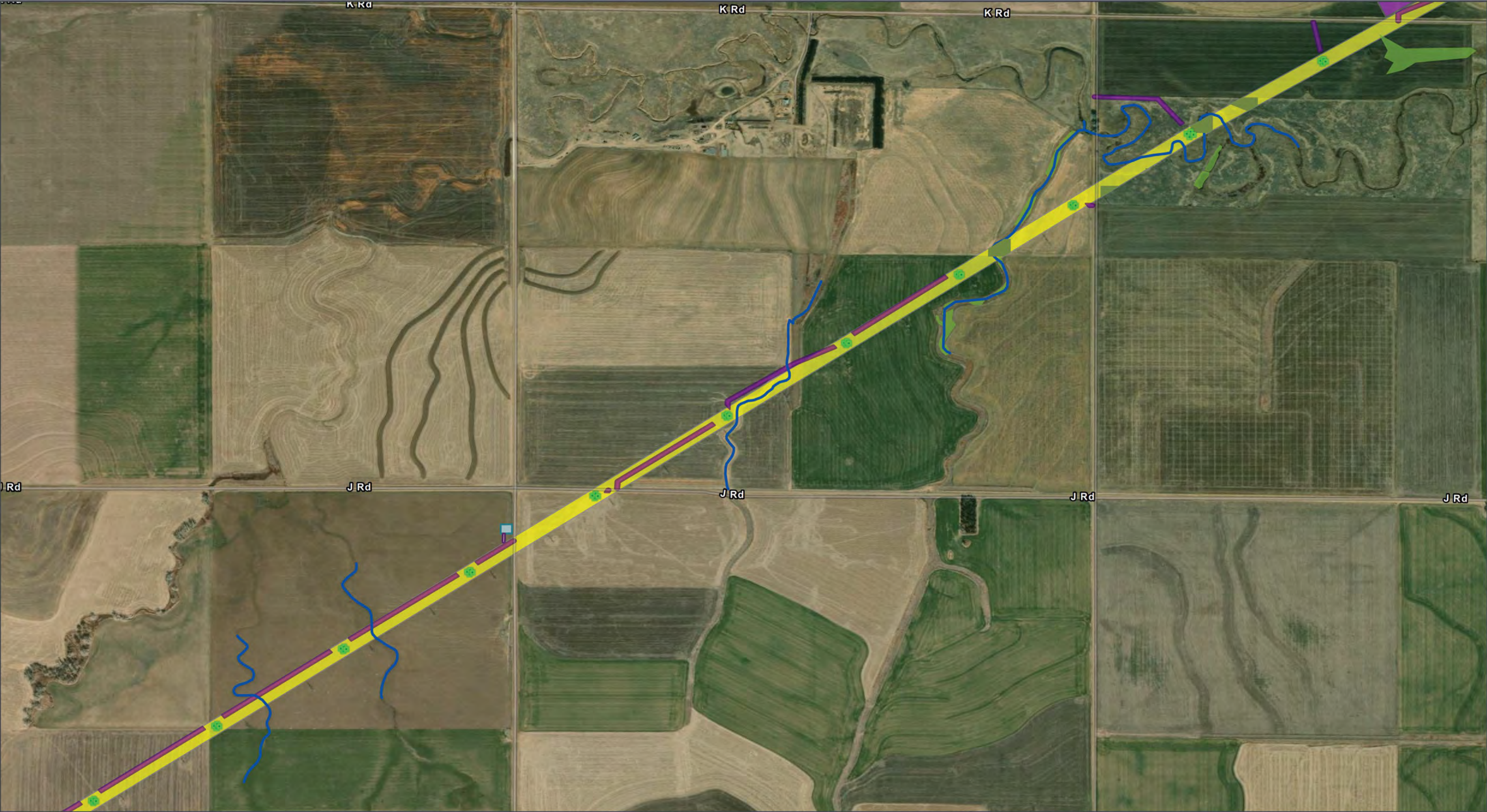
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Kansas and Missouri

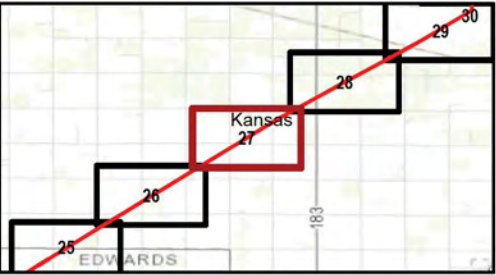




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 26 of 259

- |                                    |                                    |                           |
|------------------------------------|------------------------------------|---------------------------|
| ROW                                | OPGW Access                        | Helipad / Fly Yard        |
| <b>Permanent Project Component</b> | <b>Habitat Conversion</b>          | <b>Hydrology</b>          |
| Transmission Structure             | Vegetation Clearing                | Delineated Stream         |
| Optical Regeneration               | <b>Temporary Project Component</b> | <b>Delineated Wetland</b> |
|                                    | Access Road                        | Palustrine Emergent (PEM) |

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Kansas and Missouri  
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Base Map: Esri ArcGIS Online,  
accessed April 2025  
Updated: 4/9/2025  
Project No. 60694559  
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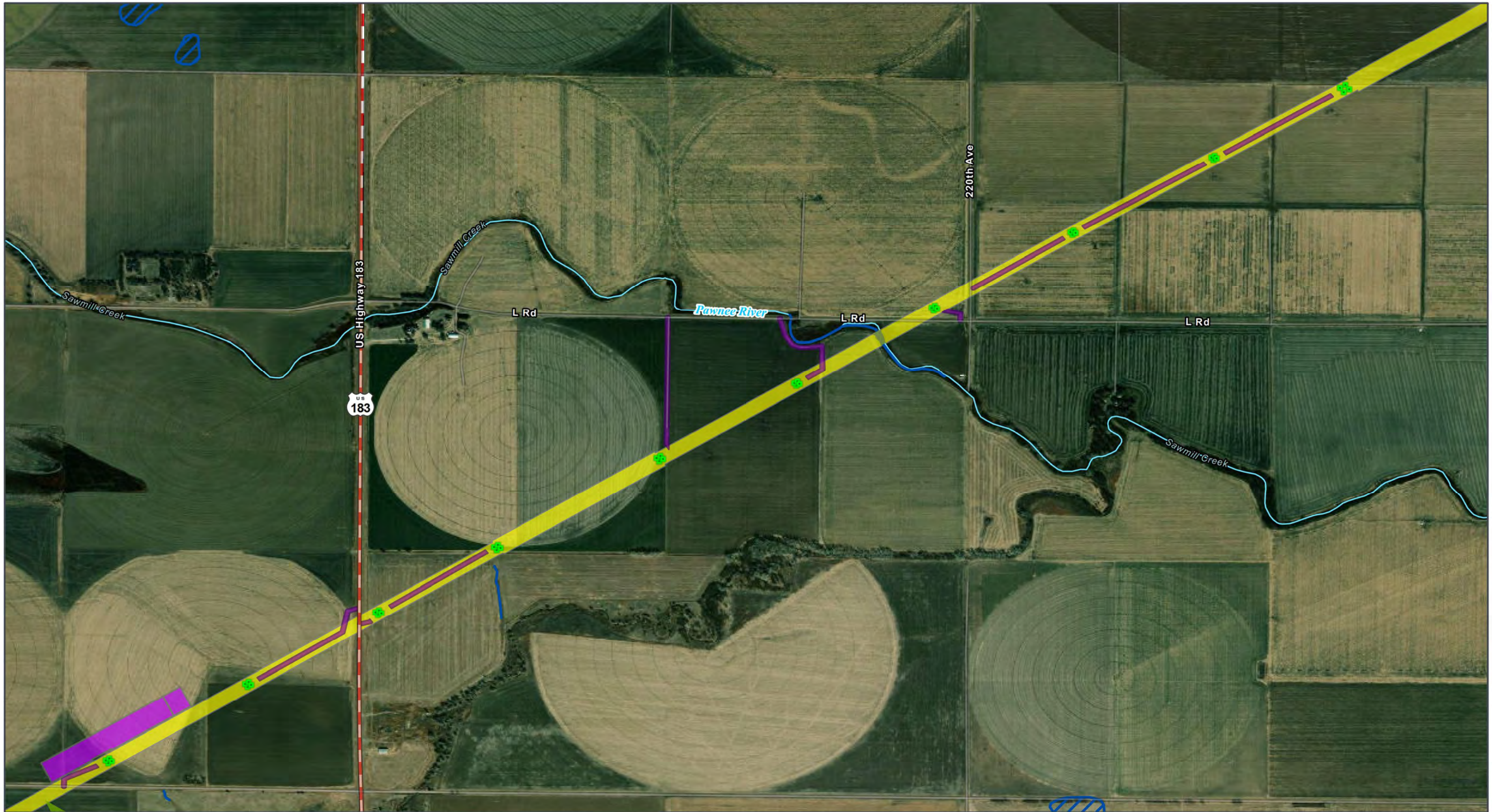
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Kansas and Missouri





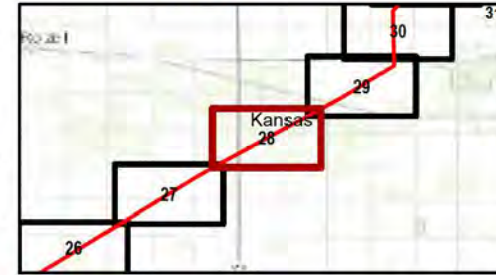
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 27 of 259

- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

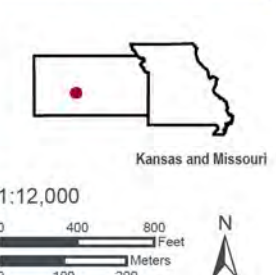
- Temporary Project Component**
- Access Road
- Helipad / Fly Yard
- Hydrology**
- Delineated Stream
- PLJV Playa

- NHD Stream/River
- Delineated Wetland**
- Palustrine Emergent (PEM)
- Transportation**
- U.S. Highway

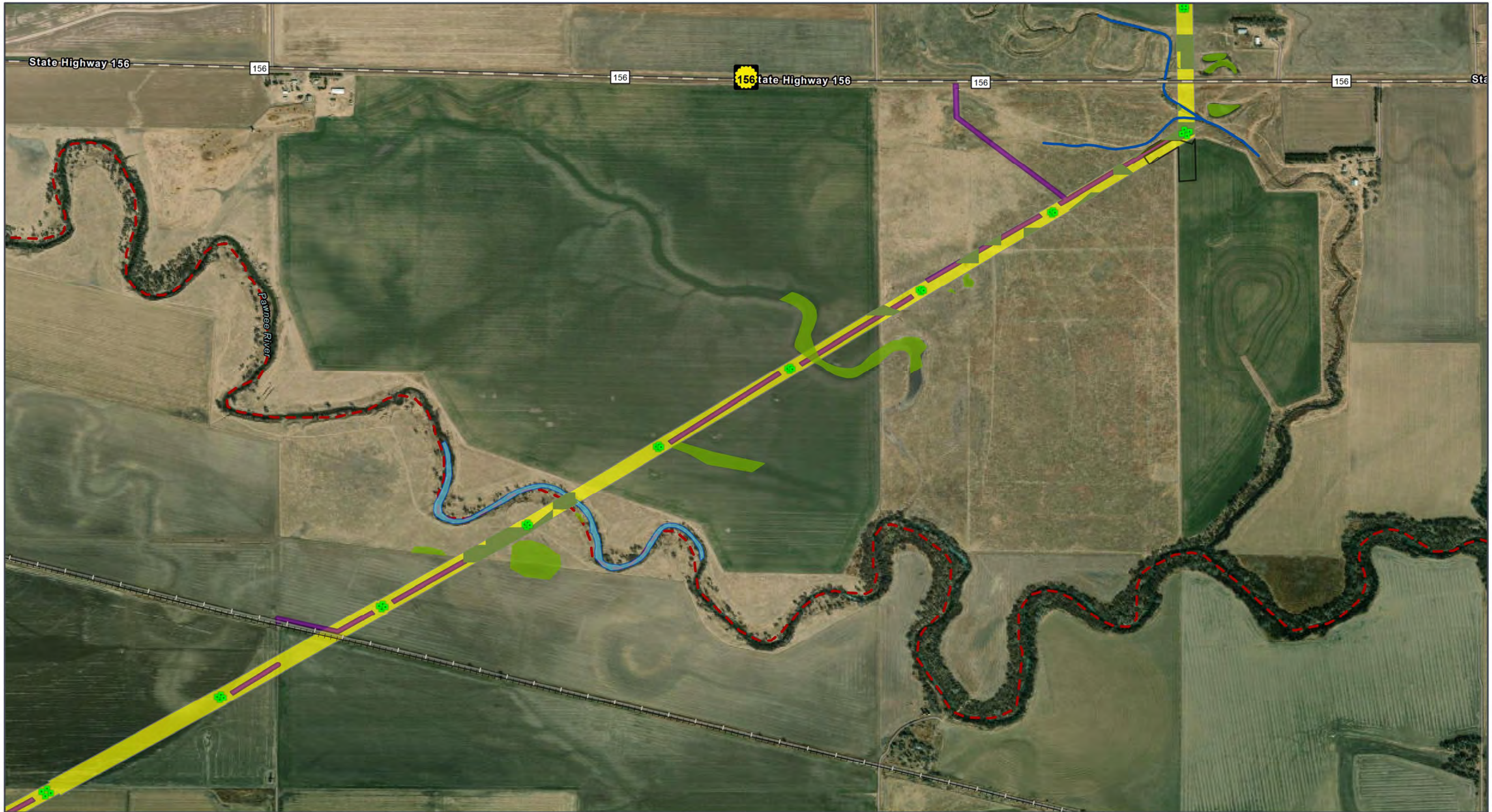
All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W  
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accessed November 2024  
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Project No. 60694559  
Layout: Wetland Mapbook 12k  
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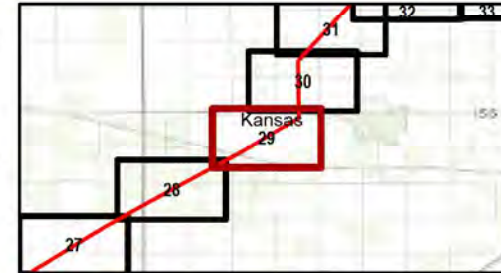
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 28 of 259

- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

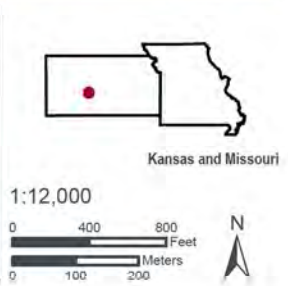
- Temporary Project Component**
- Access Road
- Pull Site/Tension Site
- Hydrology**
- Delineated Stream
- Impaired Waterway (303d)

- Delineated Wetland**
- Palustrine Emergent (PEM)
- Delineated Waterbody
- Transportation**
- State Highway
- Railroad

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Kansas and Missouri  
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38.3365°N 95.5783°W  
  
Base Map: Esri ArcGIS Online,  
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Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aron: WetlandMapBook\_12k







GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

**Wetlands Map Book**

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**Permanent Project Component**

- Transmission Structure

**Habitat Conversion**

- Vegetation Clearing

**Temporary Project Component**

- Access Road
- Pull Site/Tension Site

**Hydrology**

- Delineated Stream

**Delineated Wetland**

- PLJV Playa
- Palustrine Emergent (PEM)

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Kansas and Missouri

GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
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Project No. 60694559  
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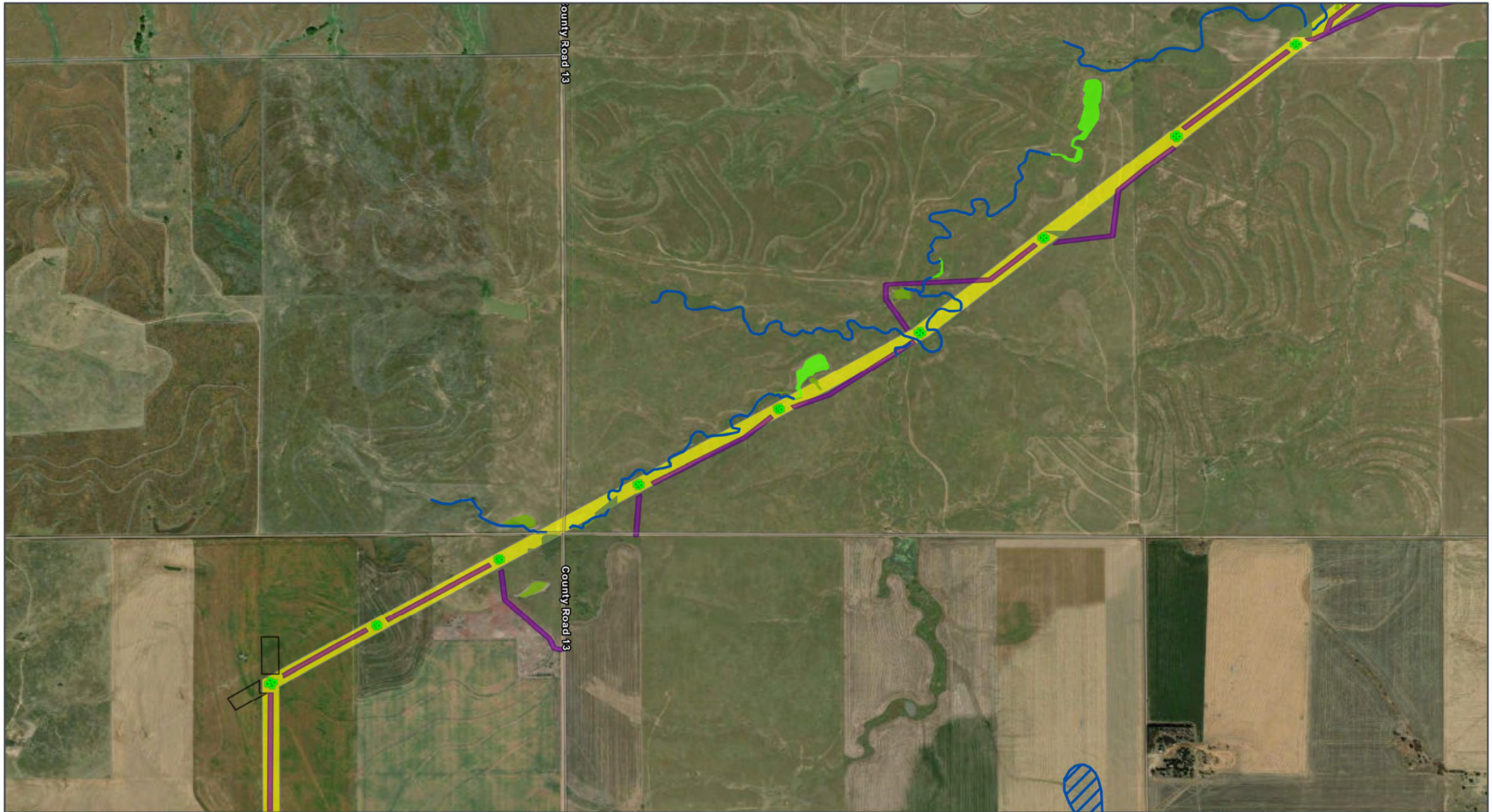
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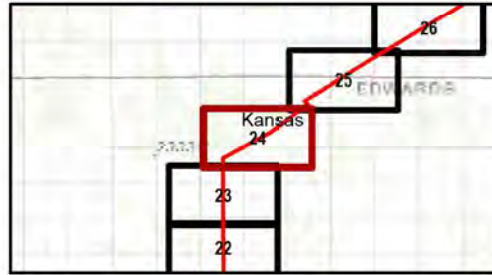
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
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**Permanent Project Component**  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

**Temporary Project Component**  
Access Road  
Pull Site/Tension Site  
**Hydrology**  
Delineated Stream

**Delineated Wetland**  
PLJV Playa  
Palustrine Emergent (PEM)  
Palustrine Unconsolidated Bottom (PUB)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
From: WetlandMapBook\_12k

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0 100 200 Meters

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Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

**Wetlands Map Book**

Map 31 of 259

 Grain Belt Express  
An Invenenergy Project

 ROW

**Permanent Project Component**

-  Transmission Structure

**Temporary Project Component**

-  Access Road

**Hydrology**

-  Delineated Stream

**Delineated Wetland**

-  Palustrine Emergent (PEM)

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Kansas and Missouri

GCS North American 1983  
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Project No. 60694559  
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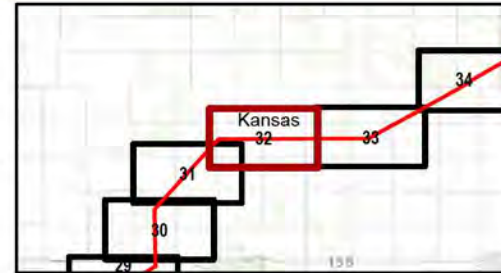
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 32 of 259

**ROW**  
Permanent Project Component  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

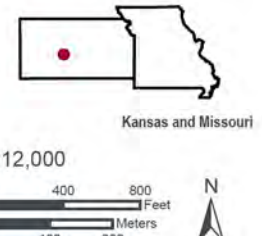
**Temporary Project Component**  
Access Road  
Helipad / Fly Yard  
Pull Site/Tension Site

**Hydrology**  
Delineated Stream  
PLJV Playa  
**Delineated Wetland**  
Palustrine Emergent (PEM)

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Kansas and Missouri  
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Project No. 60694559  
Layout: Wetland Mapbook 12k  
From: WetlandMapBook\_12k







GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

**Wetlands Map Book**

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**Permanent Project Component**

- Transmission Structure
- Habitat Conversion
- Vegetation Clearing

**Temporary Project Component**

- Access Road
- Pull Site/Tension Site

**Hydrology**

- Delineated Stream

**PLJV Playa**

- NHD Stream/River
- Impaired Waterway (303d)

**Delineated Wetland**

- Palustrine Emergent (PEM)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented

Kansas and Missouri

GCS North American 1983  
38.3365°N 95.5783°W

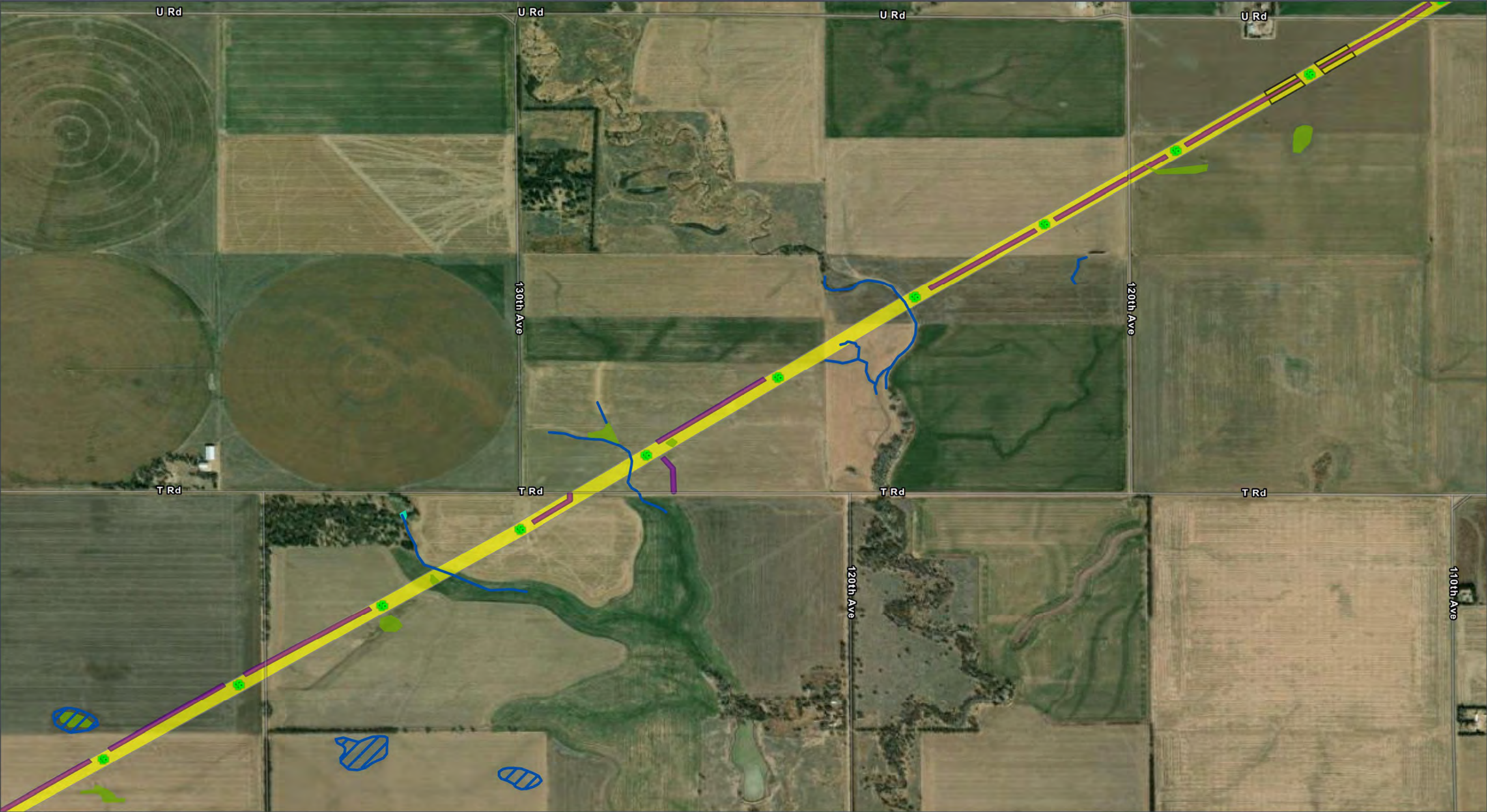
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Project No. 60694559  
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GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

**Wetlands Map Book**

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Grain Belt Express  
An Invenenergy Project

ROW

**Permanent Project Component**

Transmission Structure

**Temporary Project Component**

Access Road

Pull Site/Tension Site

**Hydrology**

Delineated Stream

PLJV Playa

**Delineated Wetland**

Palustrine Aquatic Bed (PAB)

Palustrine Emergent (PEM)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented

Kansas and Missouri

GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
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Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aero: WetlandMapBook\_12k

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GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

**Wetlands Map Book**

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 Grain Belt Express  
An Invenergy Project

 ROW

**Permanent Project Component**

-  Transmission Structure

**Temporary Project Component**

-  Access Road

 Pull Site/Tension Site

**Hydrology**

-  Delineated Stream

**Delineated Wetland**

-  Palustrine Emergent (PEM)

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Kansas and Missouri

GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
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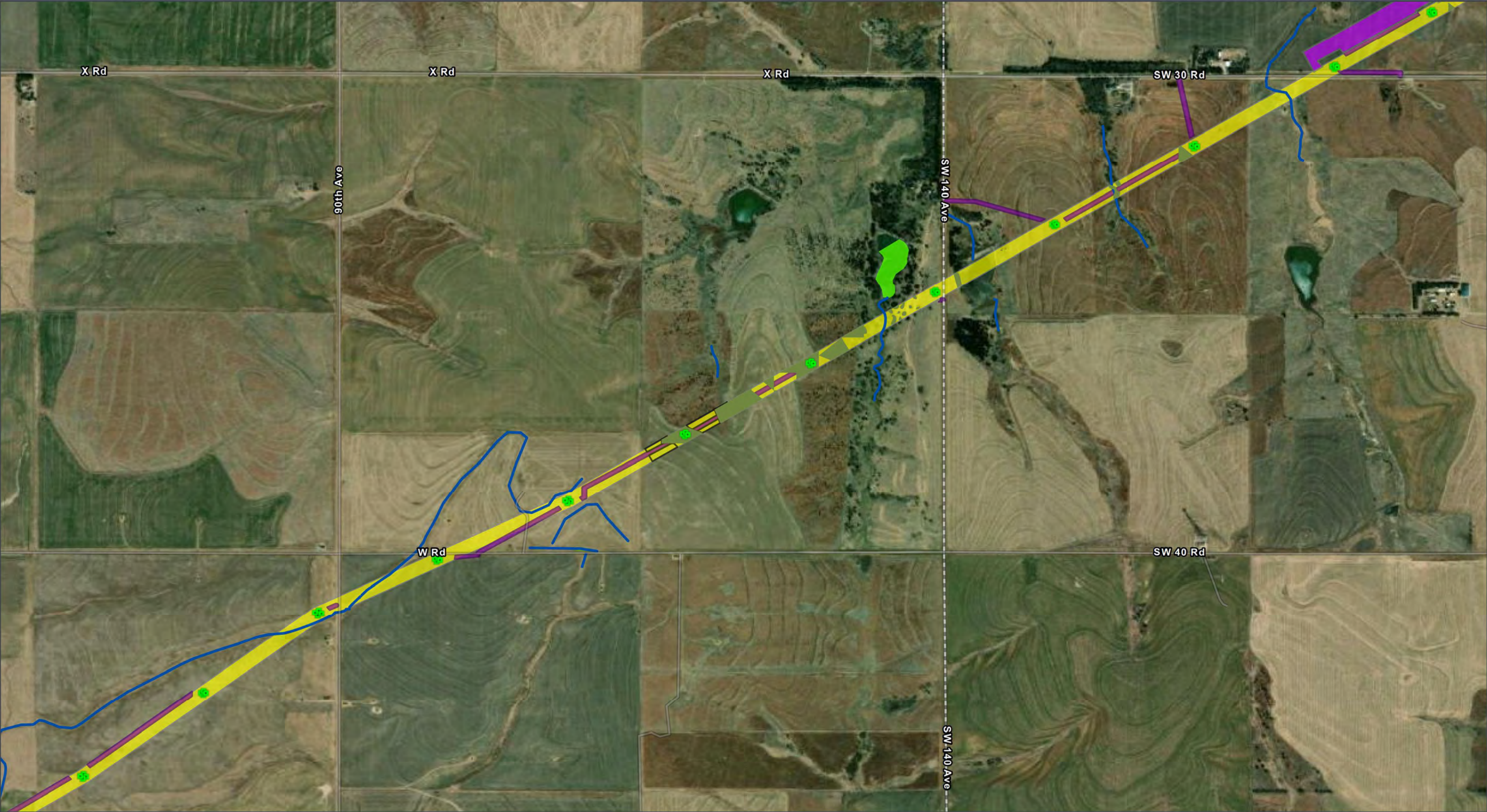
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GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

**Wetlands Map Book**

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Grain Belt Express  
An Invenery Project

**Permanent Project Component**

- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

**Temporary Project Component**

- Access Road
- Helipad / Fly Yard
- Pull Site/Tension Site

**Hydrology**

- Delineated Stream
- Delineated Wetland**
- Palustrine Emergent (PEM)
- Palustrine Unconsolidated Bottom (PUB)

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Kansas and Missouri

GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
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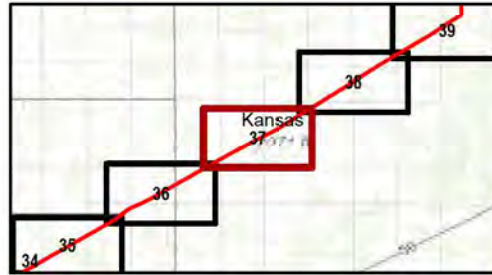
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 37 of 259

- ROW
- Permanent Project Component**
  - Transmission Structure
- Habitat Conversion**
  - Vegetation Clearing

- Temporary Project Component**
  - Access Road
  - Helipad / Fly Yard
  - Pull Site/Tension Site

- Hydrology**
  - Delineated Stream
- Delineated Wetland**
  - Palustrine Emergent (PEM)
  - Palustrine Unconsolidated Bottom (PUB)

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GCS North American 1983  
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Updated: 11/26/2024  
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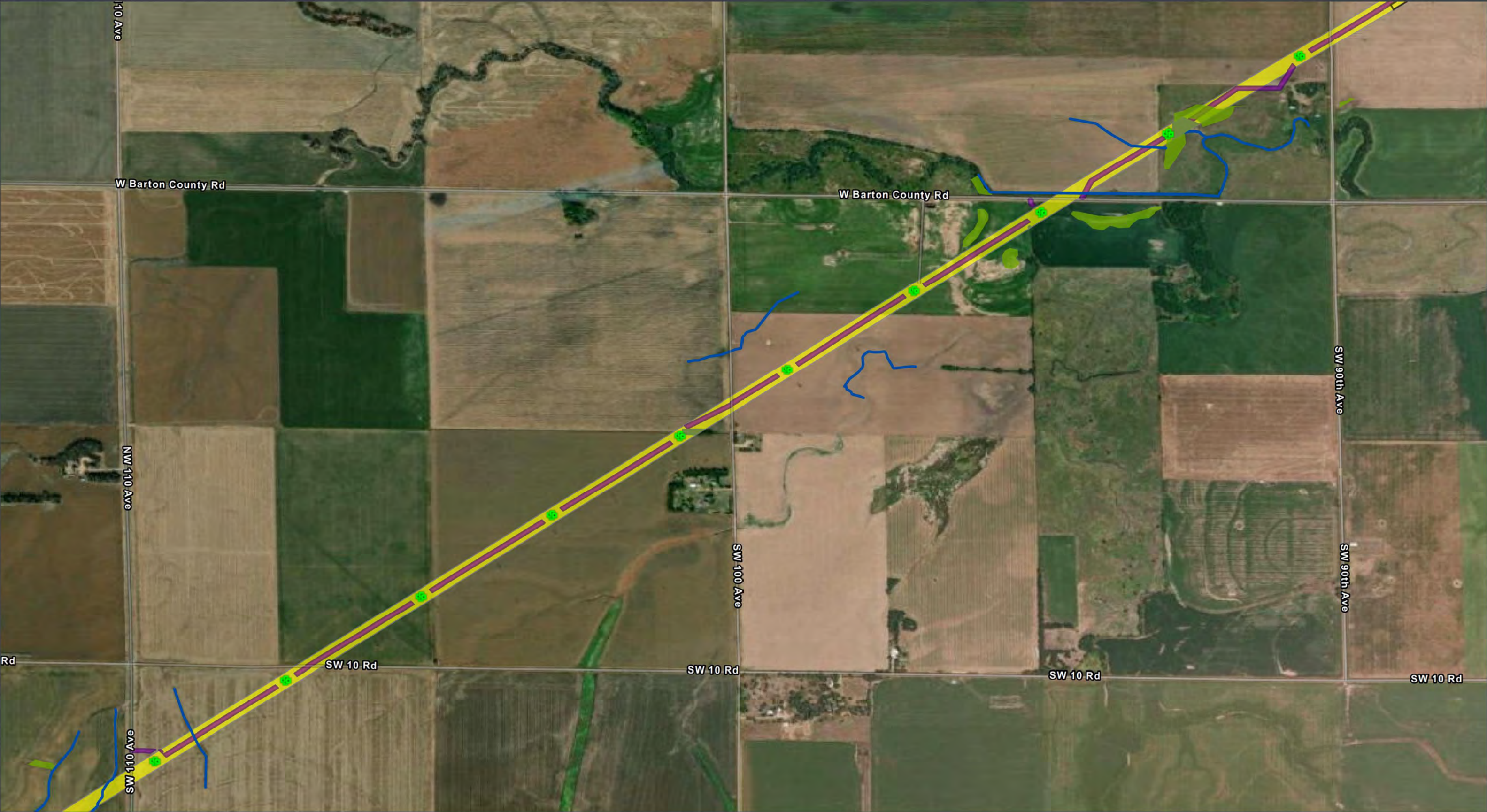
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Kansas and Missouri

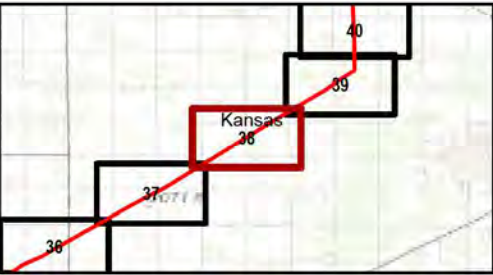




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 38 of 259

- |  |   |  |
|--|---|--|
| <b>ROW</b><br>Permanent Project Component<br>Transmission Structure<br>Habitat Conversion<br>Vegetation Clearing | <b>Temporary Project Component</b><br>Access Road<br>Pull Site/Tension Site<br>Hydrology<br>Delineated Stream | <b>Delineated Wetland</b><br>Palustrine Emergent (PEM) |
|--|---|--|

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



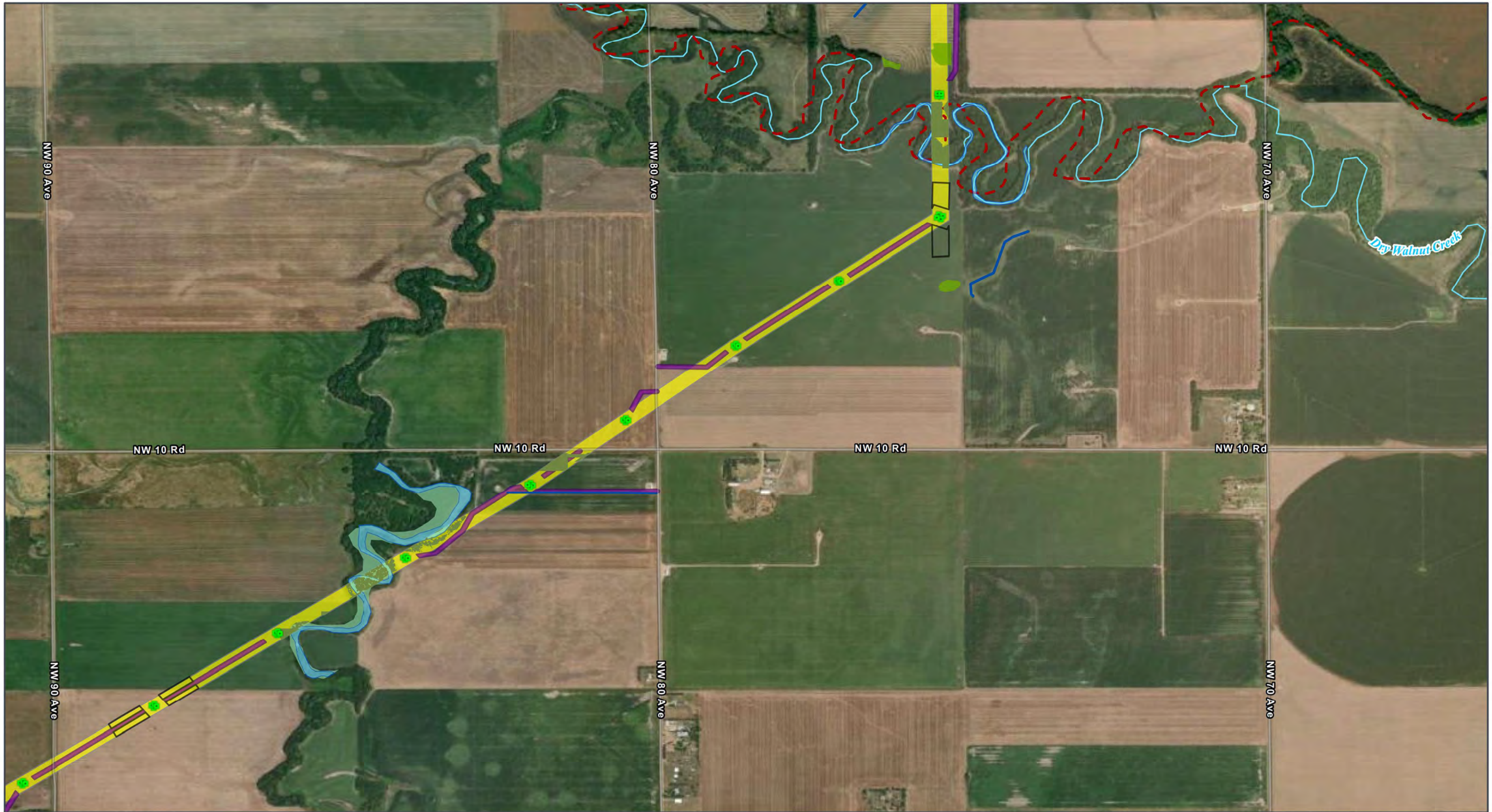
Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
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Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
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ROW

**Permanent Project Component**

Transmission Structure

**Habitat Conversion**

Vegetation Clearing

**Temporary Project Component**

Access Road

Pull Site/Tension Site

**Hydrology**

Delineated Stream

NHD Stream/River

Impaired Waterway (303d)

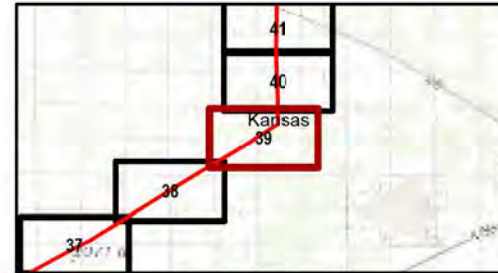
**Delineated Wetland**

Palustrine Emergent (PEM)

Palustrine Scrub-Shrub (PSS)

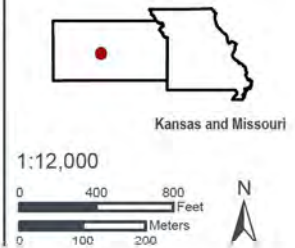
Delineated Waterbody

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented

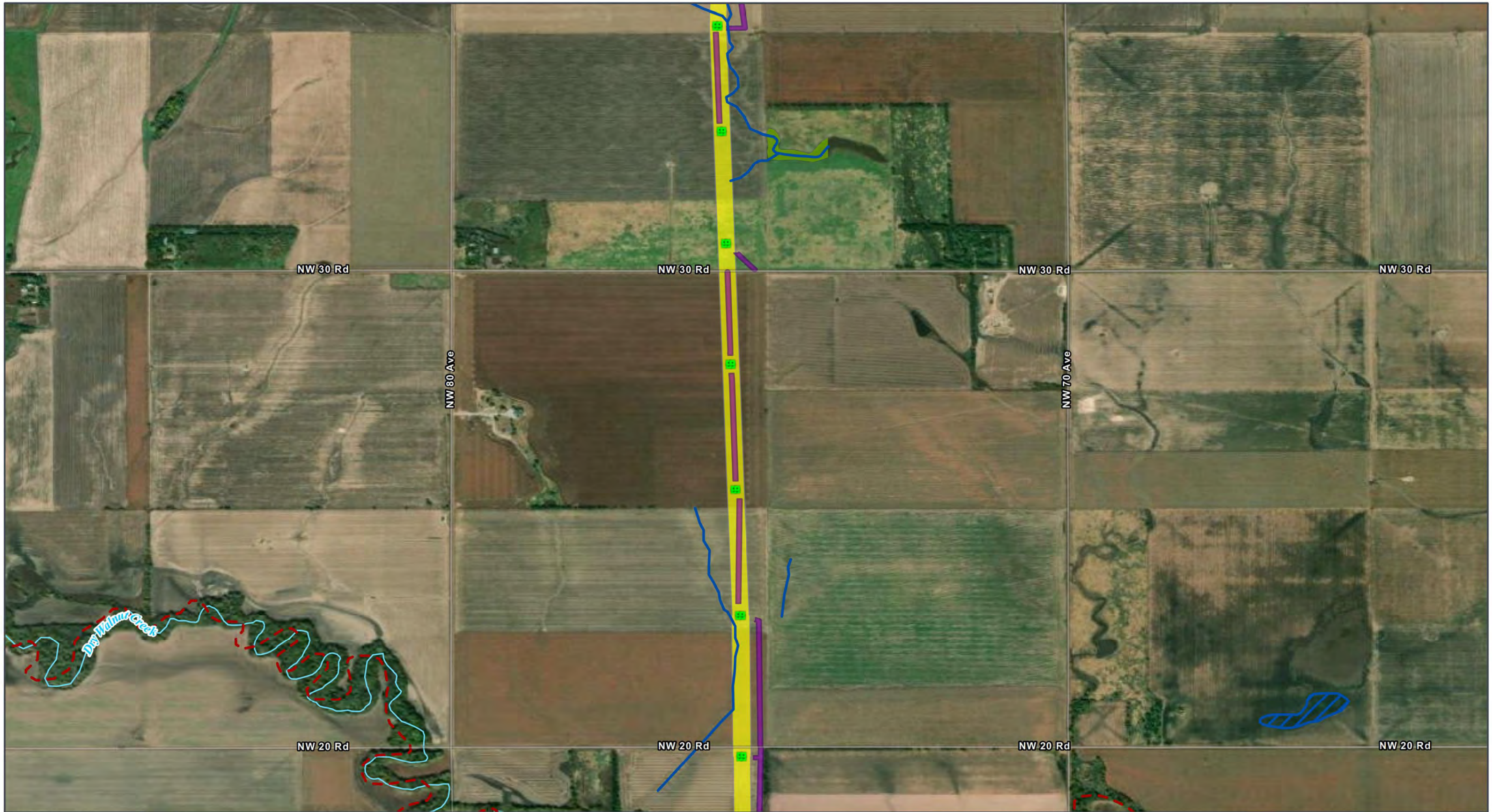


Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
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Updated: 11/26/2024  
Project No. 60694559  
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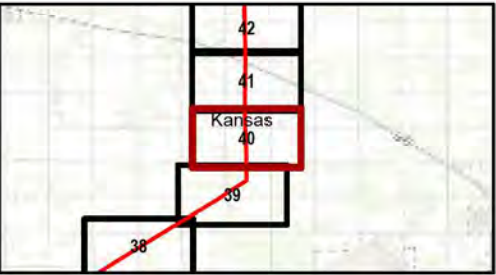




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 40 of 259

- ROW**
- Permanent Project Component**
- Transmission Structure
- Temporary Project Component**
- Access Road
- Hydrology**
- Delineated Stream
  - PLJV Playa
  - NHD Stream/River
  - Impaired Waterway (303d)
- Delineated Wetland**
- Palustrine Emergent (PEM)

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
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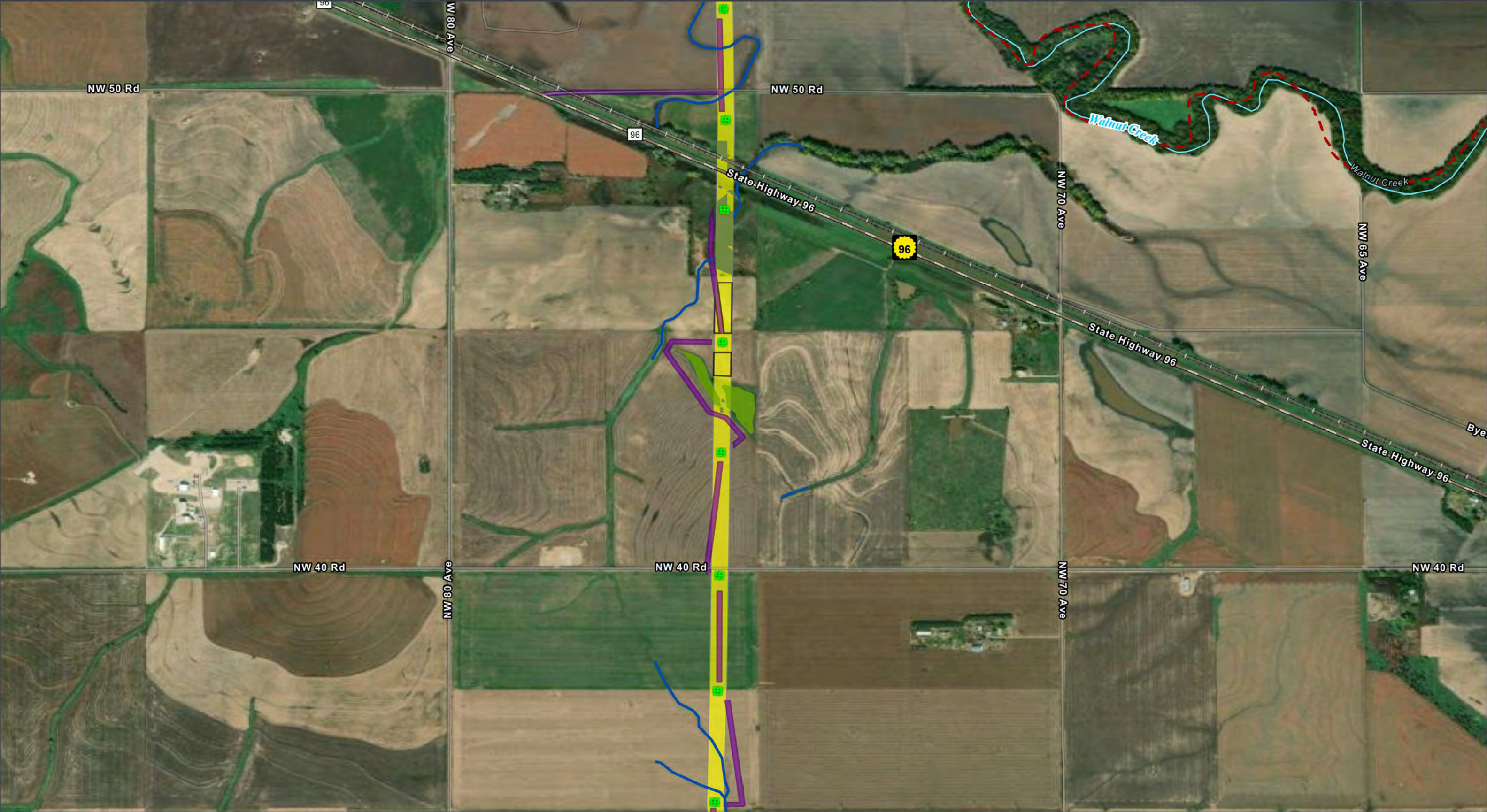
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0 400 800 Feet  
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Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

**Wetlands Map Book**

Map 41 of 259

**Permanent Project Component**

- Transmission Structure

**Habitat Conversion**

- Vegetation Clearing

**Temporary Project Component**

- Access Road
- Pull Site/Tension Site

**Hydrology**

- Delineated Stream
- NHD Stream/River

**Delineated Wetland**

- Palustrine Emergent (PEM)

**Transportation**

- State Highway
- Railroad

**Impaired Waterway (303d)**

- Impaired Waterway (303d)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented

Kansas and Missouri

GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
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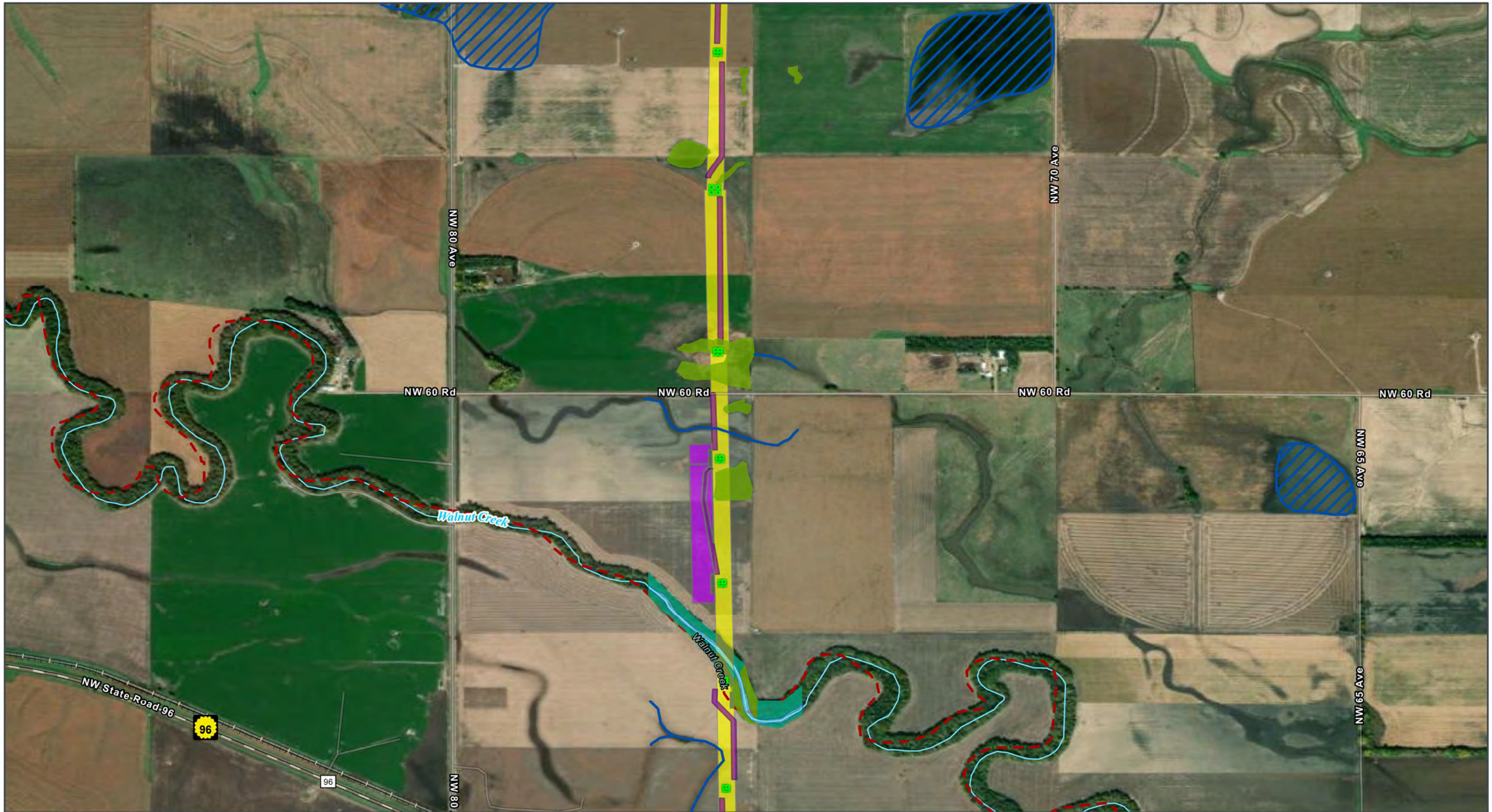
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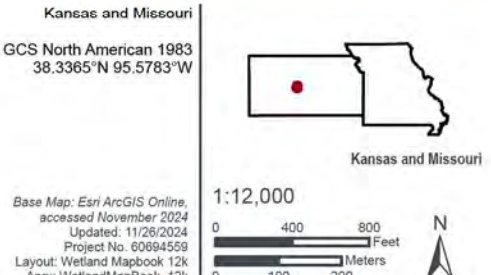
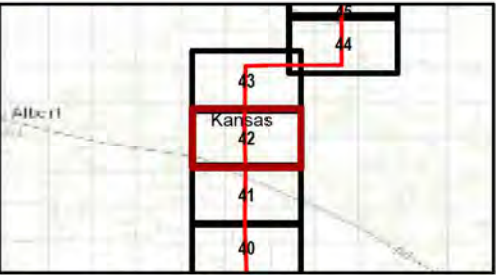


GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 42 of 259

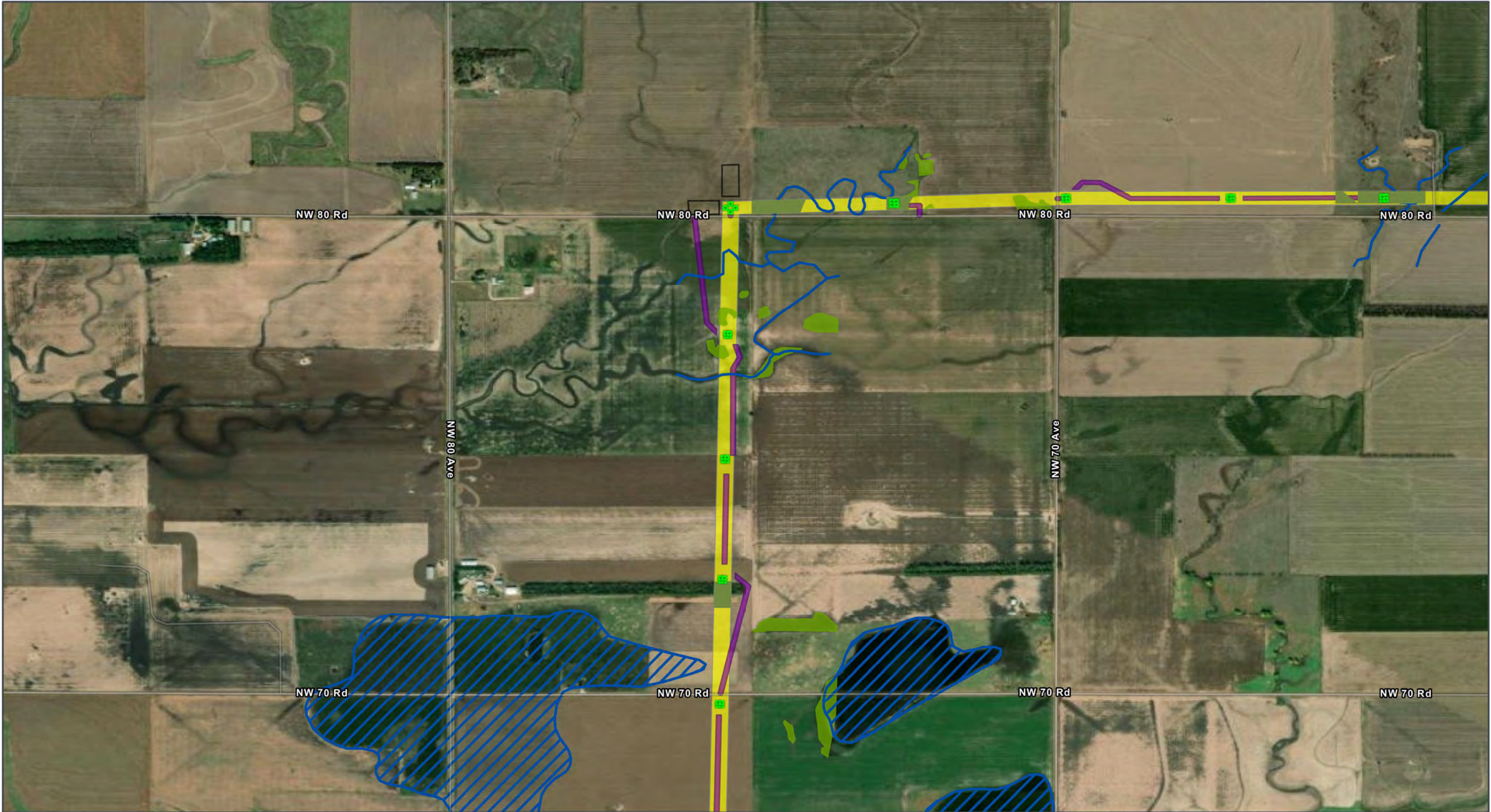
- |                                    |                           |
|------------------------------------|---------------------------|
| <b>ROW</b>                         | <b>Helipad / Fly Yard</b> |
| <b>Permanent Project Component</b> | <b>Hydrology</b>          |
| Transmission Structure             | Delineated Stream         |
| <b>Habitat Conversion</b>          | PLJV Playa                |
| Vegetation Clearing                | NHD Stream/River          |
| <b>Temporary Project Component</b> | Impaired Waterway (303d)  |
| Access Road                        |                           |

- |                           |
|---------------------------|
| <b>Delineated Wetland</b> |
| Palustrine Emergent (PEM) |
| Palustrine Forested (PFO) |
| Delineated Waterbody      |
| <b>Transportation</b>     |
| State Highway             |
| Railroad                  |

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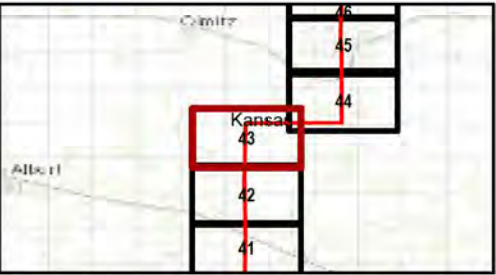
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 43 of 259

**Permanent Project Component**  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

**Temporary Project Component**  
Access Road  
Pull Site/Tension Site  
**Hydrology**  
Delineated Stream

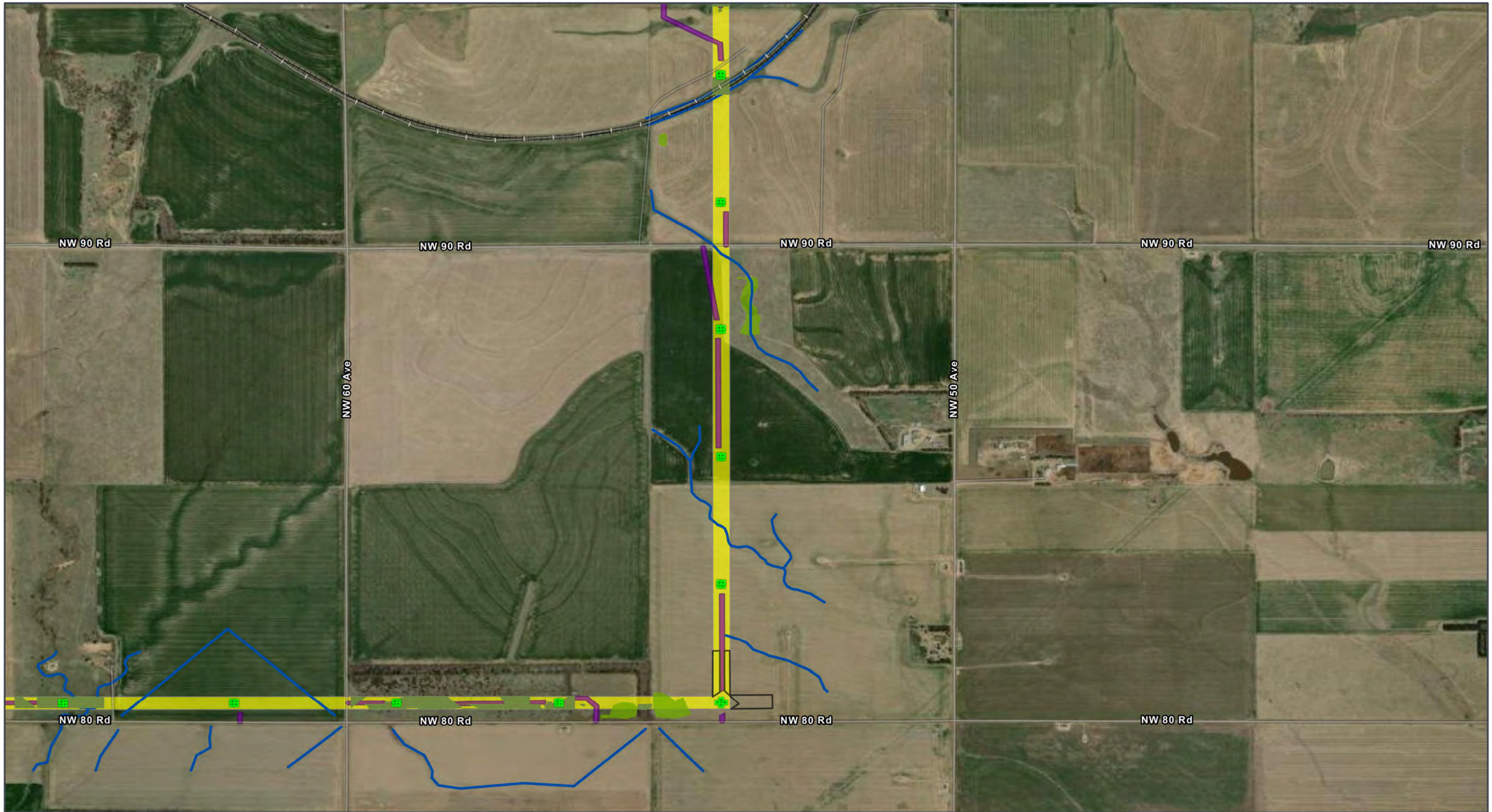
**Delineated Wetland**  
PLJV Playa  
Palustrine Emergent (PEM)

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W  
Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
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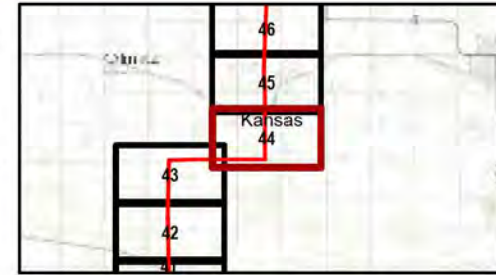
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 44 of 259

**ROW**  
Permanent Project Component  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

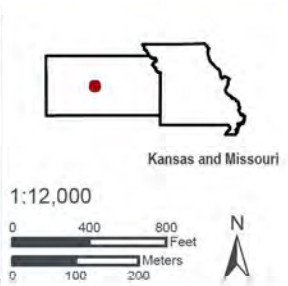
**Temporary Project Component**  
Access Road  
Pull Site/Tension Site  
**Hydrology**  
Delineated Stream

**Delineated Wetland**  
Palustrine Emergent (PEM)  
**Transportation**  
Railroad

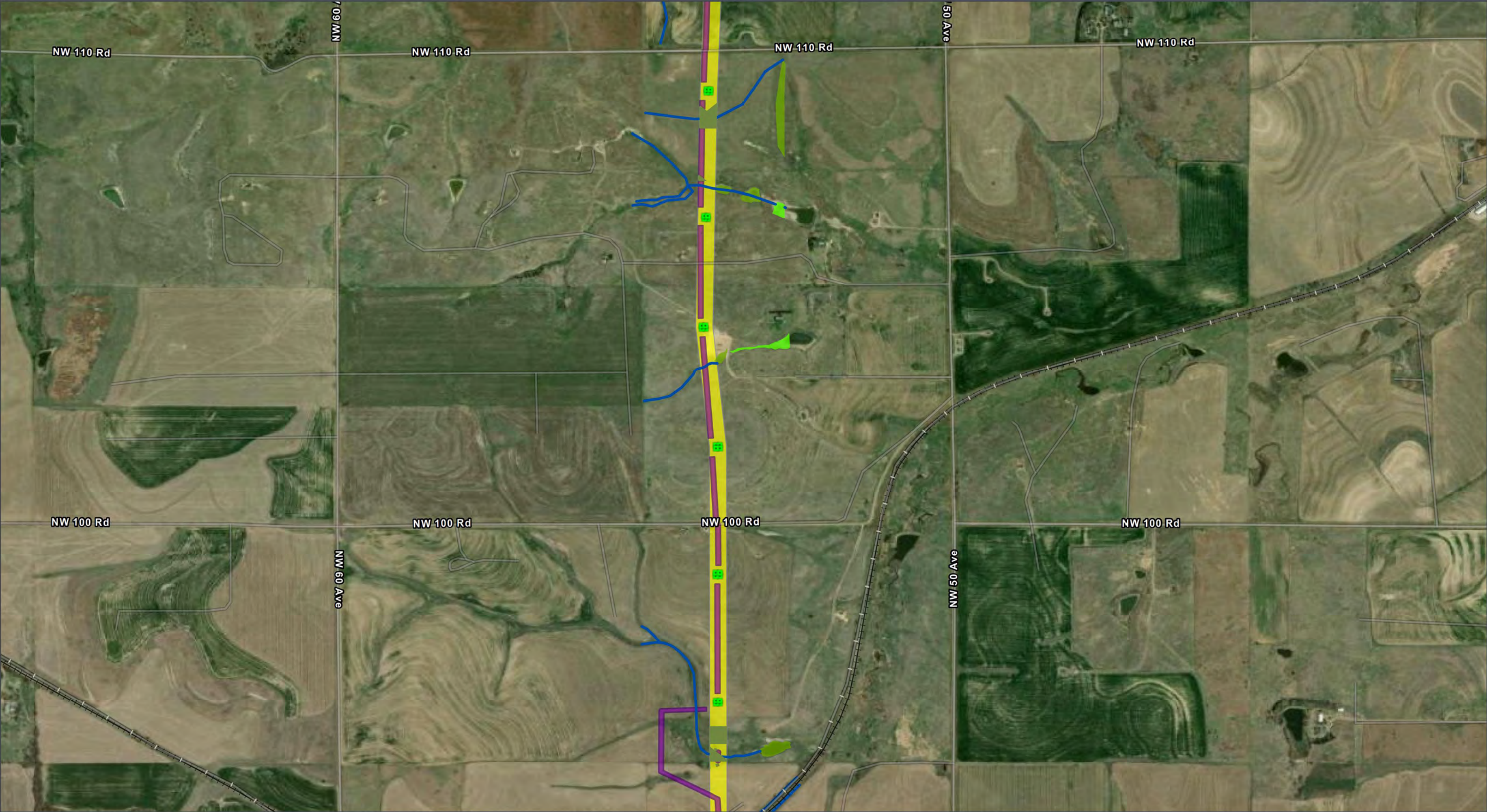
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Kansas and Missouri  
GCS North American 1983  
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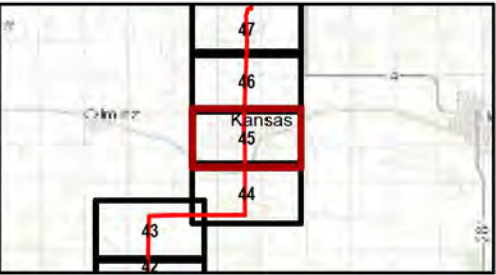




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 45 of 259

- |                          |  |  |  |
|--------------------------|--|--|--|
| <b>ROW</b><br>Yellow box | <b>Permanent Project Component</b><br>Green square: Transmission Structure<br>Dark green box: Habitat Conversion<br>Light green box: Vegetation Clearing | <b>Temporary Project Component</b><br>Purple box: Access Road<br><b>Hydrology</b><br>Blue line: Delineated Stream<br><b>Delineated Wetland</b><br>Light green box: Palustrine Emergent (PEM) | <b>Palustrine Unconsolidated Bottom (PUB)</b><br>Light green box<br><b>Transportation</b><br>Black line with cross-ticks: Railroad |
|--------------------------|--|--|--|

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
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Updated: 11/26/2024  
Project No. 60694559  
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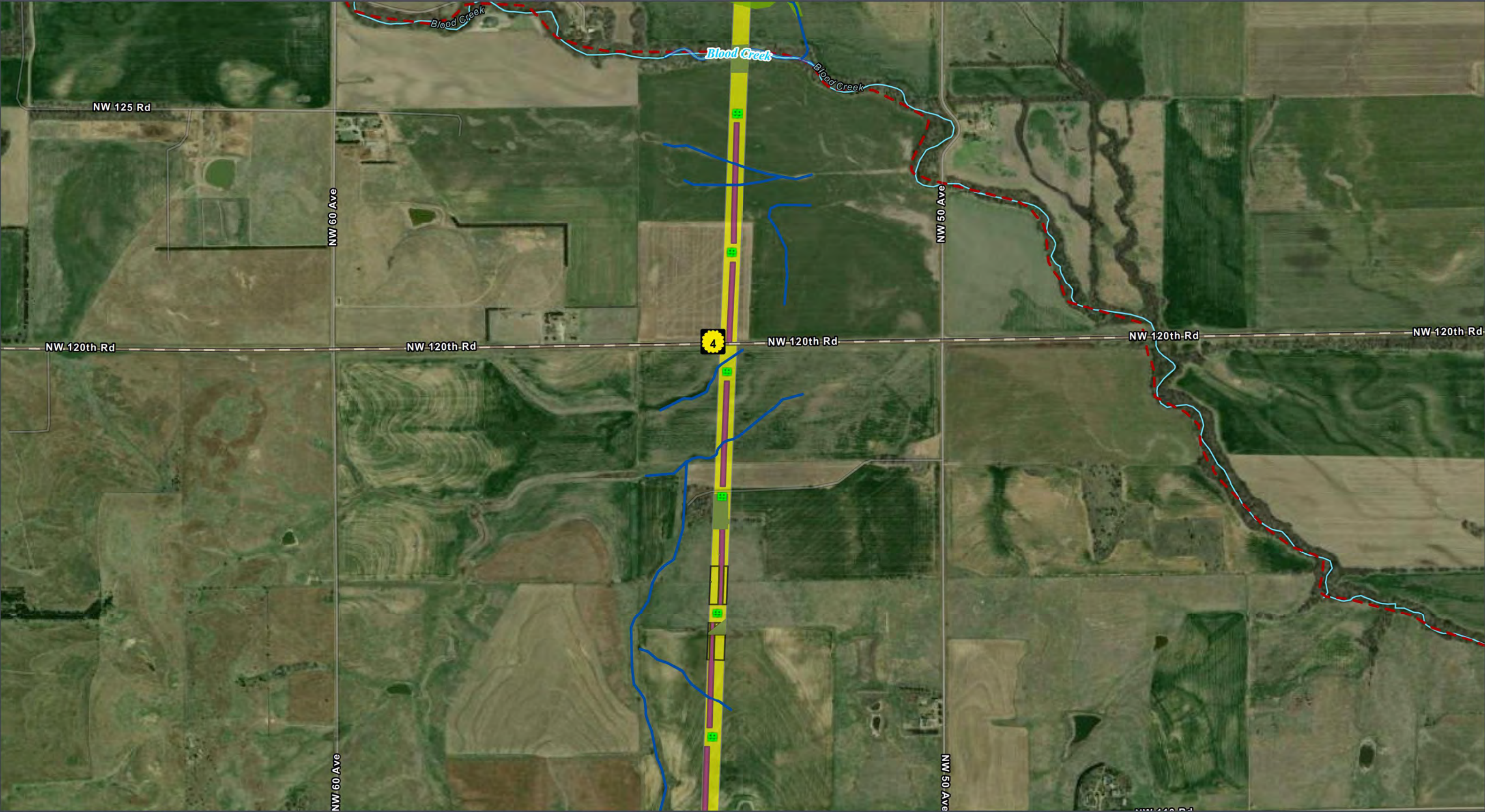
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Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 46 of 259

- |  |   |  |   |   |
|--|---|--|---|---|
| <b>ROW</b><br>Yellow rectangle   | <b>Permanent Project Component</b><br>Green square: Transmission Structure      | <b>Temporary Project Component</b><br>Purple rectangle: Access Road<br>White rectangle: Pull Site/Tension Site | <b>Impaired Waterway (303d)</b><br>Red dashed line  | <b>Delineated Wetland</b><br>Light green rectangle: Palustrine Emergent (PEM) |
| <b>Habitat Conversion</b><br>Dark green rectangle: Vegetation Clearing | <b>Hydrology</b><br>Blue line: Delineated Stream<br>Cyan line: NHD Stream/River | <b>Transportation</b><br>Black line: State Highway   | <b>Delineated Waterbody</b><br>Light blue rectangle |   |

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online, accessed November 2024  
Updated: 11/26/2024  
Project No: 60694559  
Layout: Wetland Mapbook 12k  
From: WetlandMapBook\_12k

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0 400 800 Feet  
0 100 200 Meters

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GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 47 of 259

- Permanent Project Component**
- Transmission Structure
  - Optical Regeneration
  - OPGW Access
  - Habitat Conversion**
  - Vegetation Clearing

- Temporary Project Component**
- Access Road
  - Pull Site/Tension Site
  - Hydrology**
  - Delineated Stream
  - PLJV Playa
  - NHD Stream/River

- Delineated Wetland**
- Palustrine Emergent (PEM)
  - Palustrine Unconsolidated Bottom (PUB)
  - Delineated Waterbody

Impaired Waterway (303d)

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W



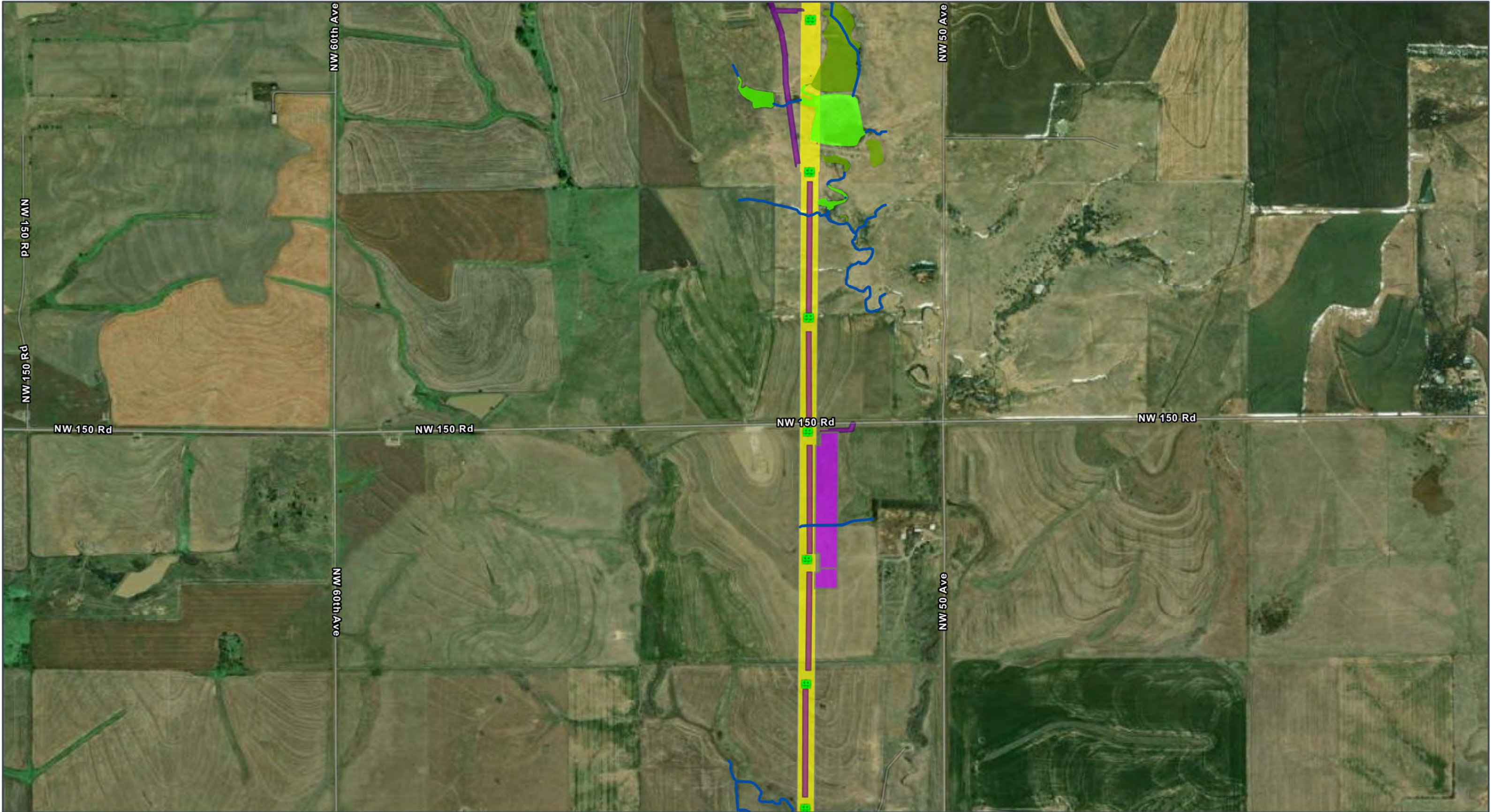
Base Map: Esri ArcGIS Online,  
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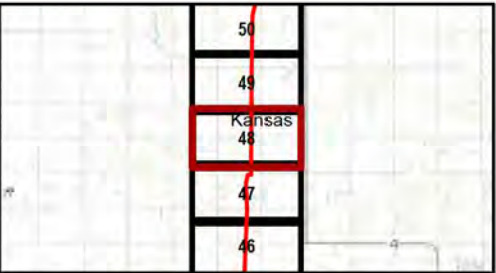
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 48 of 259

- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

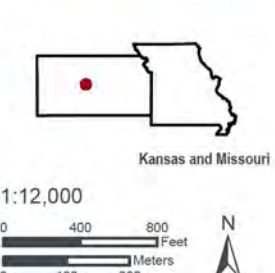
- Temporary Project Component**
- Access Road
- Helipad / Fly Yard
- Hydrology**
- Delineated Stream

- Delineated Wetland**
- Palustrine Emergent (PEM)
- Palustrine Unconsolidated Bottom (PUB)

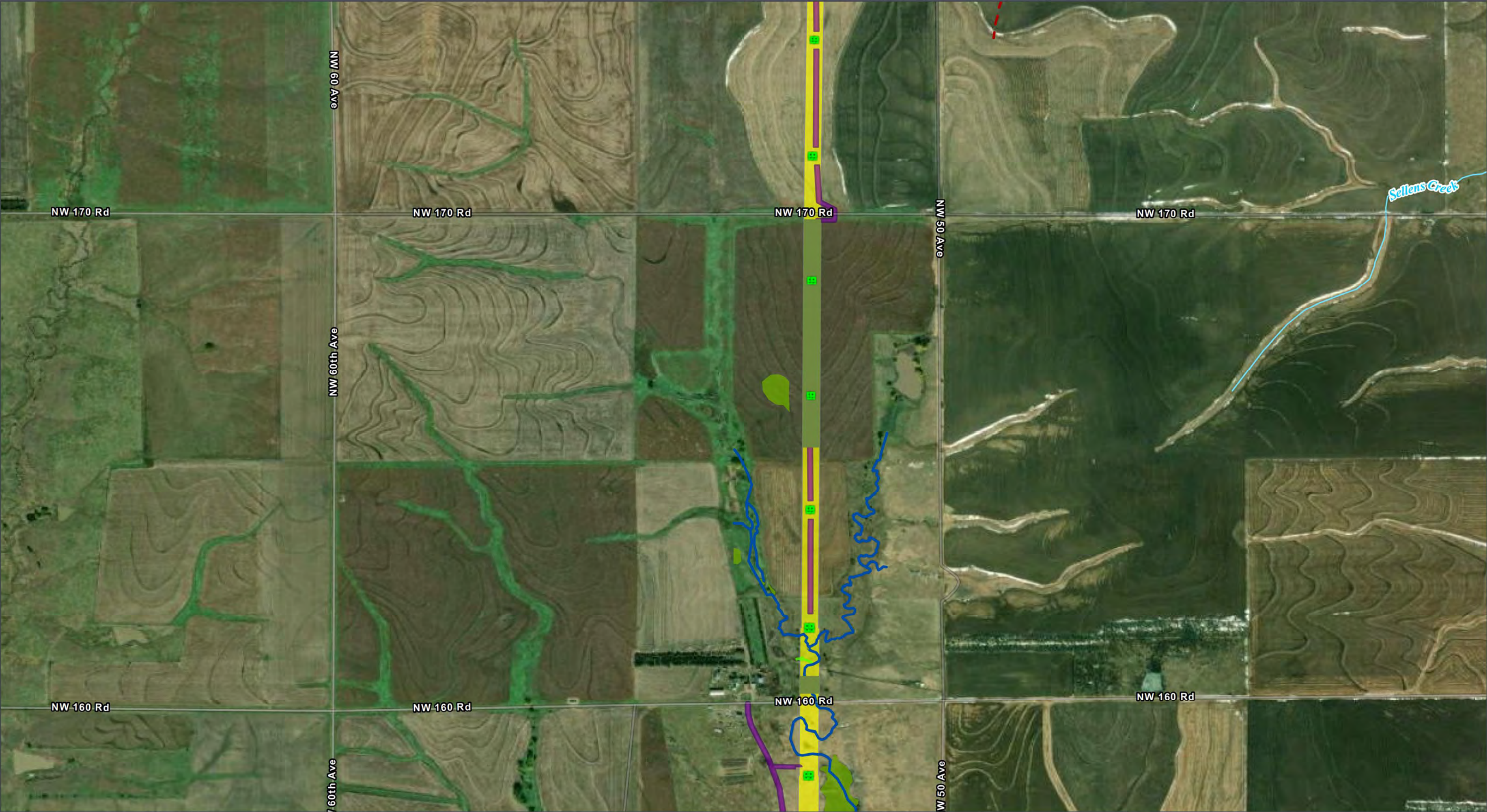
All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W  
  
Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Acrs: WetlandMapBook\_12k







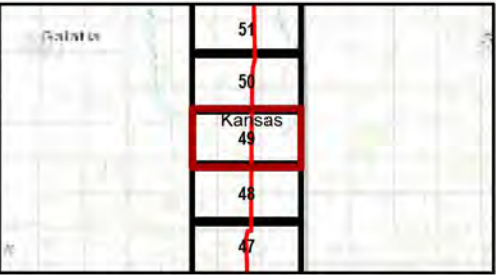
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 49 of 259

- ROW**
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

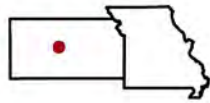
- Temporary Project Component**
- Access Road
- Hydrology**
- Delineated Stream
  - NHD Stream/River

- Impaired Waterway (303d)**
- Delineated Wetland**
- Palustrine Emergent (PEM)
  - Palustrine Unconsolidated Bottom (PUB)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W



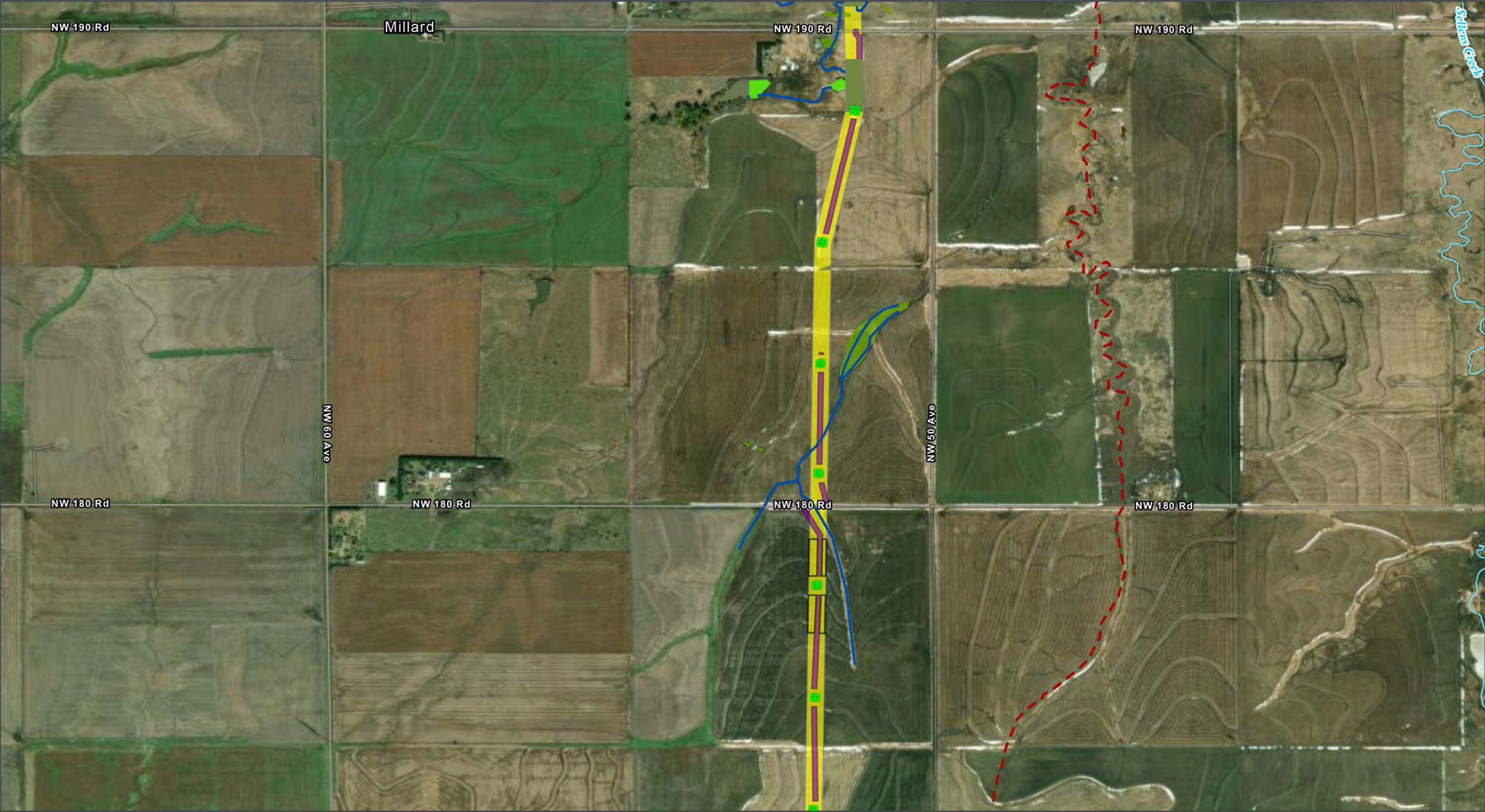
Kansas and Missouri

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Acrs: WetlandMapBook\_12k

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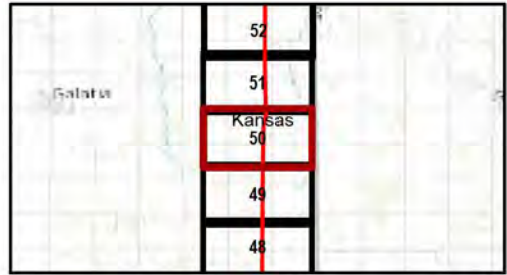




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 50 of 259

- |                           |  |   |  |   |  |
|---------------------------|--|---|--|---|--|
| <b>ROW</b><br>Yellow line | <b>Permanent Project Component</b><br>Green dot: Transmission Structure<br>Green area: Habitat Conversion<br>Green area: Vegetation Clearing | <b>Temporary Project Component</b><br>Purple line: Access Road<br>White box: Pull Site/Tension Site | <b>Hydrology</b><br>Blue line: Delineated Stream | <b>Delineated Wetland</b><br>Light green area: Palustrine Emergent (PEM)<br>Dark green area: Palustrine Unconsolidated Bottom (PUB) | <b>NHD Stream/River</b><br>Blue line<br><b>Impaired Waterway (303d)</b><br>Red dashed line |
|---------------------------|--|---|--|---|--|

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



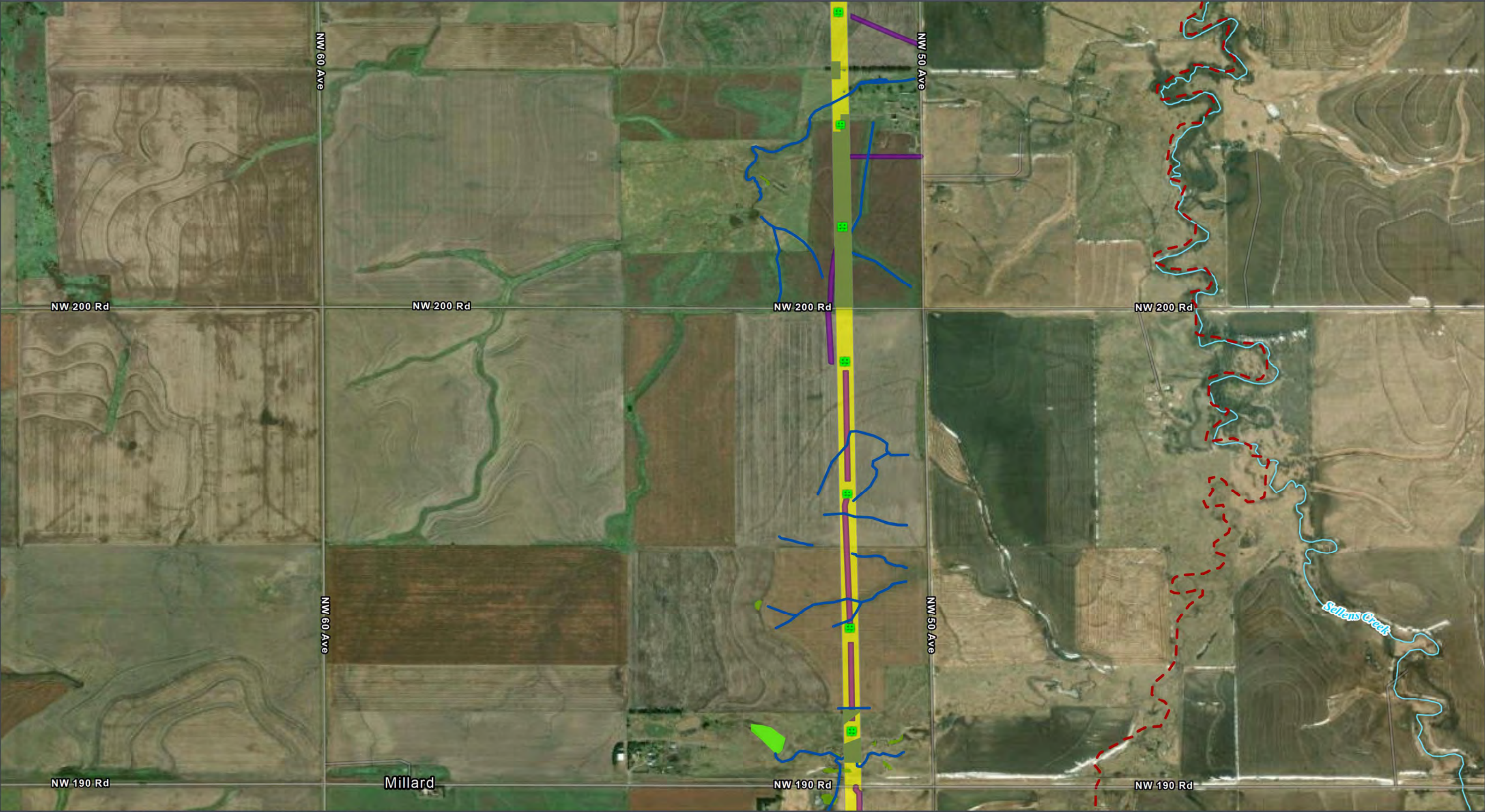
Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online, accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Acor: WetlandMapBook\_12k

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0 100 200 Meters

Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
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Map 51 of 259

- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

- Temporary Project Component**
- Access Road
- Hydrology**
- Delineated Stream
- NHD Stream/River

- Impaired Waterway (303d)
- Delineated Wetland**
- Palustrine Emergent (PEM)
- Palustrine Unconsolidated Bottom (PUB)

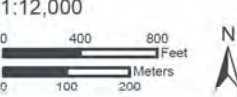
All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



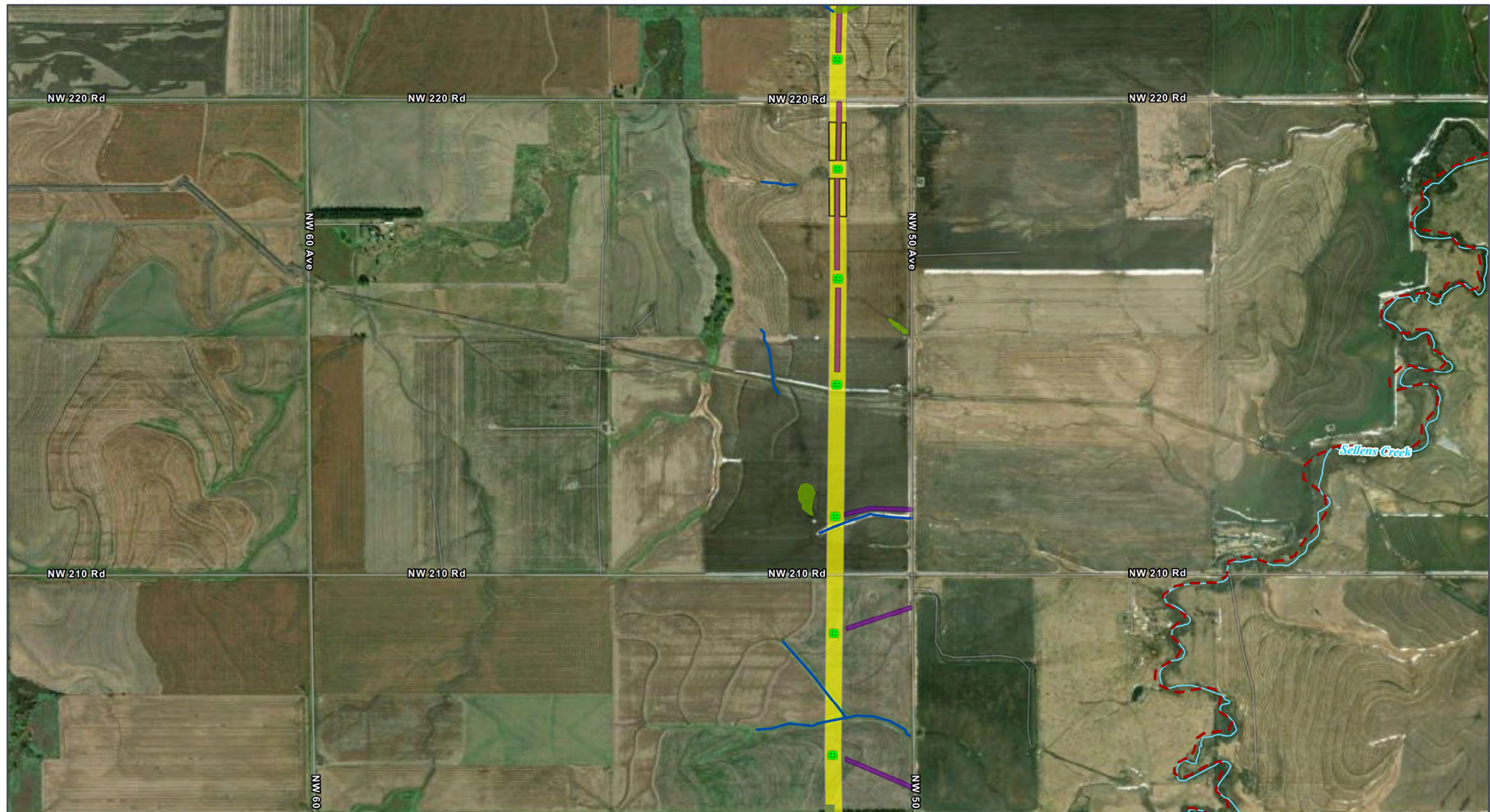
Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W



Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Acrs: WetlandMapBook\_12k
















GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

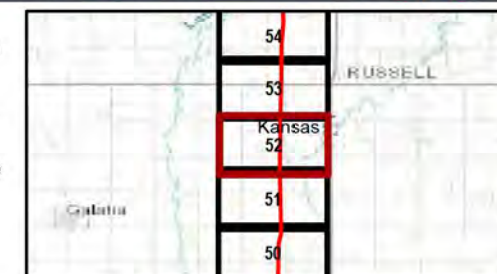
## Wetlands Map Book

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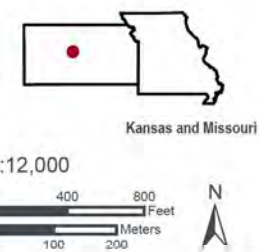
-  ROW  
**Permanent Project Component**  
 Transmission Structure  
**Habitat Conversion**  
 Vegetation Clearing
- Temporary Project Component**  
 Access Road  
 Pull Site/Tension Site  
**Hydrology**  
 Delineated Stream
-  NHD Stream/River  
 Impaired Waterway (303d)  
**Delineated Wetland**  
 Palustrine Emergent (PEM)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented.

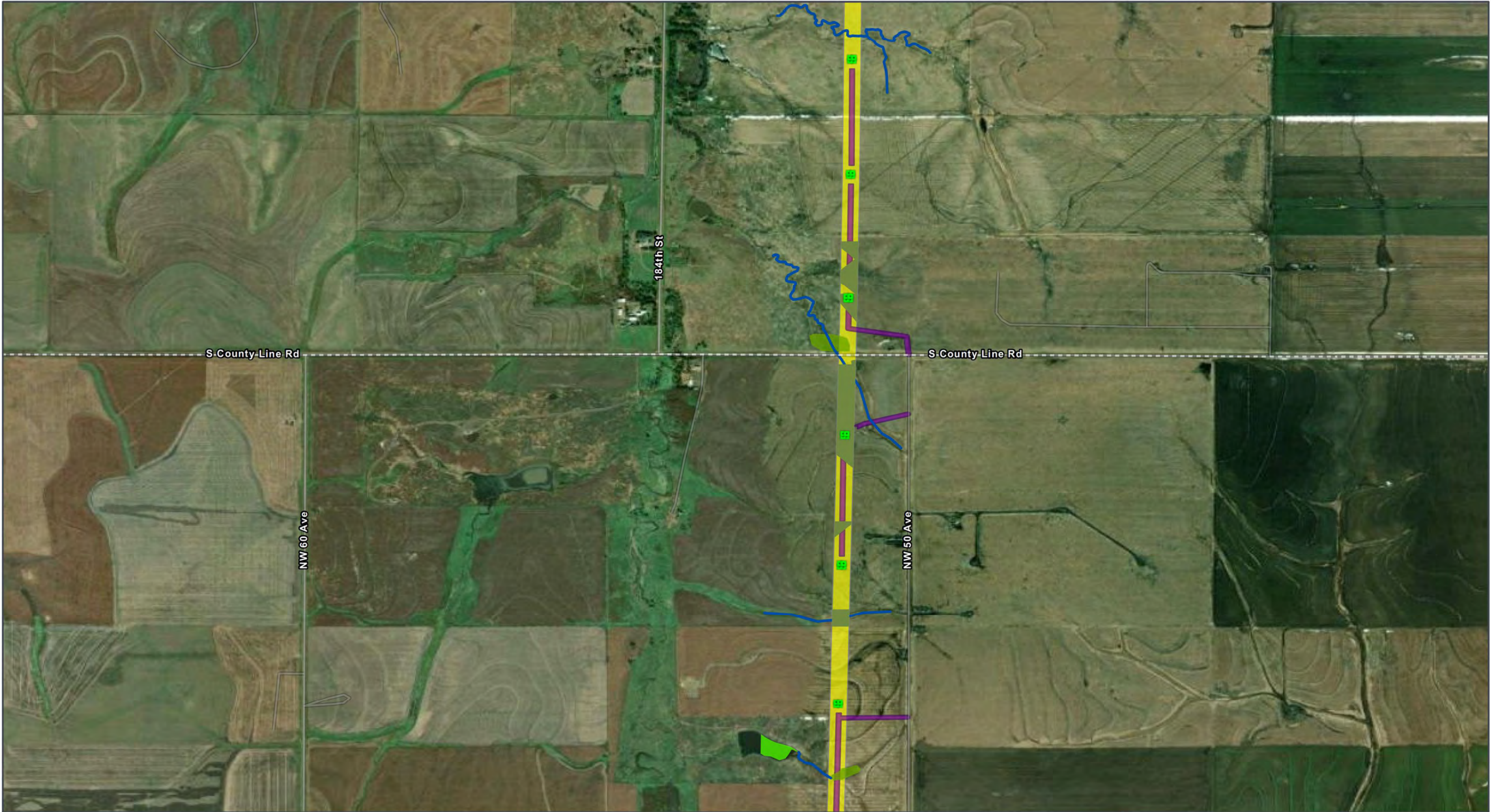


Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
ArcX: WetlandMapBook\_12k







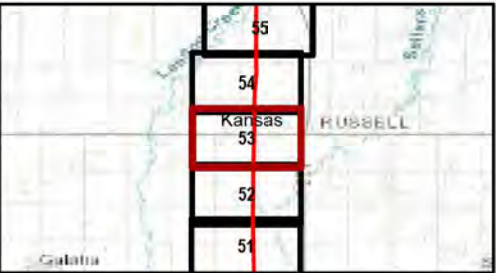
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 53 of 259

**ROW**  
Permanent Project Component  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

**Temporary Project Component**  
Access Road  
**Hydrology**  
Delineated Stream

**Delineated Wetland**  
Palustrine Emergent (PEM)  
Palustrine Unconsolidated Bottom (PUB)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W



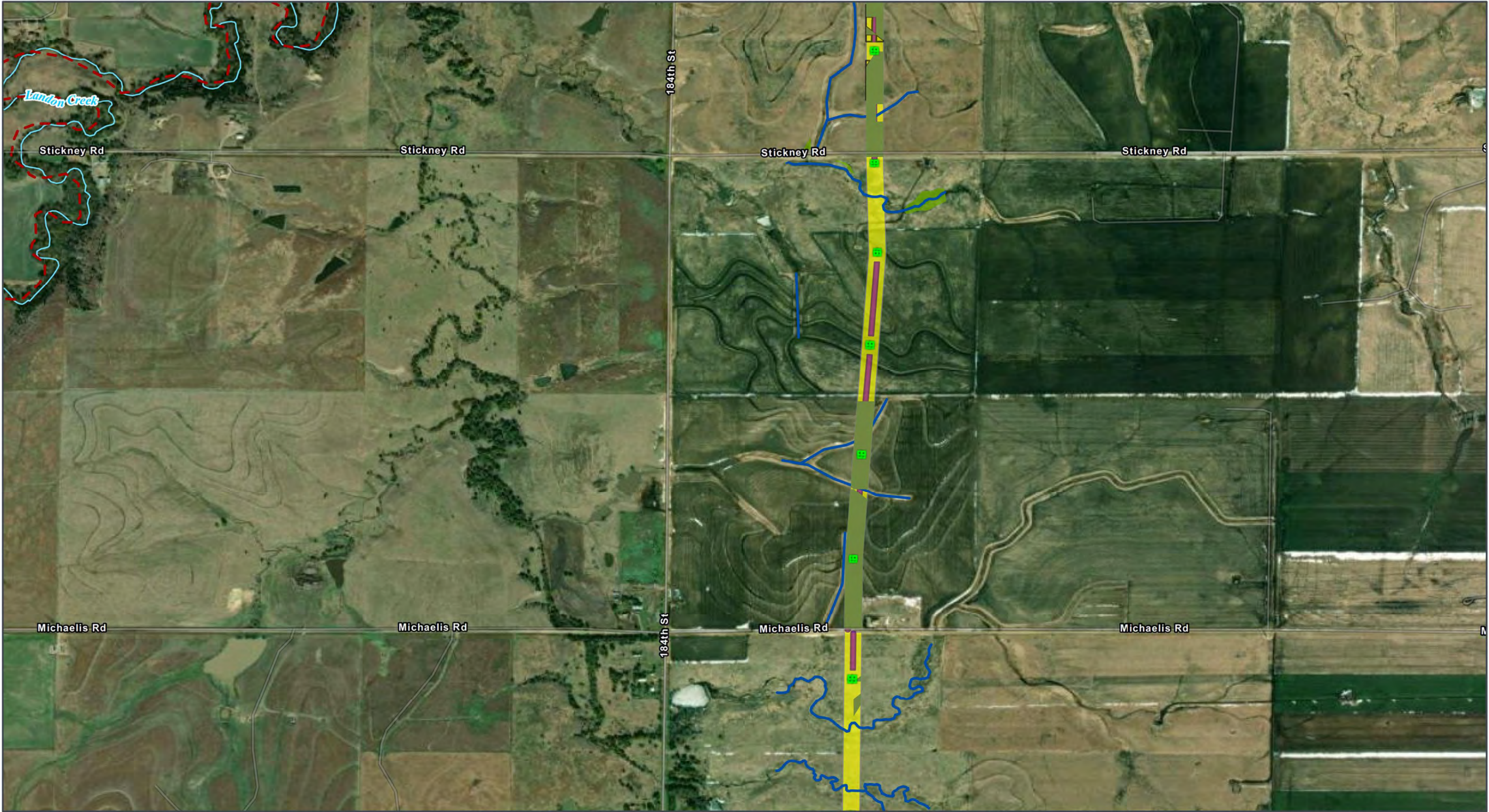
Kansas and Missouri

Base Map: Esri ArcGIS Online,  
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Project No. 60694559  
Layout: Wetland Mapbook 12k  
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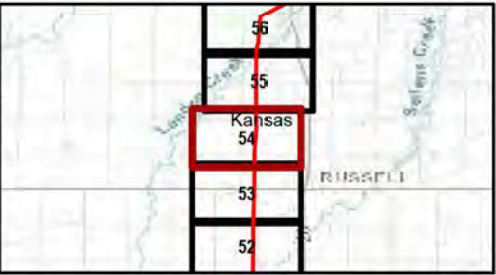
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
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- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

- Temporary Project Component**
- Access Road
  - Pull Site/Tension Site
- Hydrology**
- Delineated Stream

- NHD Stream/River**
- Impaired Waterway (303d)
- Delineated Wetland**
- Palustrine Emergent (PEM)

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12K  
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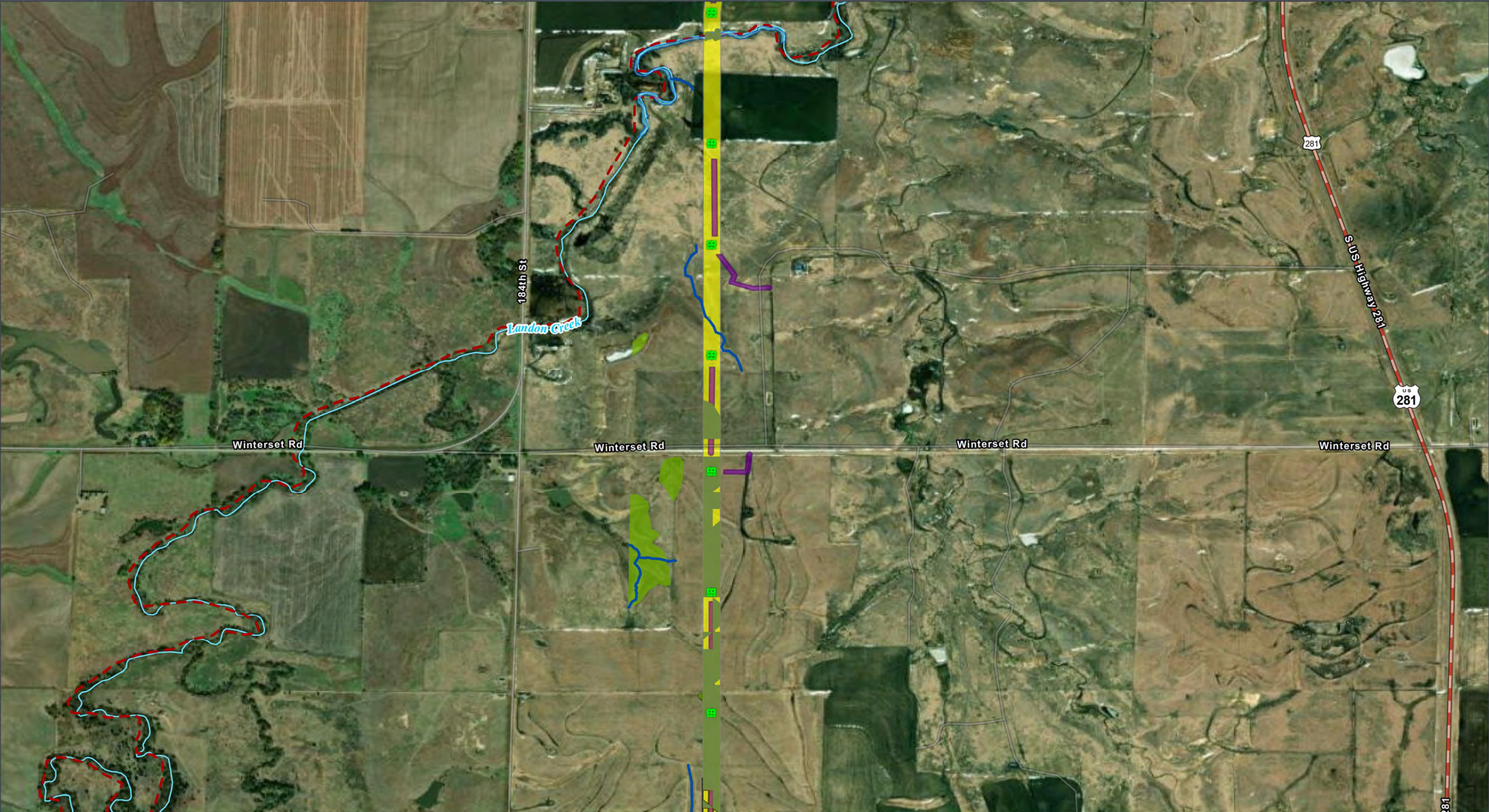
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0 400 800 Feet  
0 100 200 Meters

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Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

**Wetlands Map Book**

Map 55 of 259

**Permanent Project Component**

- Transmission Structure

**Habitat Conversion**

- Vegetation Clearing

**Temporary Project Component**

- Access Road
- Pull Site/Tension Site

**Hydrology**

- Delineated Stream
- NHD Stream/River

**Delineated Wetland**

- Palustrine Emergent (PEM)
- Delineated Waterbody

**Transportation**

- U.S. Highway

**Legend**

- ROW
- Impaired Waterway (303d)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented

Kansas and Missouri

GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12K  
From: WetlandMapBook\_12K

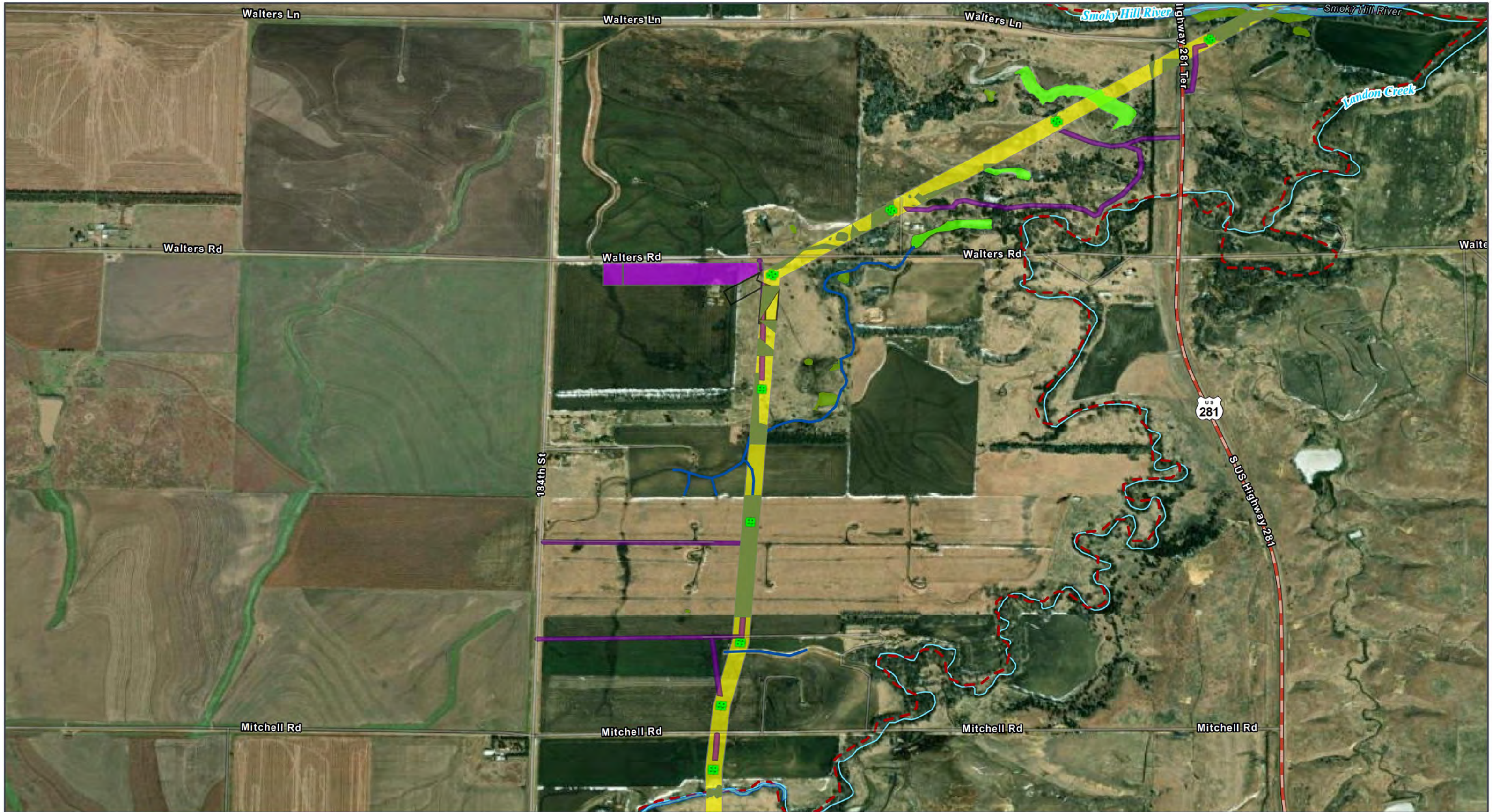
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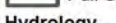
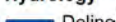

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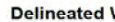


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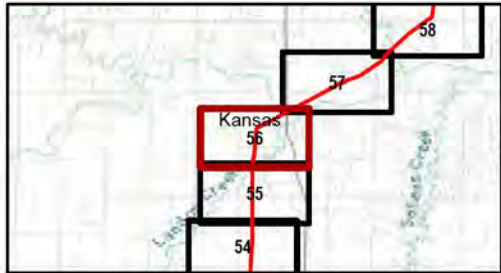


GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 56 of 259

- |  |  |
|--|--|
| <b>ROW</b>   |  ROW                      |
| <b>Permanent Project Component</b>   |  Transmission Structure   |
| <b>Habitat Conversion</b>  |  Vegetation Clearing      |
| <b>Temporary Project Component</b>   |  Access Road              |
|  Helipad / Fly Yard |  Pull Site/Tension Site   |
| <b>Hydrology</b>   |  Delineated Stream        |
|  |  NHD Stream/River         |
|  |  Impaired Waterway (303d) |

- |                           |  |
|---------------------------|--|
| <b>Delineated Wetland</b> |  Palustrine Emergent (PEM)              |
|                           |  Palustrine Unconsolidated Bottom (PUB) |
|                           |  Delineated Waterbody                   |
| <b>Transportation</b>     |  U.S. Highway                           |

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
From: WetlandMapBook\_12k

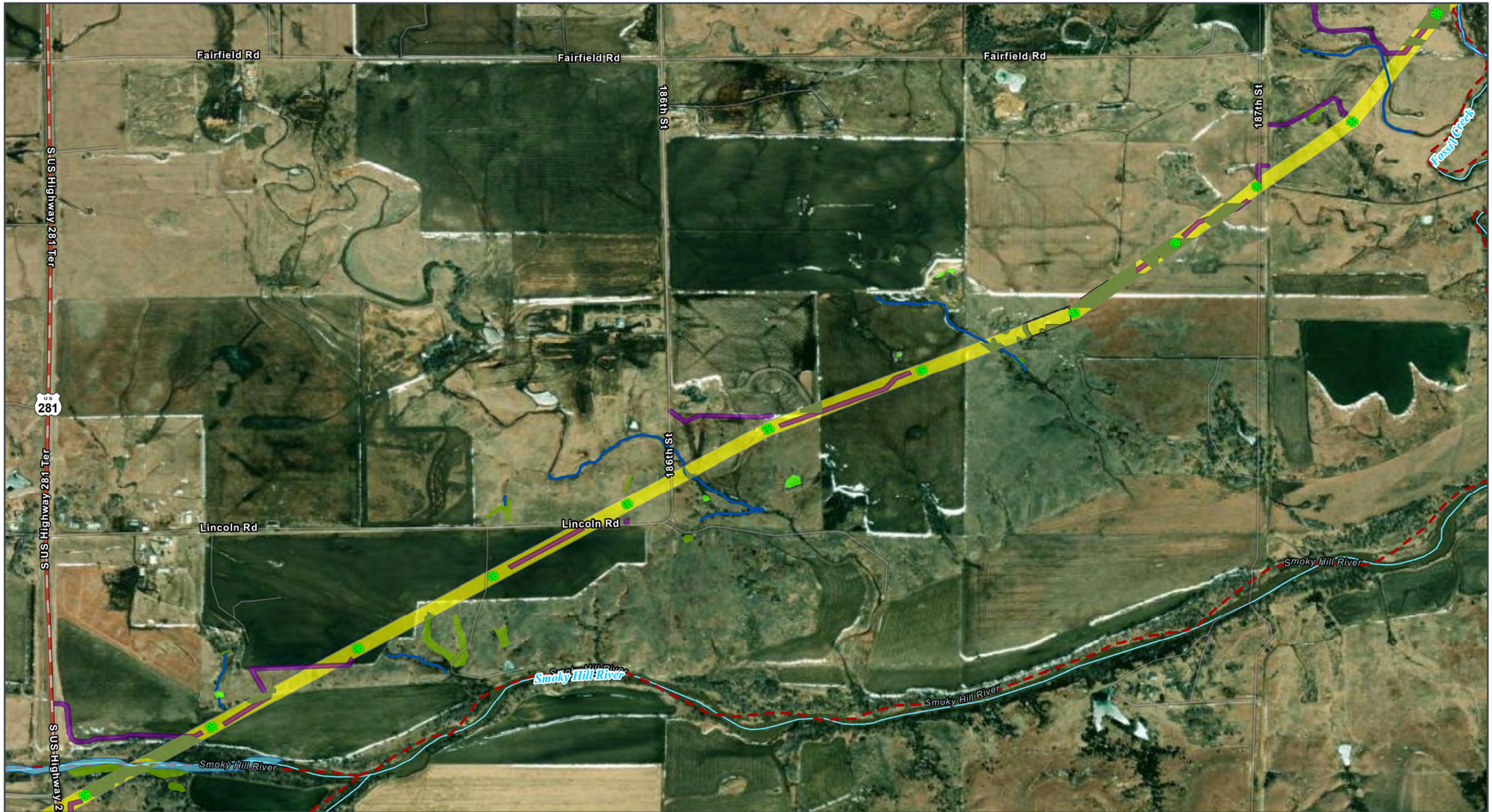
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Kansas and Missouri



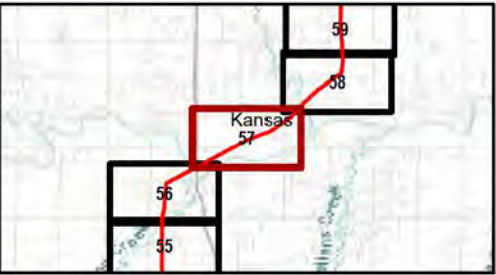


GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 57 of 259



- |                                    |                           |  |
|------------------------------------|---------------------------|--|
| <b>ROW</b>                         | Pull Site/Tension Site    | Palustrine Unconsolidated Bottom (PUB) |
| <b>Permanent Project Component</b> | <b>Hydrology</b>          | Delineated Waterbody                   |
| Transmission Structure             | Delineated Stream         | <b>Transportation</b>                  |
| <b>Habitat Conversion</b>          | NHD Stream/River          | U.S. Highway                           |
| Vegetation Clearing                | Impaired Waterway (303d)  |  |
| <b>Temporary Project Component</b> | <b>Delineated Wetland</b> |  |
| Access Road                        | Palustrine Emergent (PEM) |  |

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

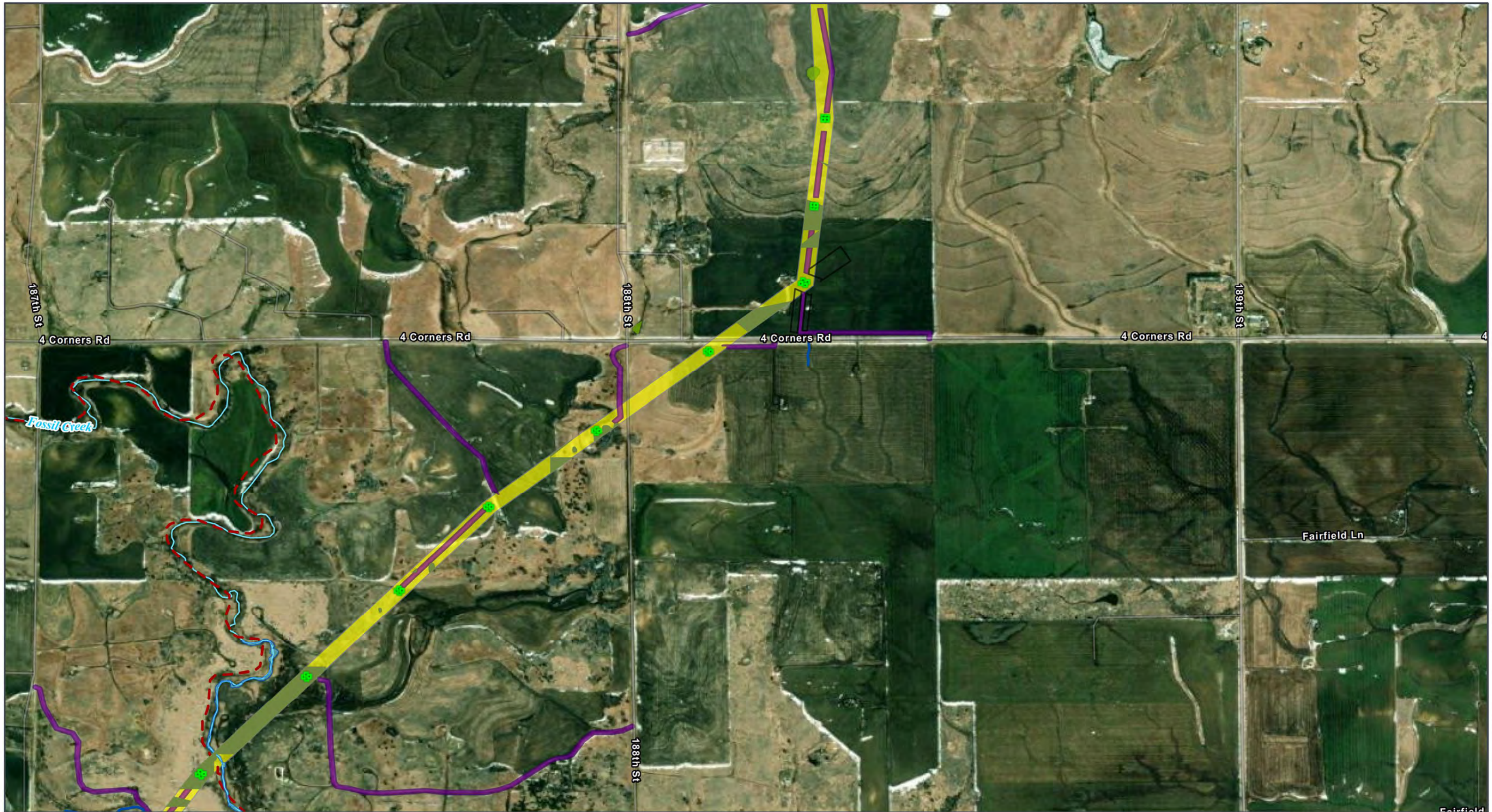
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accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aron: WetlandMapBook\_12k

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GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 58 of 259

- |  |  |  |
|--|--|--|
| <p><b>Permanent Project Component</b></p> <ul style="list-style-type: none"> <li><span style="color: green;">■</span> Transmission Structure</li> <li><b>Habitat Conversion</b></li> <li><span style="color: green;">■</span> Vegetation Clearing</li> </ul> | <p><b>Temporary Project Component</b></p> <ul style="list-style-type: none"> <li><span style="color: purple;">■</span> Access Road</li> <li><span style="color: purple;">■</span> Pull Site/Tension Site</li> <li><b>Hydrology</b></li> <li><span style="color: blue;">■</span> Delineated Stream</li> </ul> | <ul style="list-style-type: none"> <li><span style="color: blue;">—</span> NHD Stream/River</li> <li><span style="color: red;">- -</span> Impaired Waterway (303d)</li> <li><b>Delineated Wetland</b></li> <li><span style="color: green;">■</span> Palustrine Emergent (PEM)</li> <li><span style="color: blue;">■</span> Delineated Waterbody</li> </ul> |
|--|--|--|

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
From: WetlandMapBook\_12k

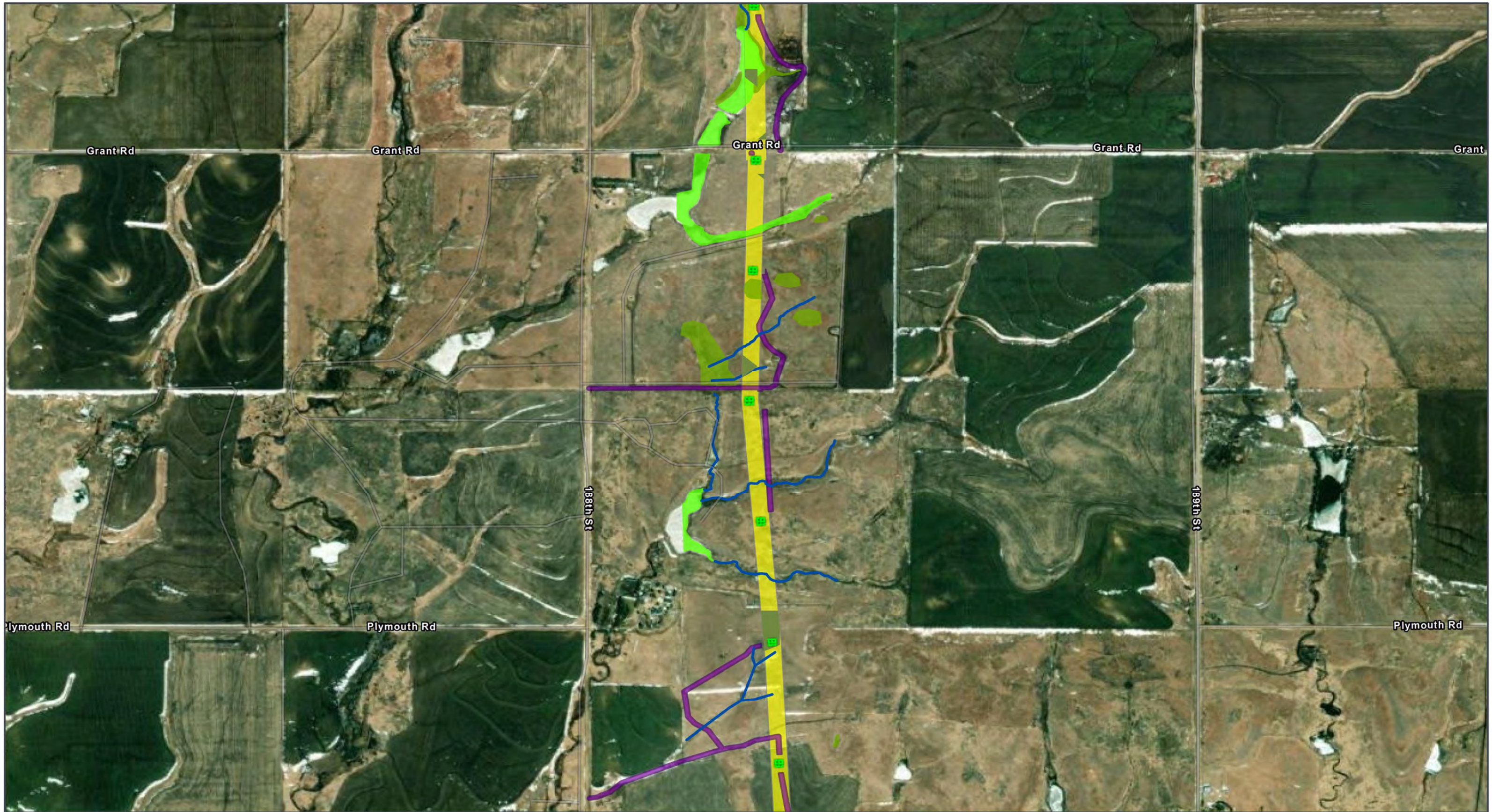
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Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
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- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

- Temporary Project Component**
- Access Road
- Hydrology**
- Delineated Stream

- Delineated Wetland**
- Palustrine Emergent (PEM)
- Palustrine Unconsolidated Bottom (PUB)

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
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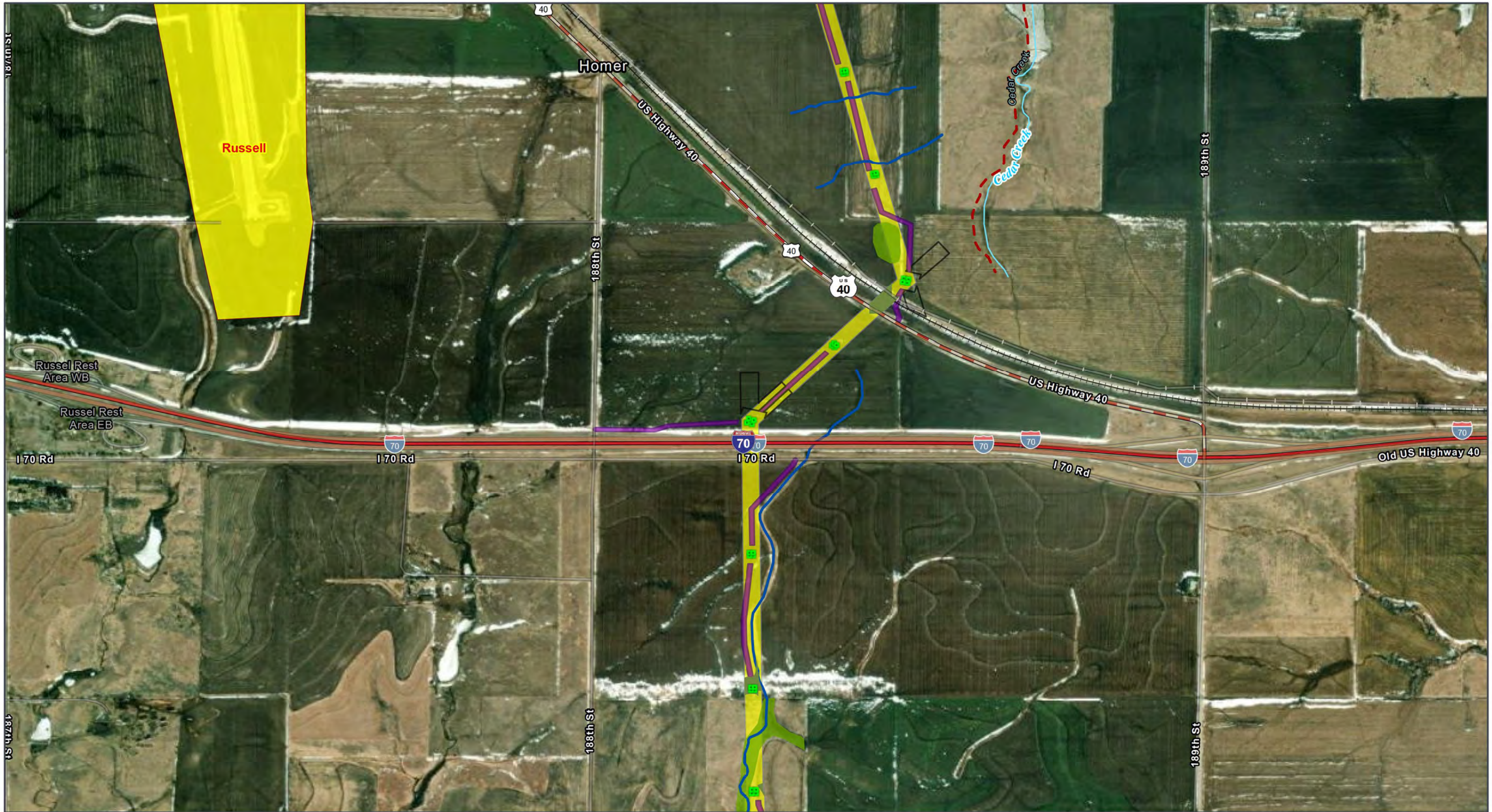
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Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 60 of 259



- Municipal Boundary Near the Project
- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

- Temporary Project Component**
- Access Road
- Pull Site/Tension Site
- Hydrology**
- Delineated Stream
- NHD Stream/River
- Impaired Waterway (303d)

- Delineated Wetland**
- Palustrine Emergent (PEM)
- Palustrine Unconsolidated Bottom (PUB)
- Transportation**
- Interstate Highway
- U.S. Highway
- Railroad

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
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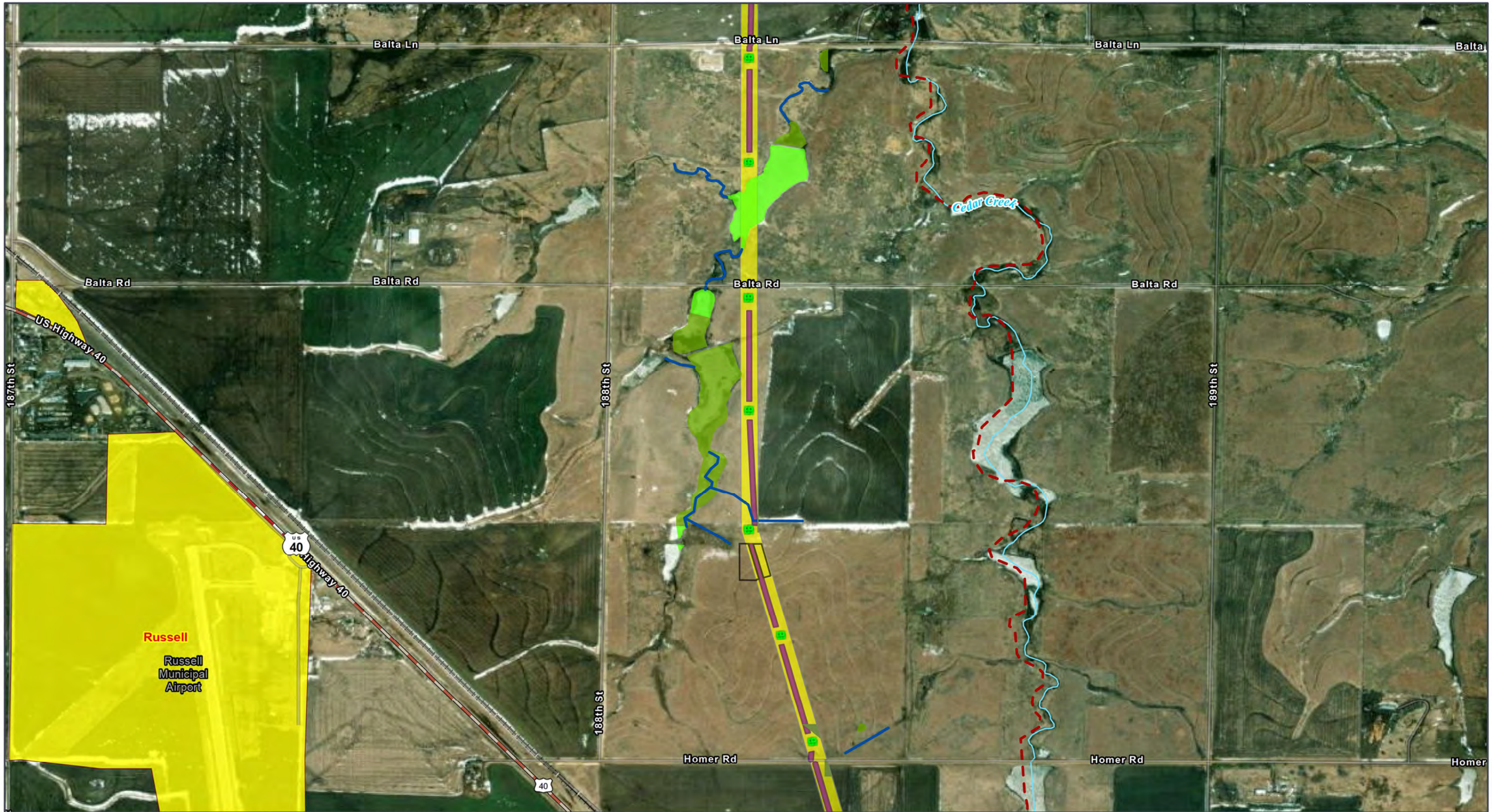
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Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 61 of 259

- Municipal Boundary Near the Project
- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

- Temporary Project Component**
- Access Road
- Pull Site/Tension Site
- Hydrology**
- Delineated Stream
- NHD Stream/River
- Impaired Waterway (303d)

- Delineated Wetland**
- Palustrine Emergent (PEM)
- Palustrine Unconsolidated Bottom (PUB)
- Transportation**
- U.S. Highway
- Railroad

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
From: WetlandMapBook\_12k

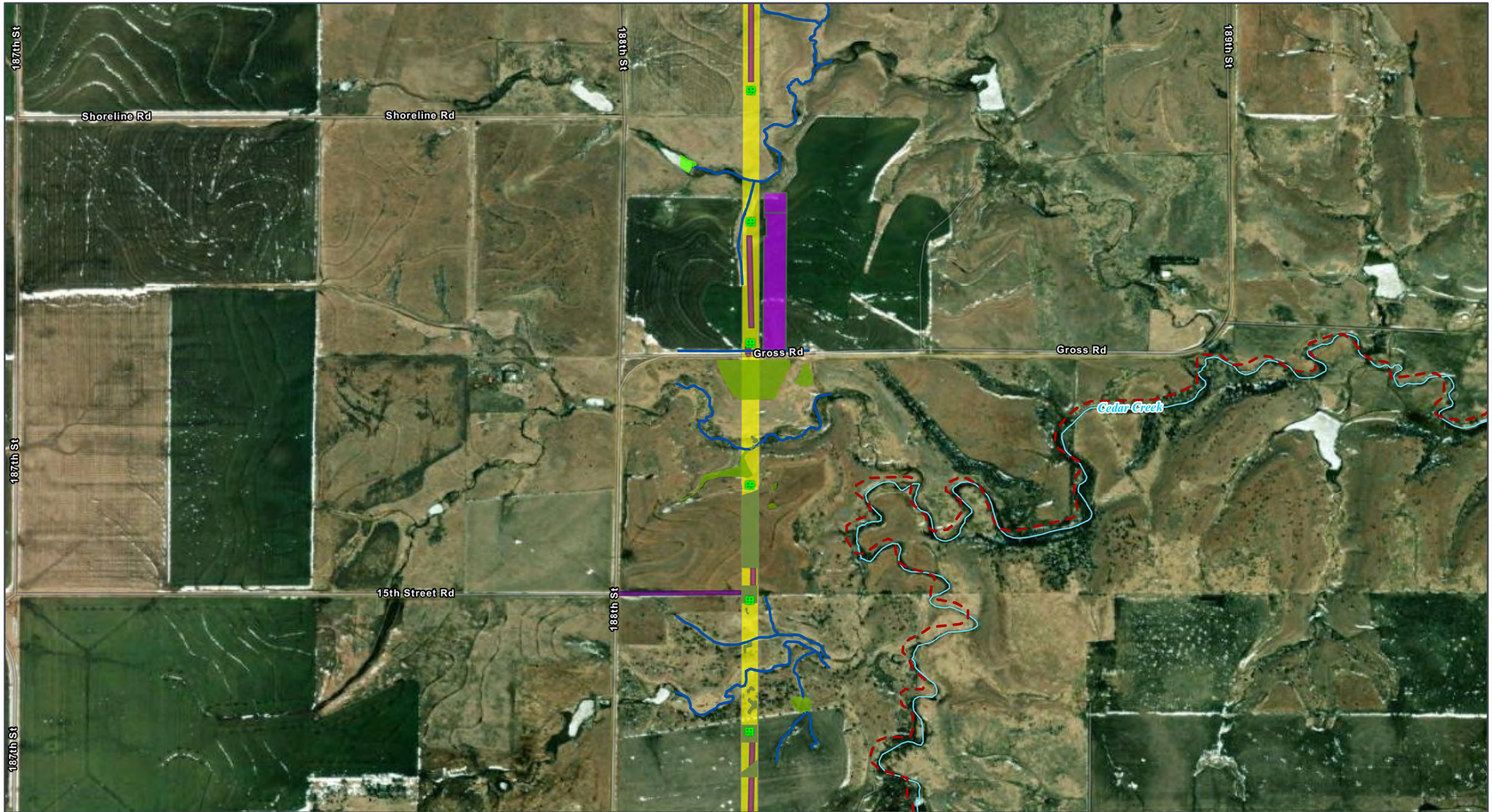
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N

Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 62 of 259

- ROW
- Permanent Project Component**
  - Transmission Structure
- Habitat Conversion**
  - Vegetation Clearing

- Temporary Project Component**
  - Access Road
  - Helipad / Fly Yard
- Hydrology**
  - Delineated Stream

- NHD Stream/River
- Impaired Waterway (303d)
- Delineated Wetland**
  - Palustrine Emergent (PEM)
  - Palustrine Unconsolidated Bottom (PUB)

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Kansas and Missouri

GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aero: WetlandMapBook\_12k

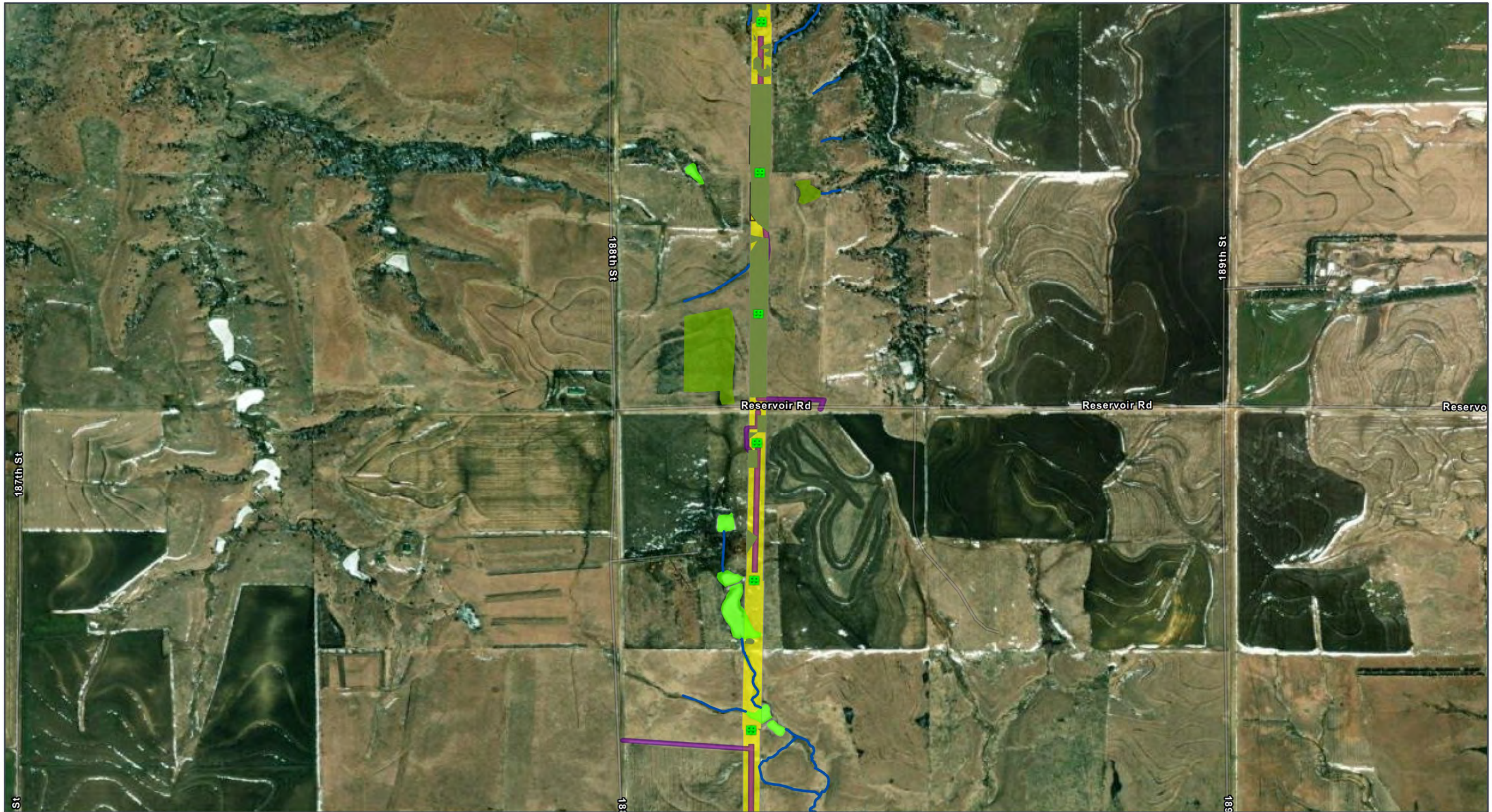
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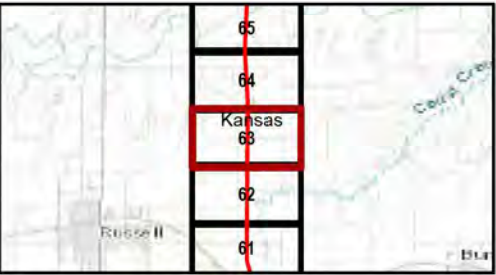
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 63 of 259

**ROW**  
Permanent Project Component  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

**Temporary Project Component**  
Access Road  
Pull Site/Tension Site  
**Hydrology**  
Delineated Stream

**Delineated Wetland**  
Palustrine Emergent (PEM)  
Palustrine Unconsolidated Bottom (PUB)

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W  
Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
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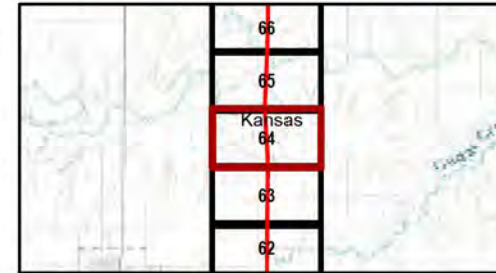
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 64 of 259

**Permanent Project Component**  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

**Temporary Project Component**  
Access Road  
**Hydrology**  
Delineated Stream  
NHD Stream/River  
Impaired Waterway (303d)

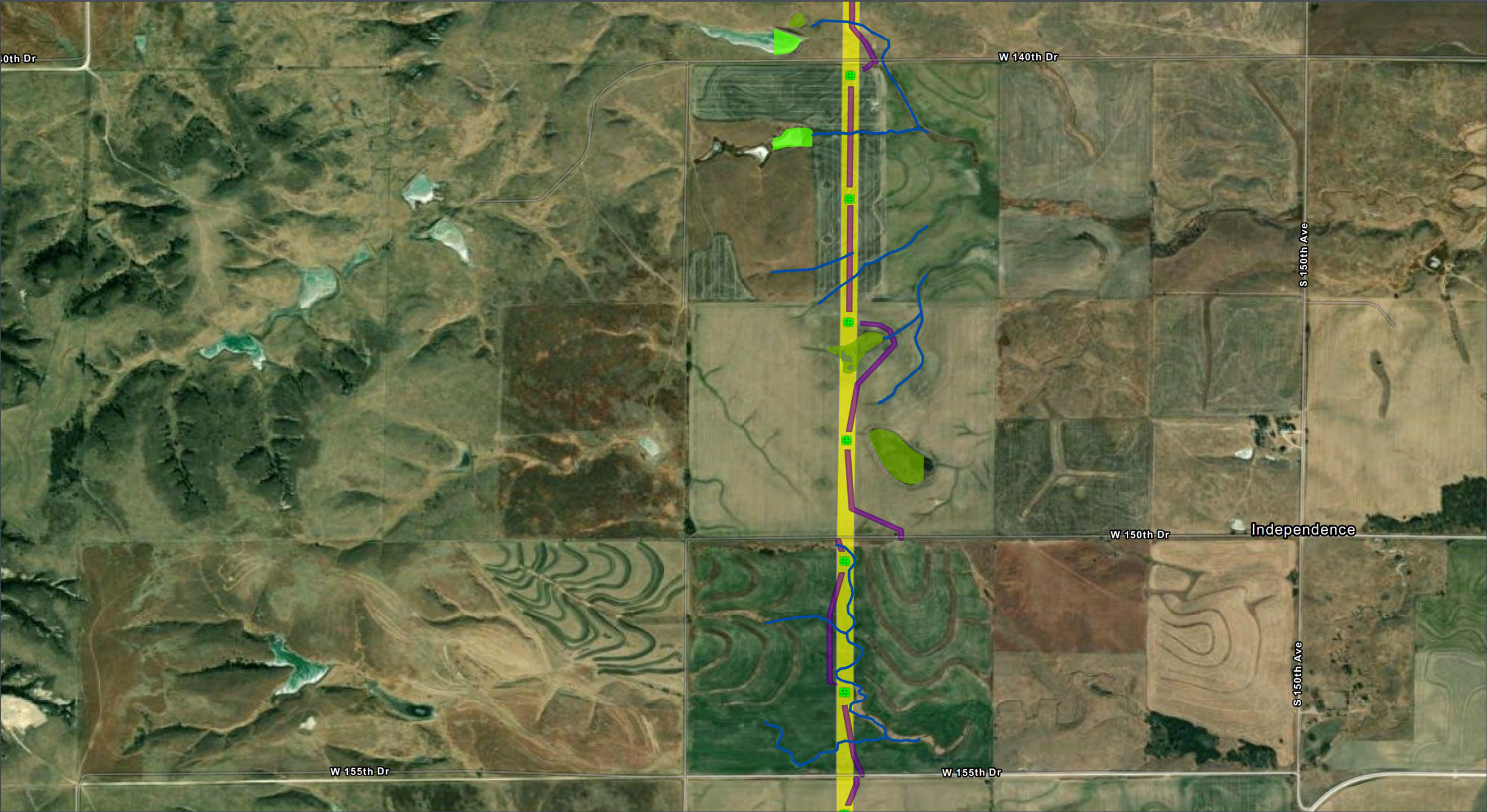
**Delineated Wetland**  
Palustrine Emergent (PEM)  
Palustrine Unconsolidated Bottom (PUB)  
Delineated Waterbody

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W  
Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aron: WetlandMapBook\_12k  
1:12,000  
0 400 800 Feet  
0 100 200 Meters  
N





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

**Wetlands Map Book**

Map 65 of 259

**Permanent Project Component**

- Transmission Structure
- Habitat Conversion
  - Vegetation Clearing

**Temporary Project Component**

- Access Road
- Hydrology**
  - Delineated Stream

**Delineated Wetland**

- Palustrine Emergent (PEM)
- Palustrine Unconsolidated Bottom (PUB)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented

Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

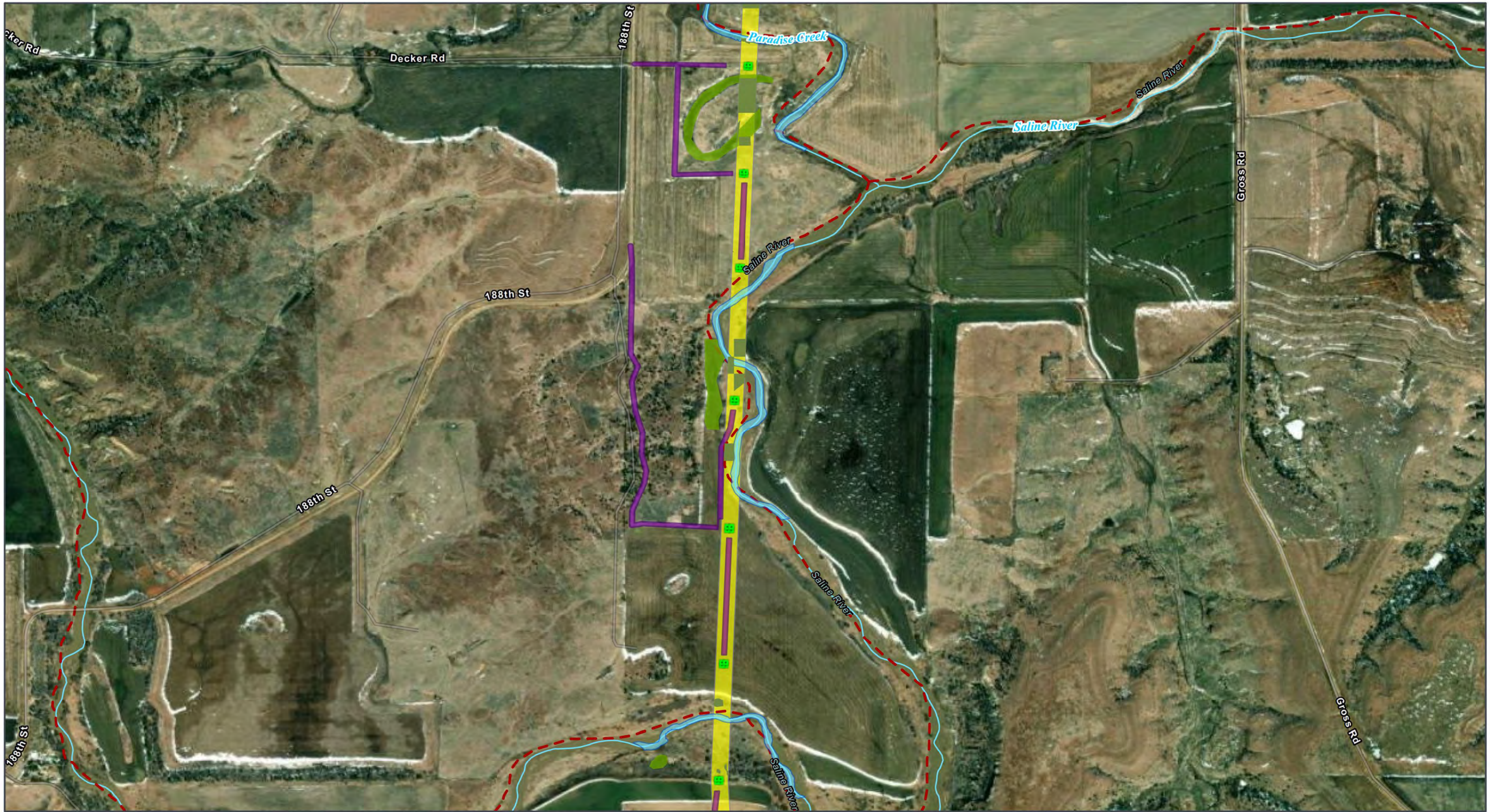
Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
From: WetlandMapBook\_12k

1:12,000

0 400 800 Feet  
0 100 200 Meters

N





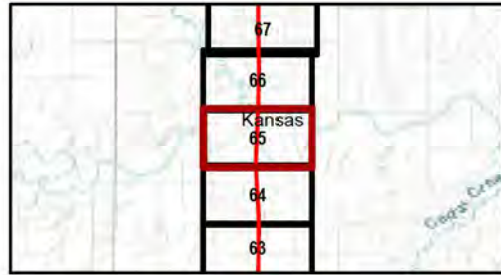
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 66 of 259

- ROW
- Permanent Project Component**
  - Transmission Structure
  - Habitat Conversion**
    - Vegetation Clearing

- Temporary Project Component**
  - Access Road
  - Hydrology**
    - NHD Stream/River
    - Impaired Waterway (303d)

- Delineated Wetland**
  - Palustrine Emergent (PEM)
  - Delineated Waterbody

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No: 60694559  
Layout: Wetland Mapbook 12k  
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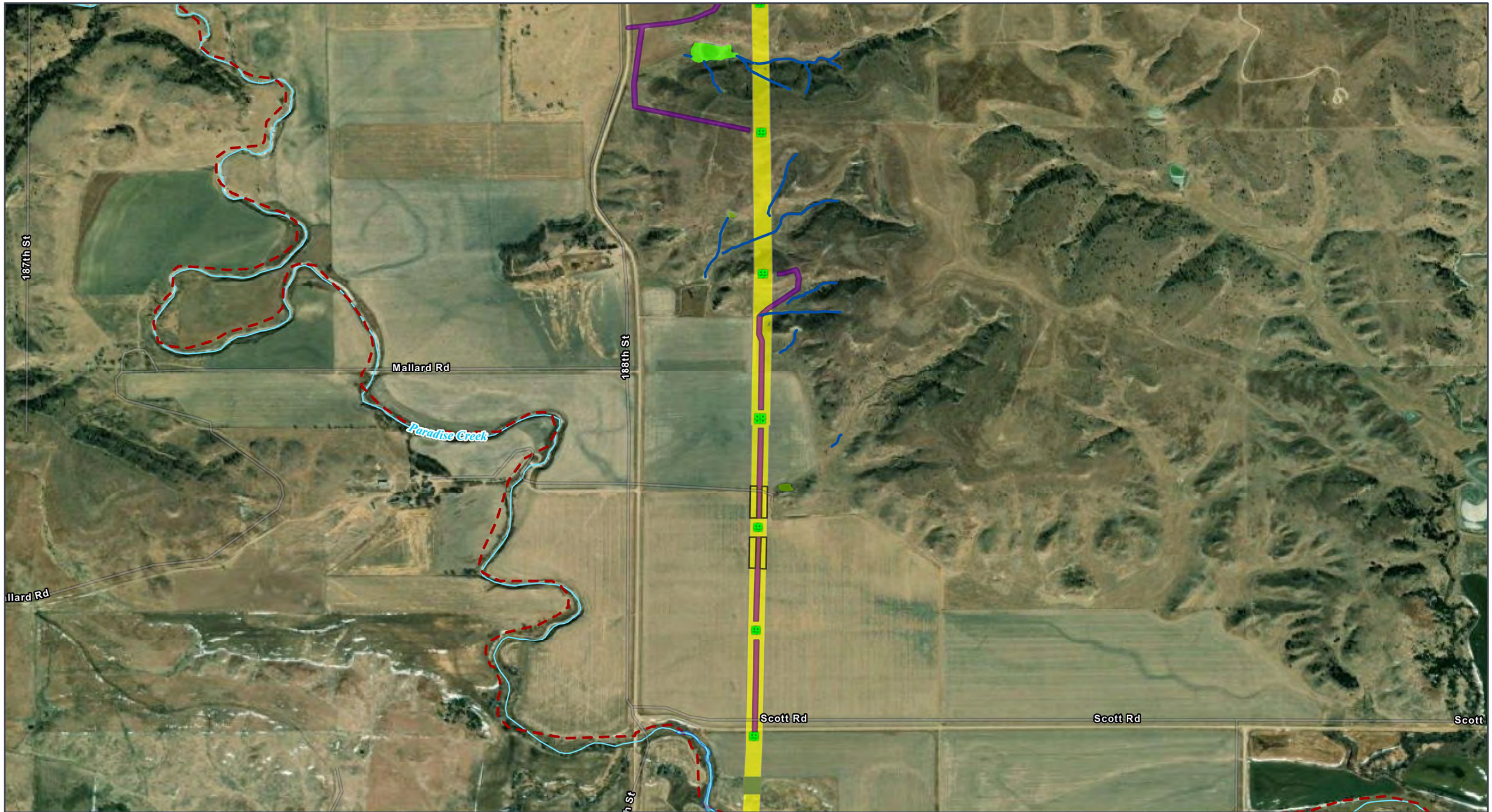
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Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 67 of 259

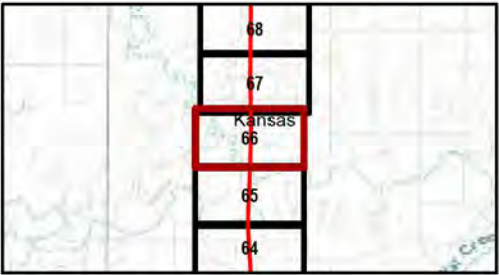
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

- Temporary Project Component**
- Access Road
  - Pull Site/Tension Site
- Hydrology**
- Delineated Stream
  - NHD Stream/River

- Delineated Wetland**
- Palustrine Emergent (PEM)
  - Palustrine Unconsolidated Bottom (PUB)
  - Delineated Waterbody

Impaired Waterway (303d)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
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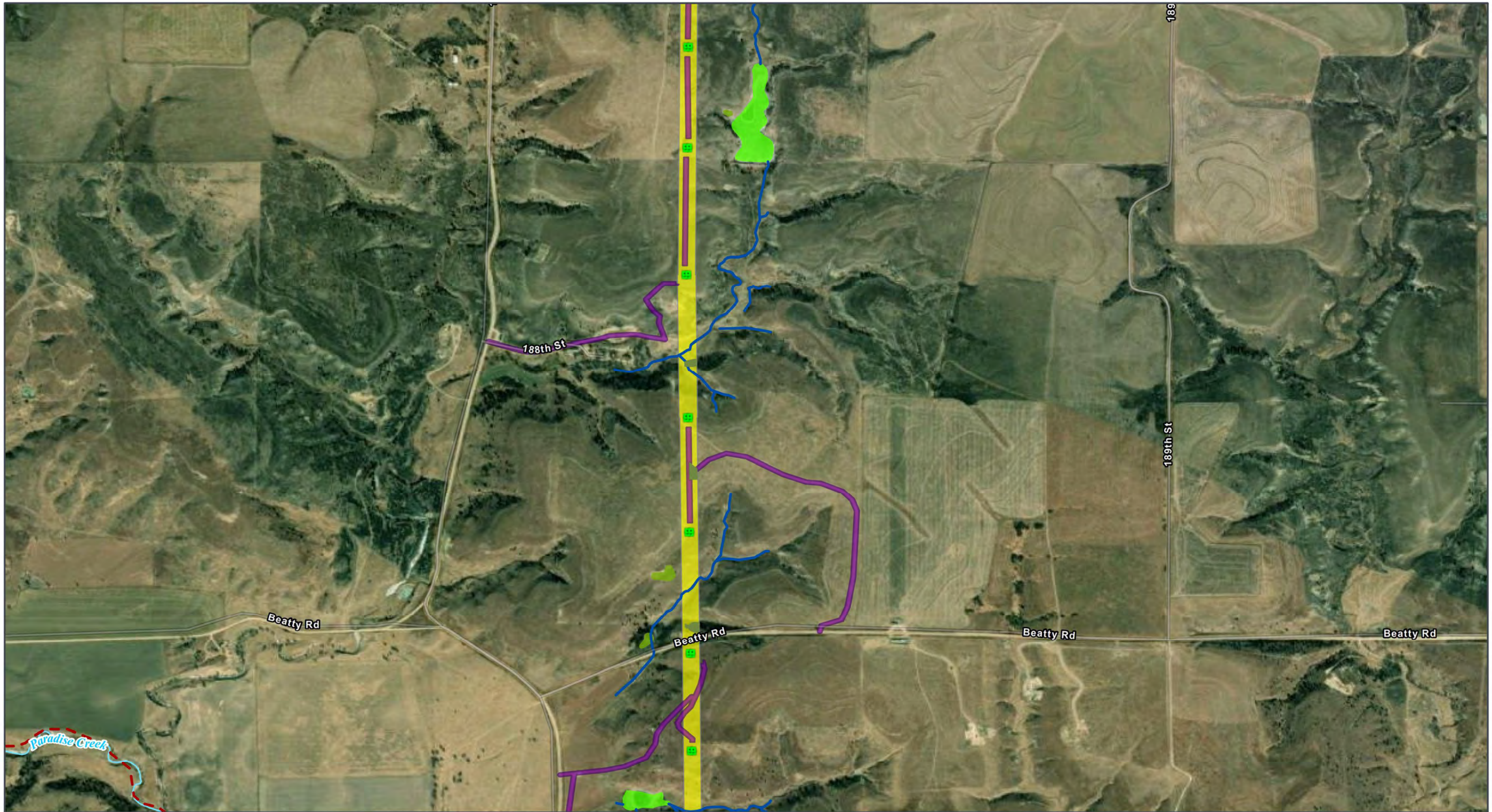
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Kansas and Missouri





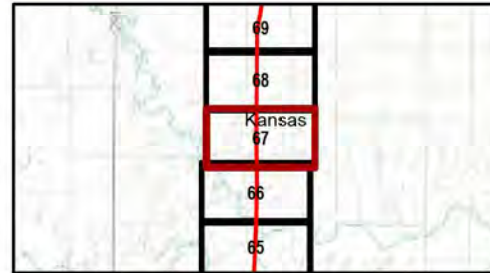
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 68 of 259

- ROW
- Permanent Project Component**
  - Transmission Structure
- Habitat Conversion**
  - Vegetation Clearing

- Temporary Project Component**
  - Access Road
- Hydrology**
  - Delineated Stream
  - NHD Stream/River

- Impaired Waterway (303d)
- Delineated Wetland**
  - Palustrine Emergent (PEM)
  - Palustrine Unconsolidated Bottom (PUB)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri

GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
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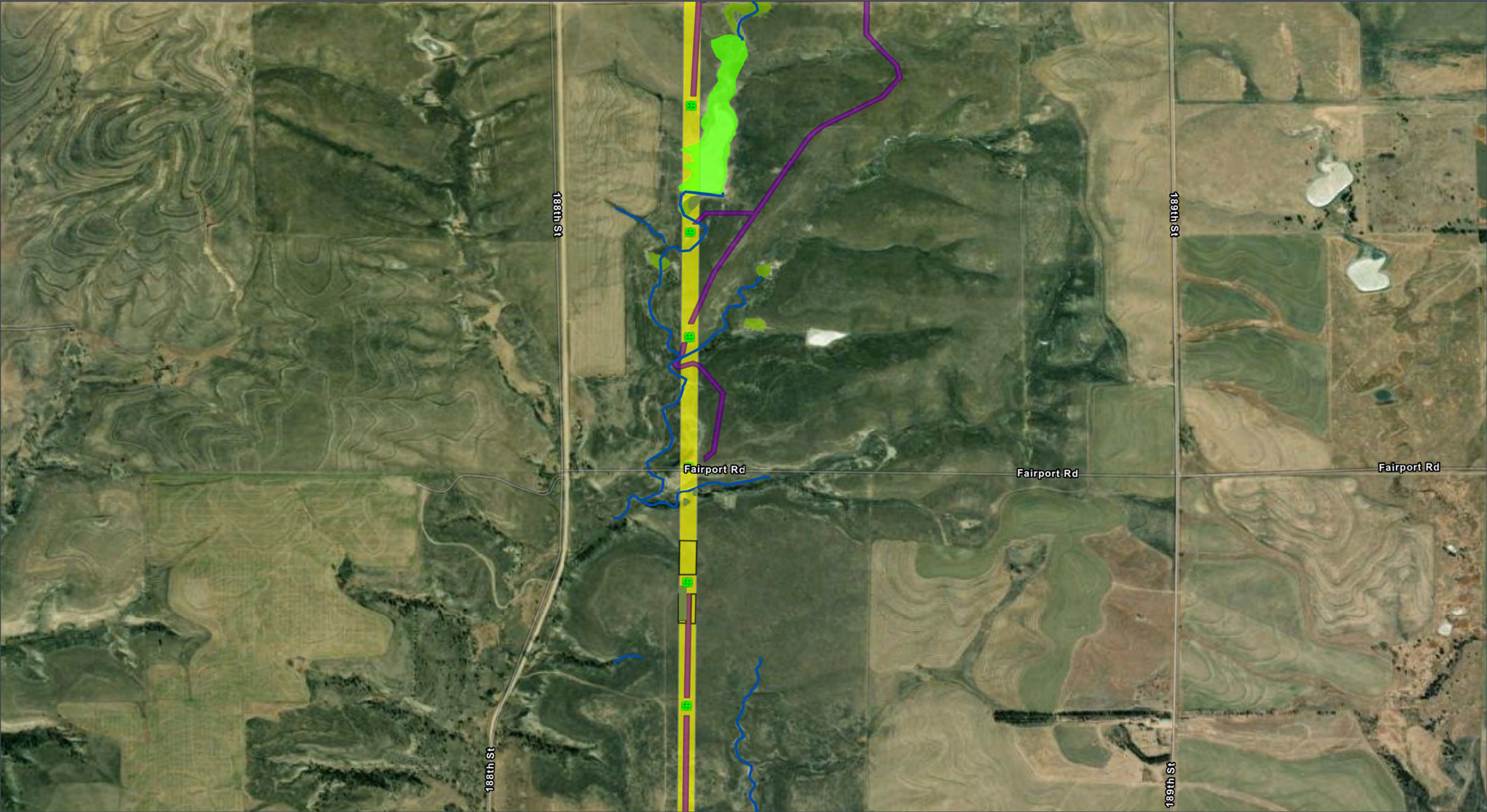
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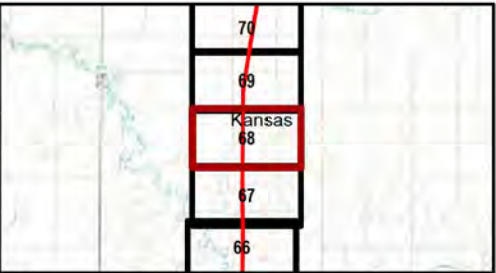
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 69 of 259

- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

- Temporary Project Component**
- Access Road
- Pull Site/Tension Site
- Hydrology**
- Delineated Stream

- Delineated Wetland**
- Palustrine Emergent (PEM)
- Palustrine Unconsolidated Bottom (PUB)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
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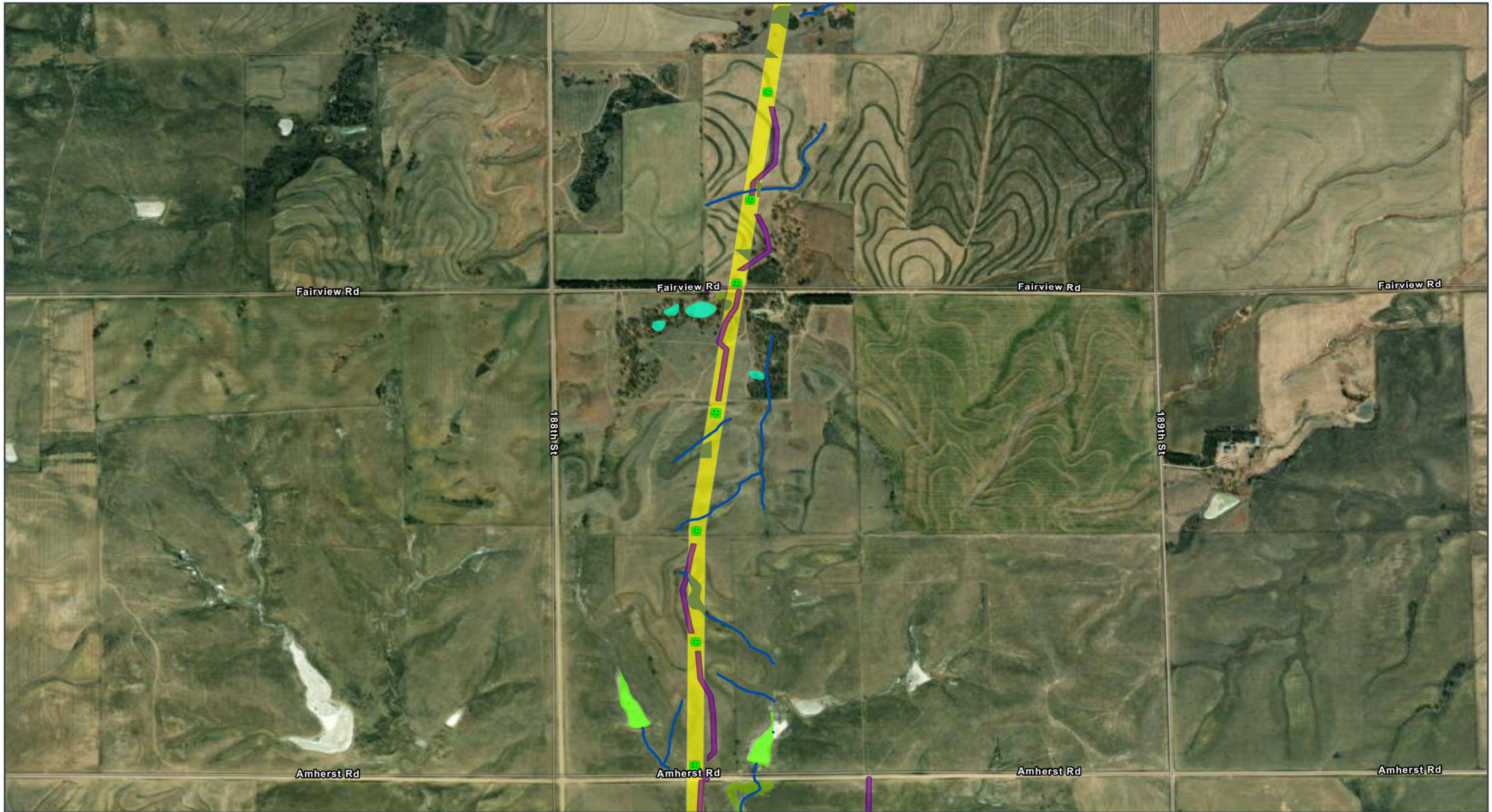
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Kansas and Missouri





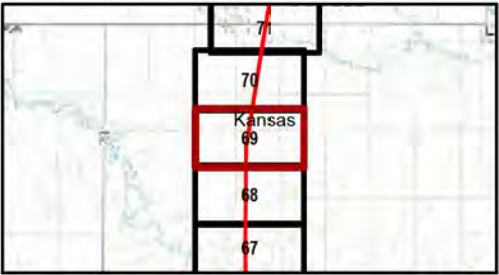
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 70 of 259

- ROW
- Permanent Project Component**
  - Transmission Structure
- Habitat Conversion**
  - Vegetation Clearing

- Temporary Project Component**
  - Access Road
- Hydrology**
  - Delineated Stream

- Delineated Wetland**
  - Palustrine Aquatic Bed (PAB)
  - Palustrine Emergent (PEM)
  - Palustrine Unconsolidated Bottom (PUB)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aron: WetlandMapBook\_12k

1:12,000

0 400 800 Feet  
0 100 200 Meters

N

Kansas and Missouri





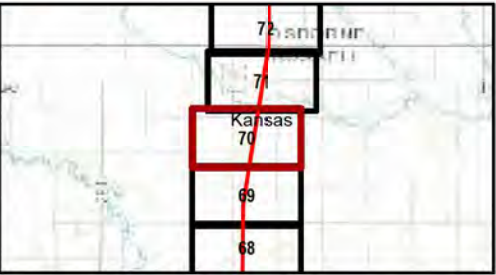
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 71 of 259

- ROW
- Permanent Project Component**
  - Transmission Structure
- Habitat Conversion**
  - Vegetation Clearing

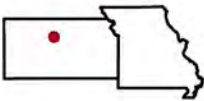
- Temporary Project Component**
  - Access Road
  - Helipad / Fly Yard
- Hydrology**
  - Delineated Stream

- NHD Stream/River
- Impaired Waterway (303d)
- Delineated Wetland**
  - Palustrine Emergent (PEM)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W



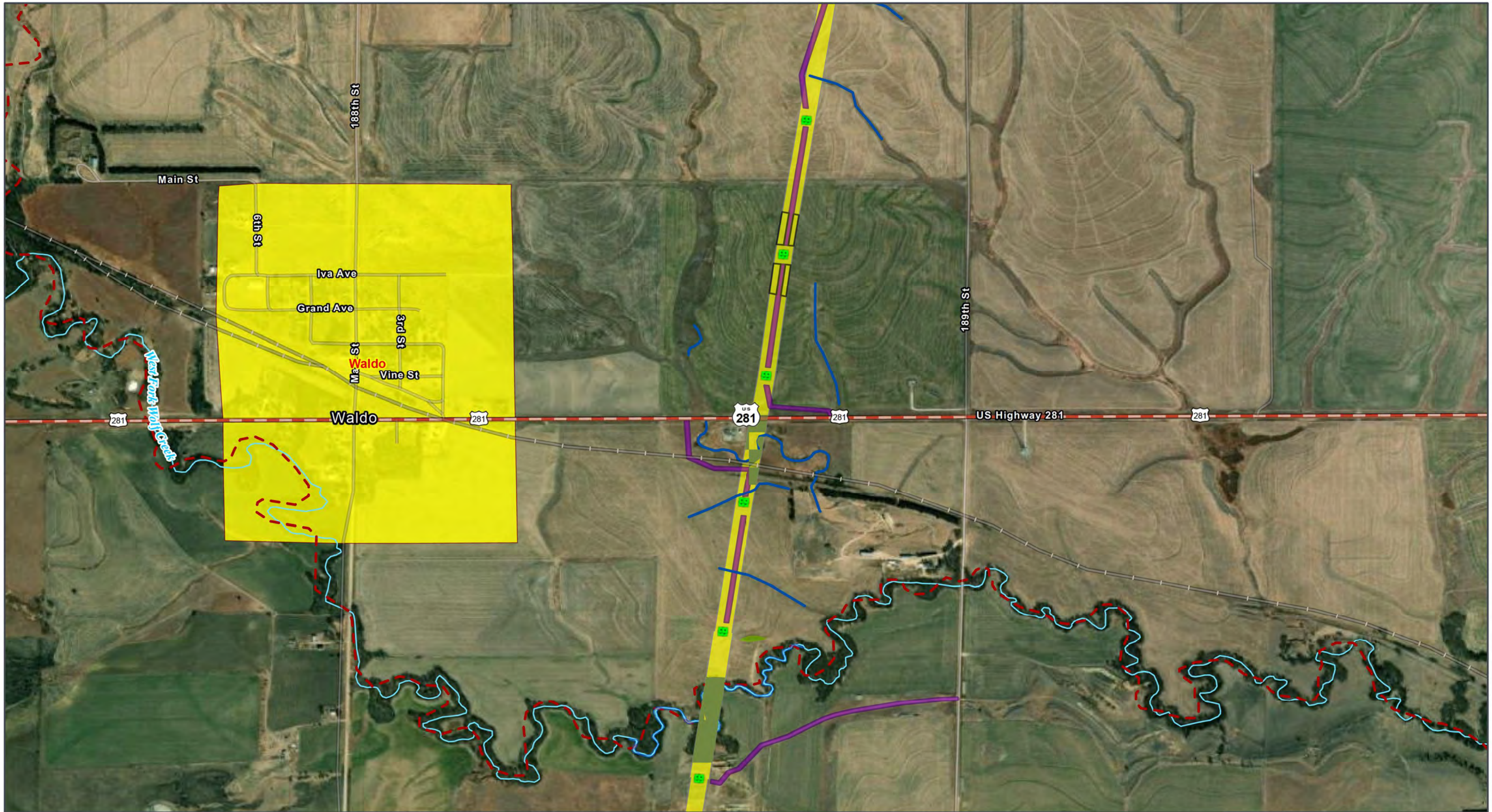
Kansas and Missouri

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No: 60694559  
Layout: Wetland Mapbook 12k  
From: WetlandMapBook\_12k

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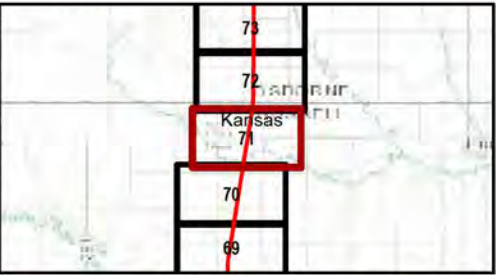
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 72 of 259

- Municipal Boundary Near the Project
- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

- Temporary Project Component**
- Access Road
- Pull Site/Tension Site
- Hydrology**
- Delineated Stream
- NHD Stream/River

- Impaired Waterway (303d)
- Delineated Wetland**
- Palustrine Emergent (PEM)
- Delineated Waterbody
- Transportation**
- U.S. Highway

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

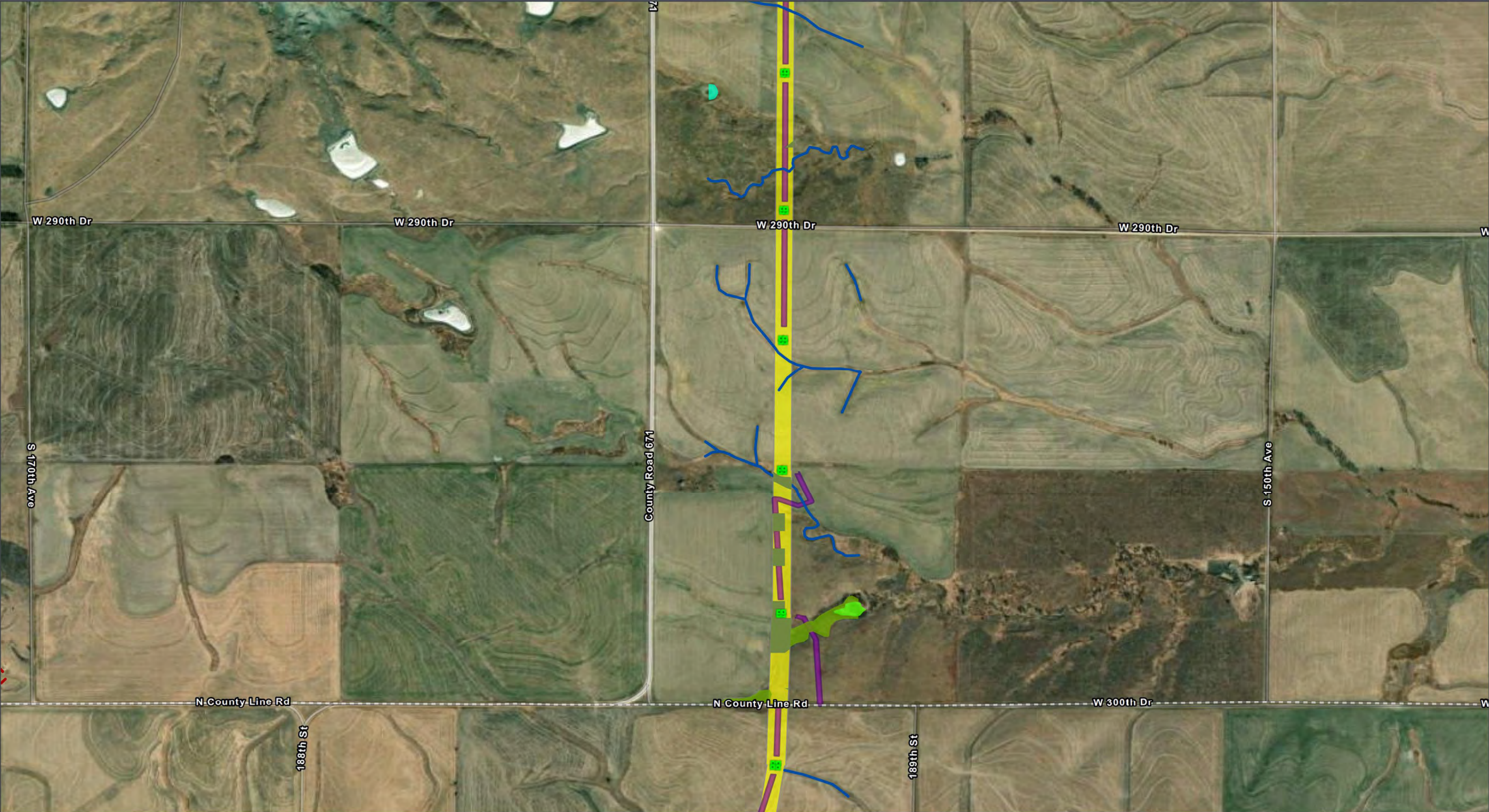
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accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
From: WetlandMapBook\_12k

1:12,000

0 400 800 Feet  
0 100 200 Meters

N





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

**Wetlands Map Book**

Map 73 of 259

Grain Belt Express  
An Invenenergy Project

**Permanent Project Component**

- Transmission Structure
- Habitat Conversion
  - Vegetation Clearing

**Temporary Project Component**

- Access Road
- Hydrology**
  - Delineated Stream
  - Impaired Waterway (303d)

**Delineated Wetland**

- Palustrine Aquatic Bed (PAB)
- Palustrine Emergent (PEM)
- Palustrine Unconsolidated Bottom (PUB)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented

Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
From: WetlandMapBook\_12k

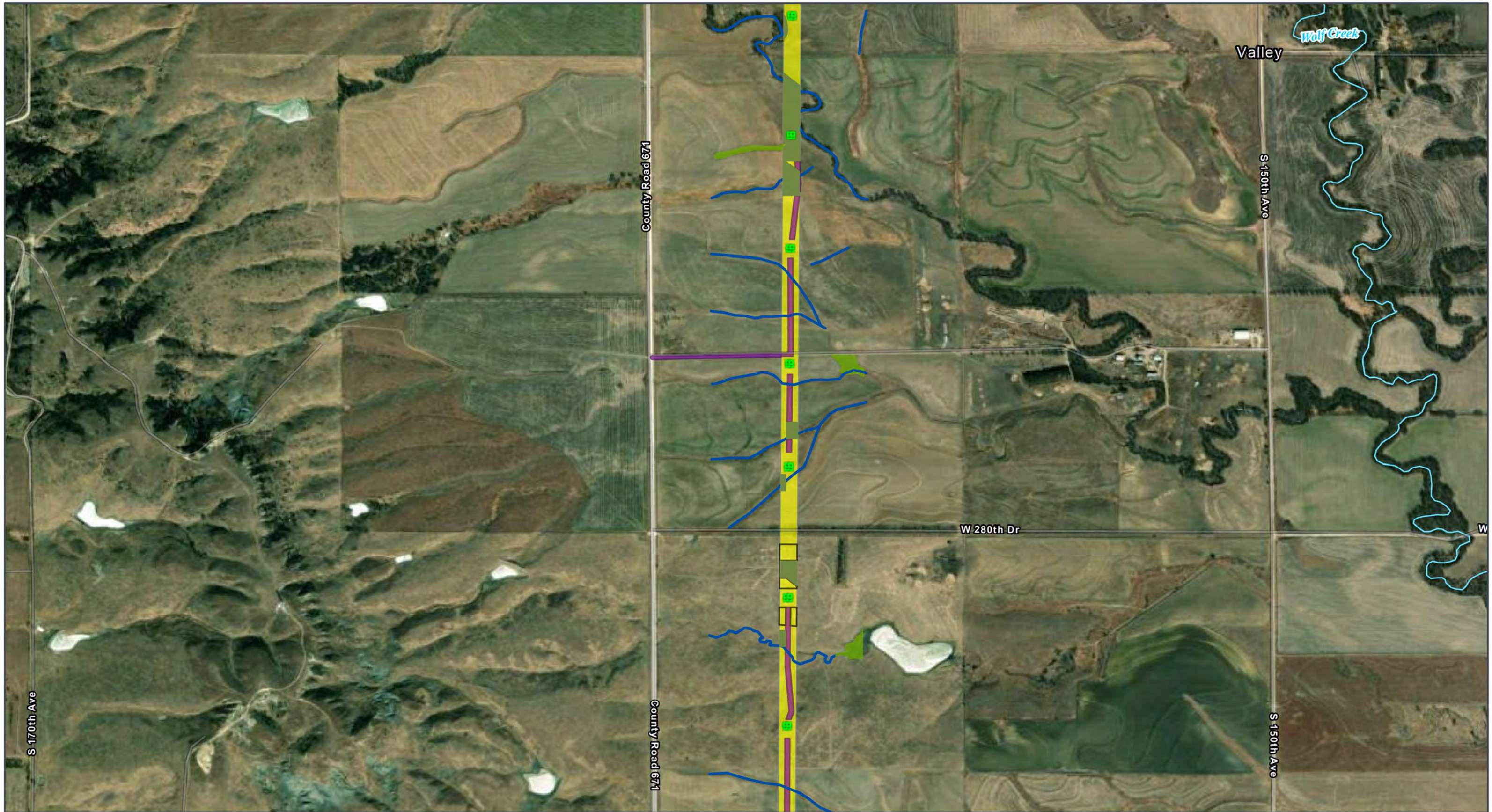
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Kansas and Missouri





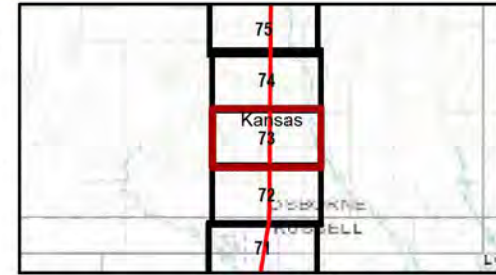
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 74 of 259

**Permanent Project Component**  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

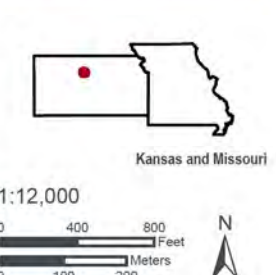
**Temporary Project Component**  
Access Road  
Pull Site/Tension Site  
**Hydrology**  
Delineated Stream

NHD Stream/River  
**Delineated Wetland**  
Palustrine Emergent (PEM)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W  
Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
From: WetlandMapBook\_12k







GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 75 of 259

**Permanent Project Component**  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

**Temporary Project Component**  
Access Road  
**Hydrology**  
Delineated Stream  
NHD Stream/River

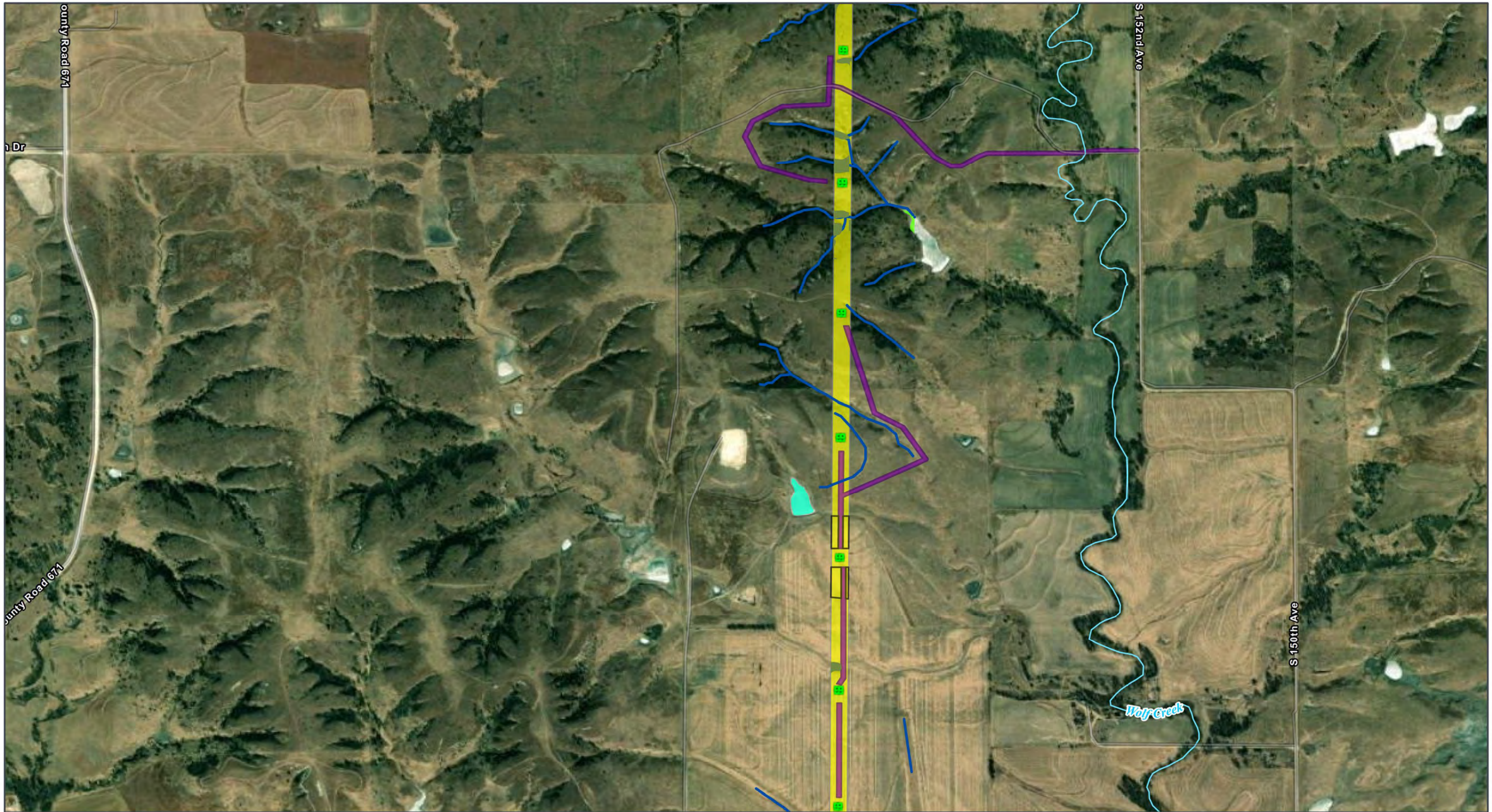
**Delineated Wetland**  
Palustrine Aquatic Bed (PAB)  
Palustrine Emergent (PEM)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W  
Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
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From: WetlandMapBook\_12k  
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0 100 200 Meters  
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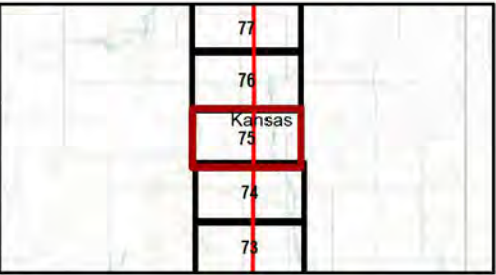
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 76 of 259

- ROW
- Permanent Project Component**
  - Transmission Structure
- Habitat Conversion**
  - Vegetation Clearing

- Temporary Project Component**
  - Access Road
  - Pull Site/Tension Site
- Hydrology**
  - Delineated Stream

- NHD Stream/River
- Delineated Wetland**
  - Palustrine Aquatic Bed (PAB)
  - Palustrine Unconsolidated Bottom (PUB)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri

GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12K  
Aron: WetlandMapBook\_12K

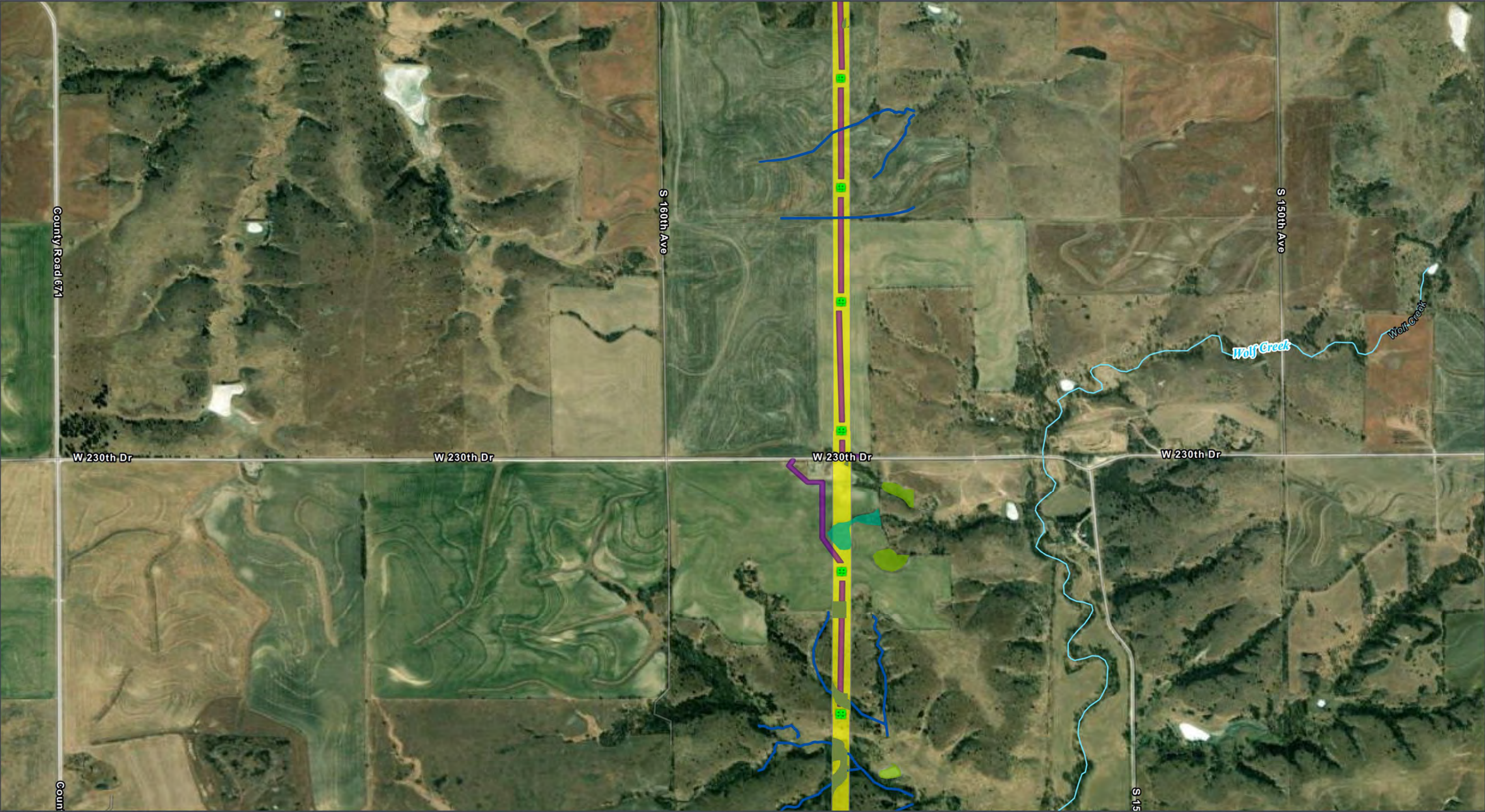
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0 400 800 Feet

0 100 200 Meters

N





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

**Wetlands Map Book**

Map 77 of 259

 Grain Belt Express  
An Inveney Project

**Permanent Project Component**

- Transmission Structure
- Habitat Conversion
- Vegetation Clearing

**Temporary Project Component**

- Access Road

**Hydrology**

- Delineated Stream
- NHD Stream/River

**Delineated Wetland**

- Palustrine Emergent (PEM)
- Palustrine Forested (PFO)

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Kansas and Missouri

GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aron: WetlandMapBook\_12k

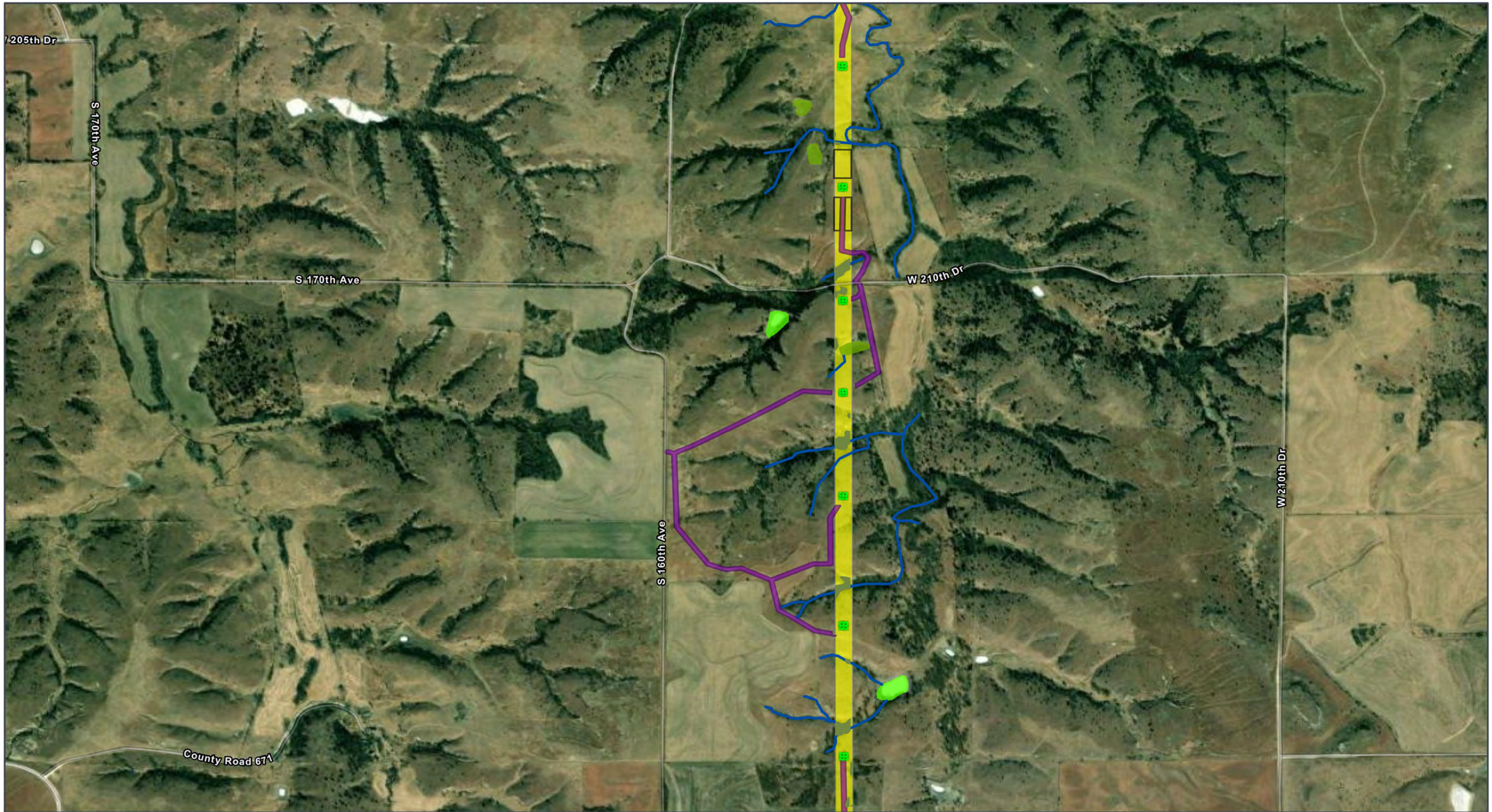
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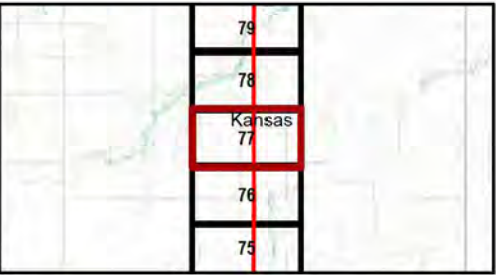
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 78 of 259

- Permanent Project Component**
- Transmission Structure
  - Habitat Conversion**
  - Vegetation Clearing

- Temporary Project Component**
- Access Road
  - Pull Site/Tension Site
  - Hydrology**
  - Delineated Stream

- Delineated Wetland**
- Palustrine Emergent (PEM)
  - Palustrine Unconsolidated Bottom (PUB)

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
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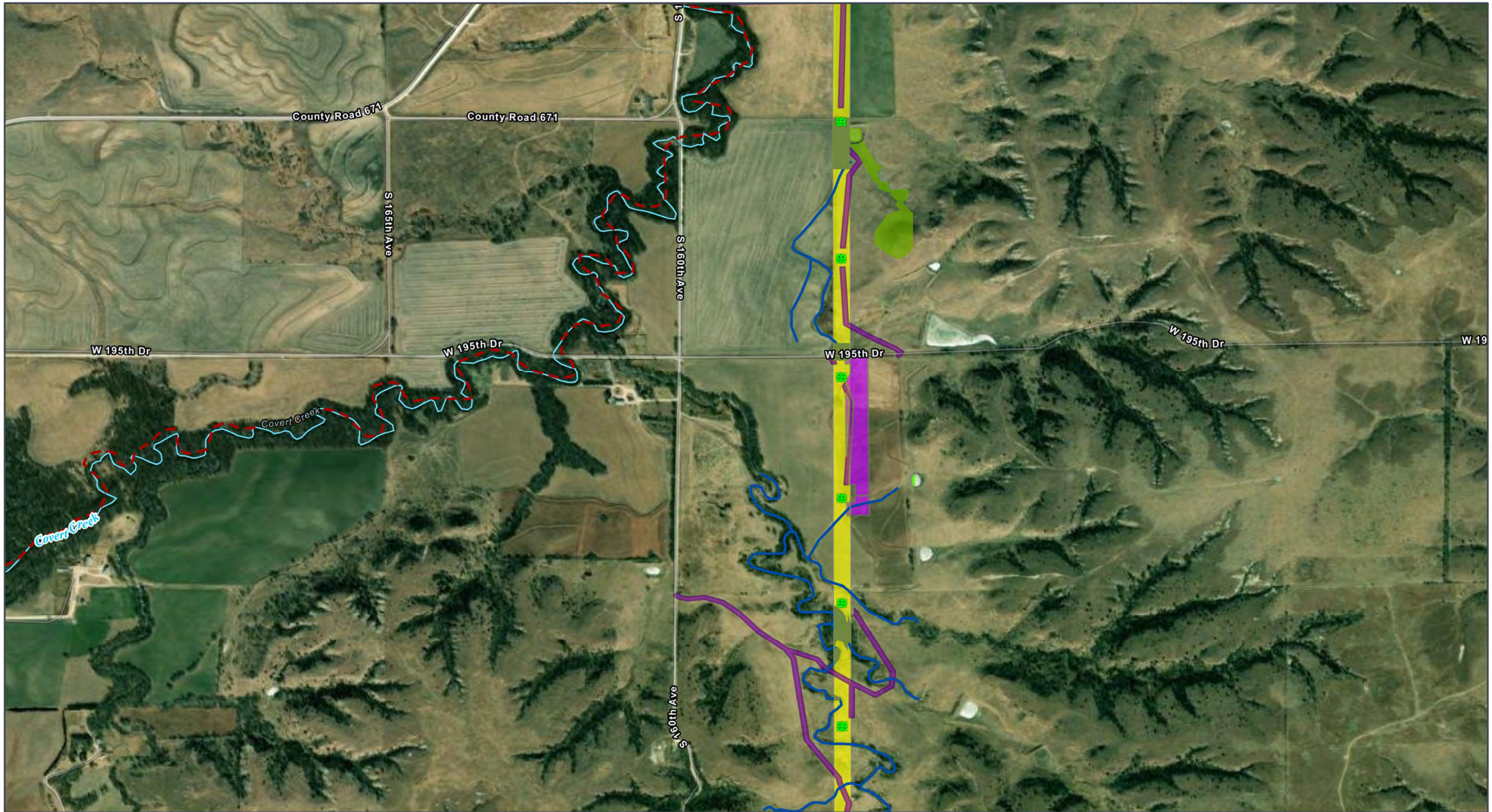
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0 400 800 Feet  
0 100 200 Meters

N

Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 79 of 259

ROW

**Permanent Project Component**

Transmission Structure

**Habitat Conversion**

Vegetation Clearing

**Temporary Project Component**

Access Road

Helipad / Fly Yard

**Hydrology**

Delineated Stream

NHD Stream/River

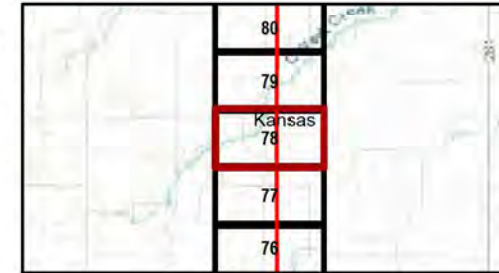
Impaired Waterway (303d)

**Delineated Wetland**

Palustrine Emergent (PEM)

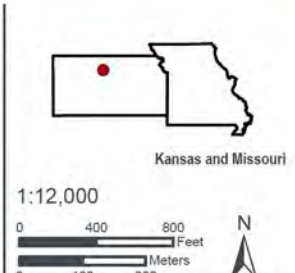
Palustrine Unconsolidated Bottom (PUB)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented

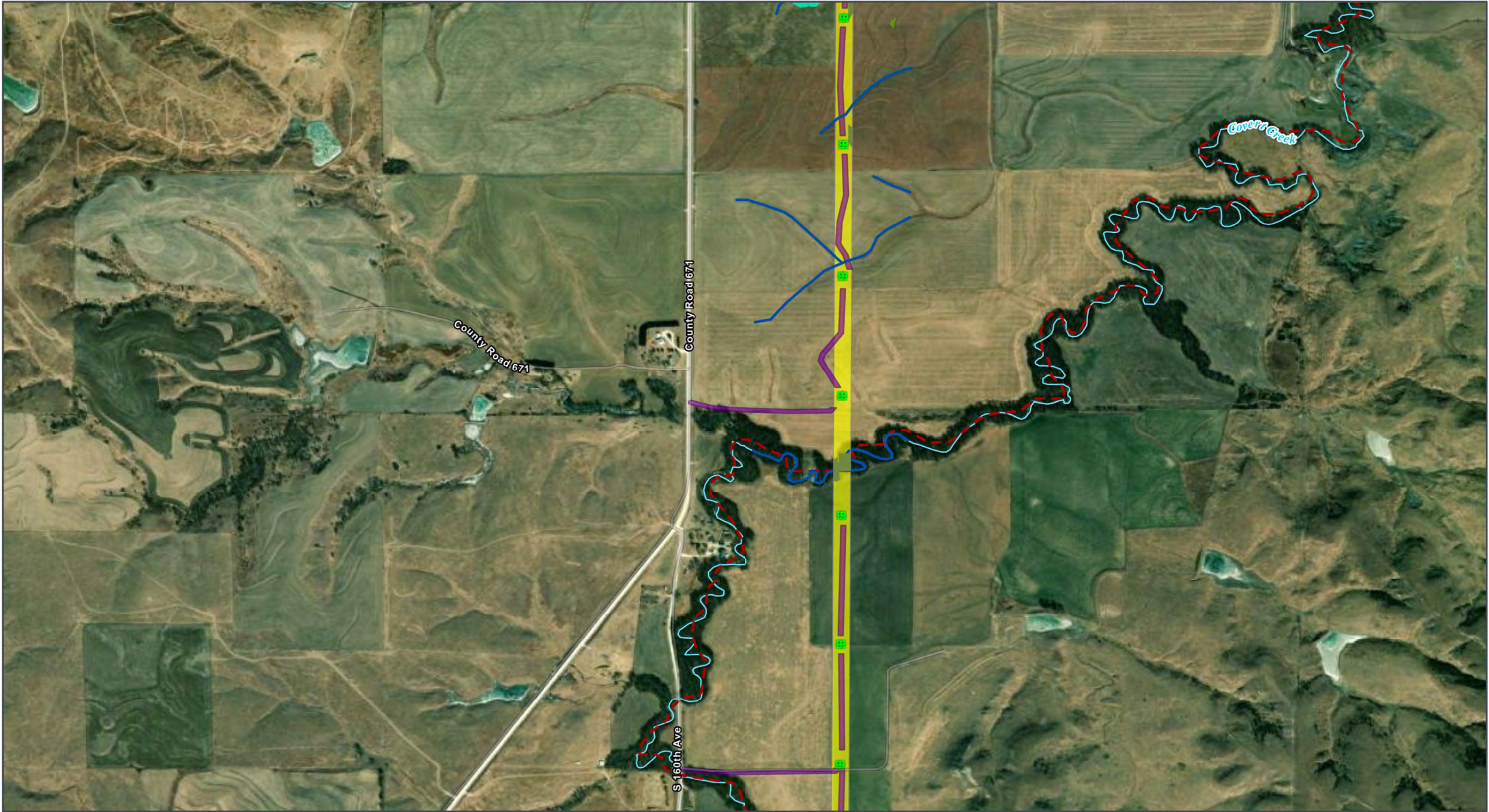


Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
From: WetlandMapBook\_12k







GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 80 of 259

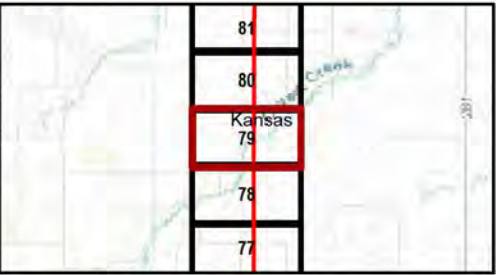
**Permanent Project Component**  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

**Temporary Project Component**  
Access Road  
**Hydrology**  
Delineated Stream  
NHD Stream/River

**Delineated Wetland**  
Palustrine Aquatic Bed (PAB)  
Palustrine Emergent (PEM)

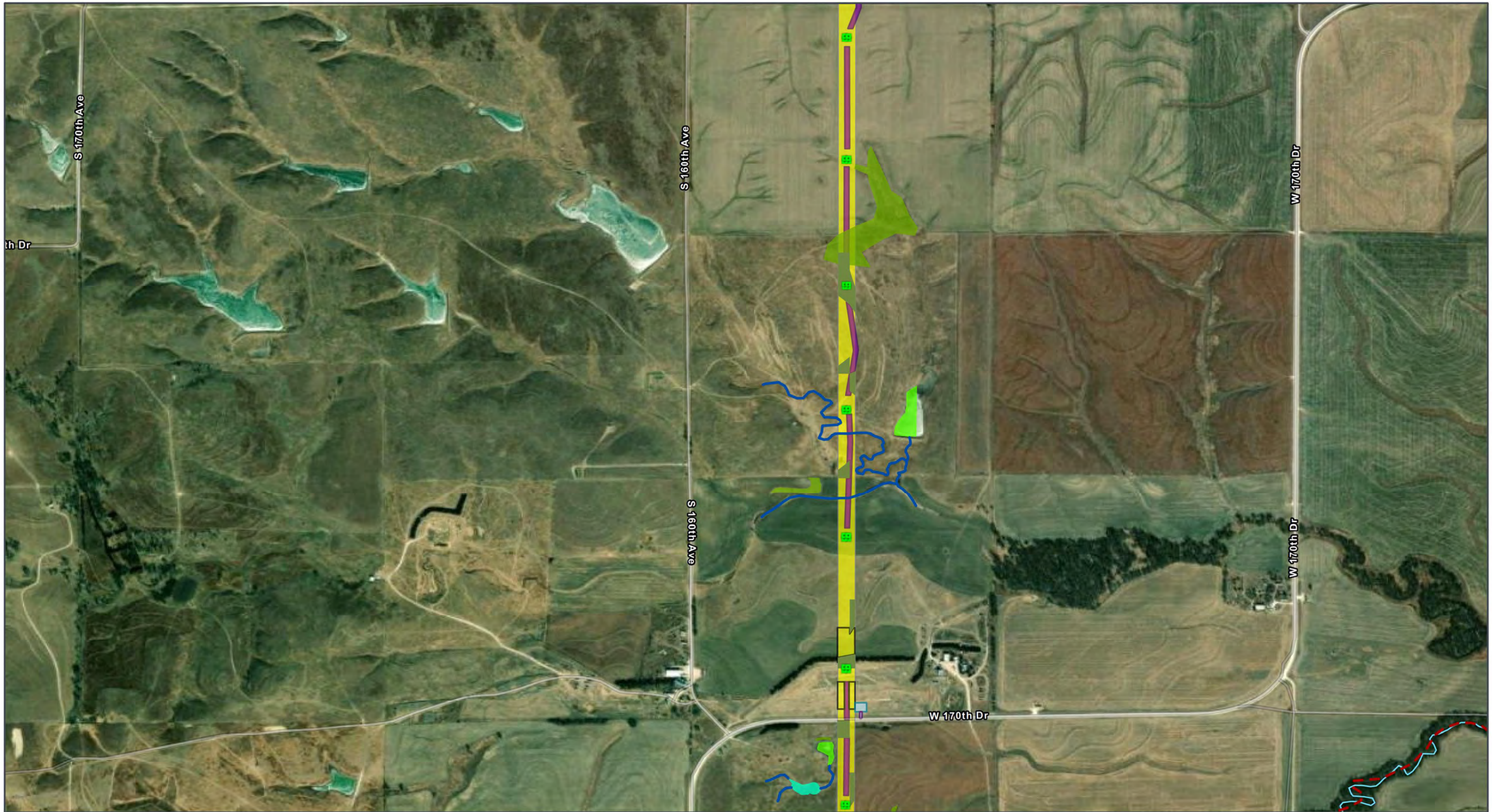
Impaired Waterway (303d)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W  
Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aron: WetlandMapBook\_12k  
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0 400 800 Feet  
0 100 200 Meters  
N  
Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 81 of 259

ROW

**Permanent Project Component**

- Transmission Structure
- Optical Regeneration
- OPGW Access

**Habitat Conversion**

Vegetation Clearing

**Temporary Project Component**

- Access Road
- Pull Site/Tension Site

**Hydrology**

Delineated Stream

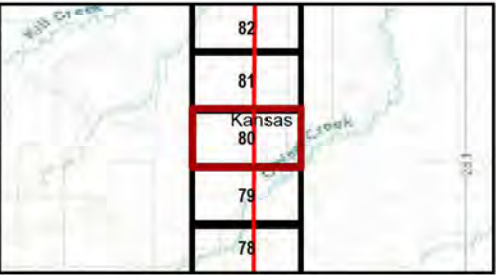
NHD Stream/River

Impaired Waterway (303d)

**Delineated Wetland**

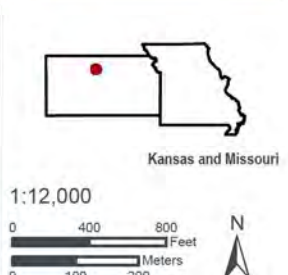
- Palustrine Aquatic Bed (PAB)
- Palustrine Emergent (PEM)
- Palustrine Unconsolidated Bottom (PUB)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented

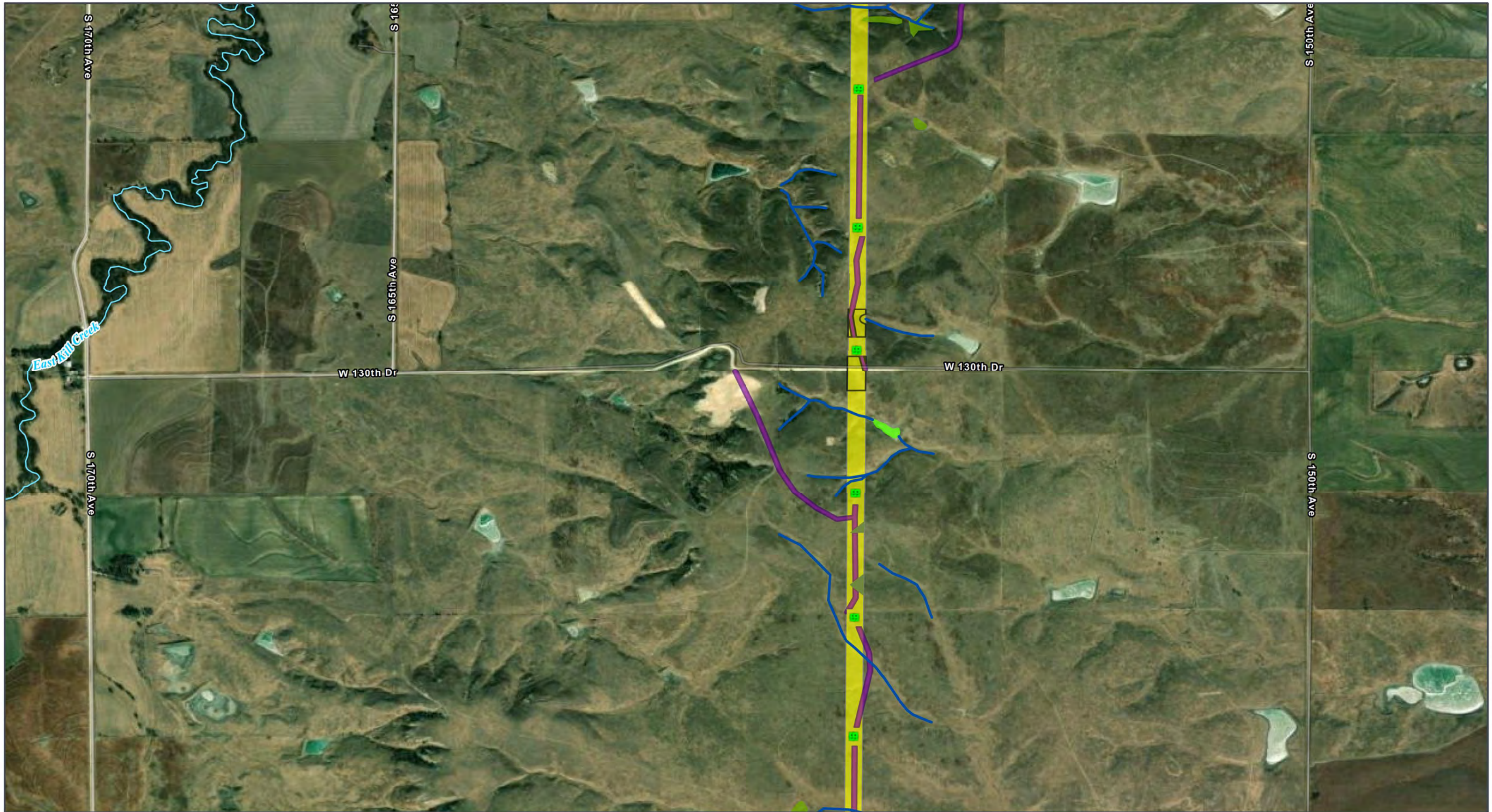


Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aron: WetlandMapBook\_12k







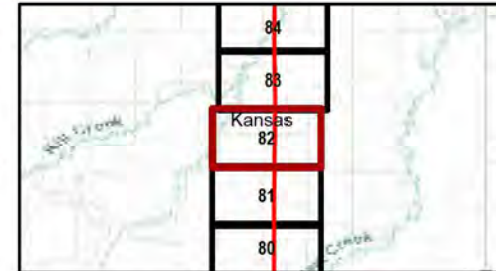
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 82 of 259

**Permanent Project Component**  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

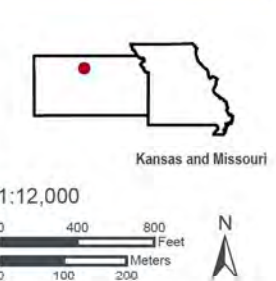
**Temporary Project Component**  
Access Road  
Pull Site/Tension Site  
**Hydrology**  
Delineated Stream

**Delineated Wetland**  
Palustrine Emergent (PEM)  
Palustrine Unconsolidated Bottom (PUB)

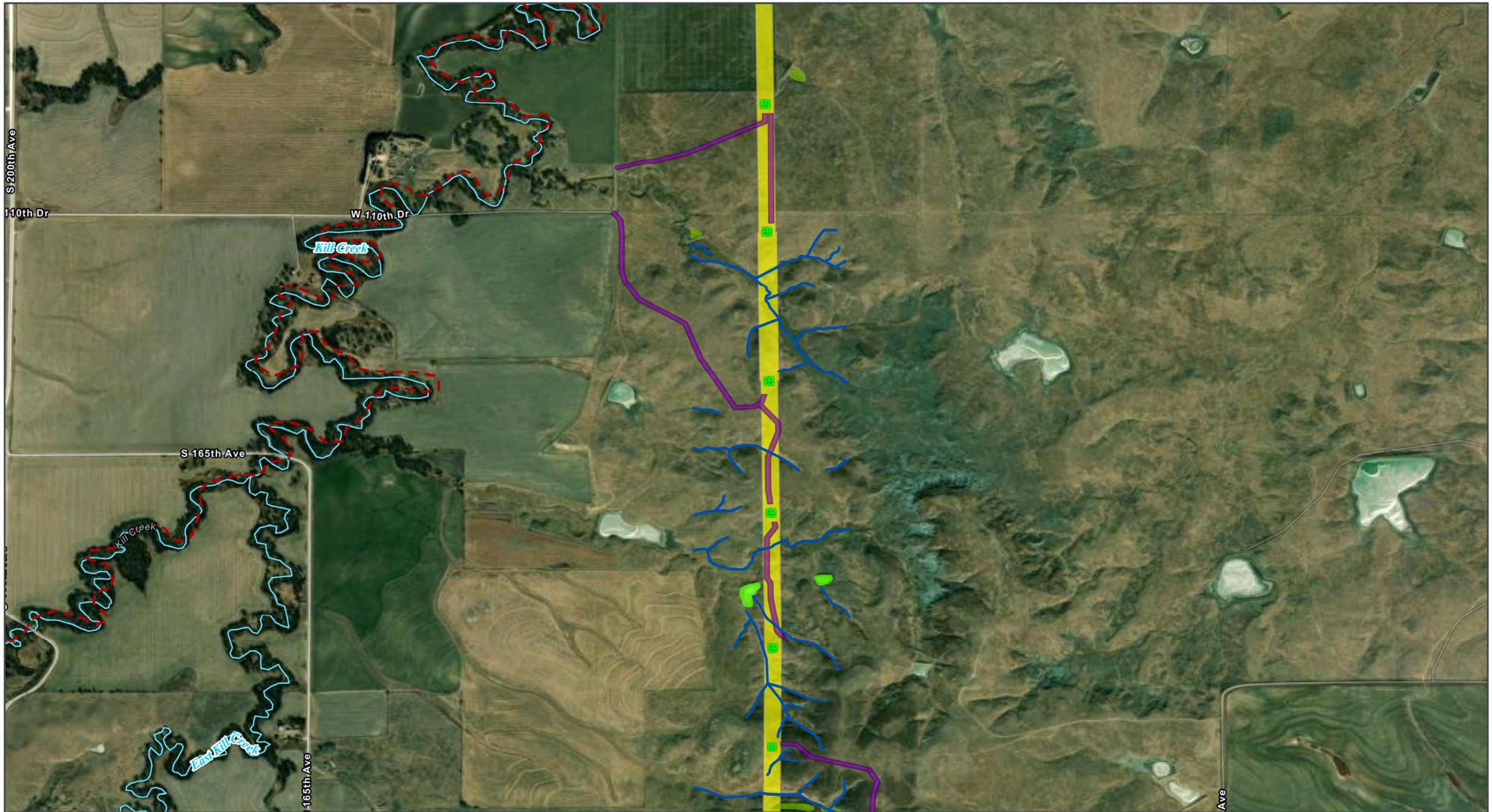
All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W  
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accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aero: WetlandMapBook\_12k







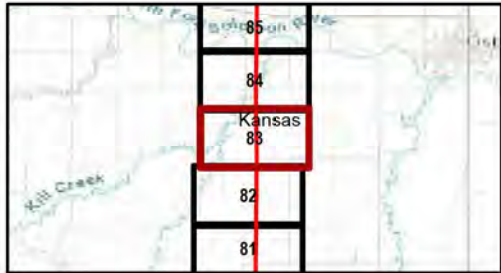
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
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**Permanent Project Component**  
Transmission Structure

**Temporary Project Component**  
Access Road  
**Hydrology**  
Delineated Stream  
NHD Stream/River

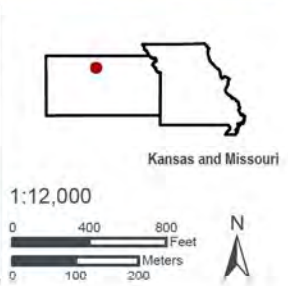
Impaired Waterway (303d)  
**Delineated Wetland**  
Palustrine Emergent (PEM)  
Palustrine Unconsolidated Bottom (PUB)

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

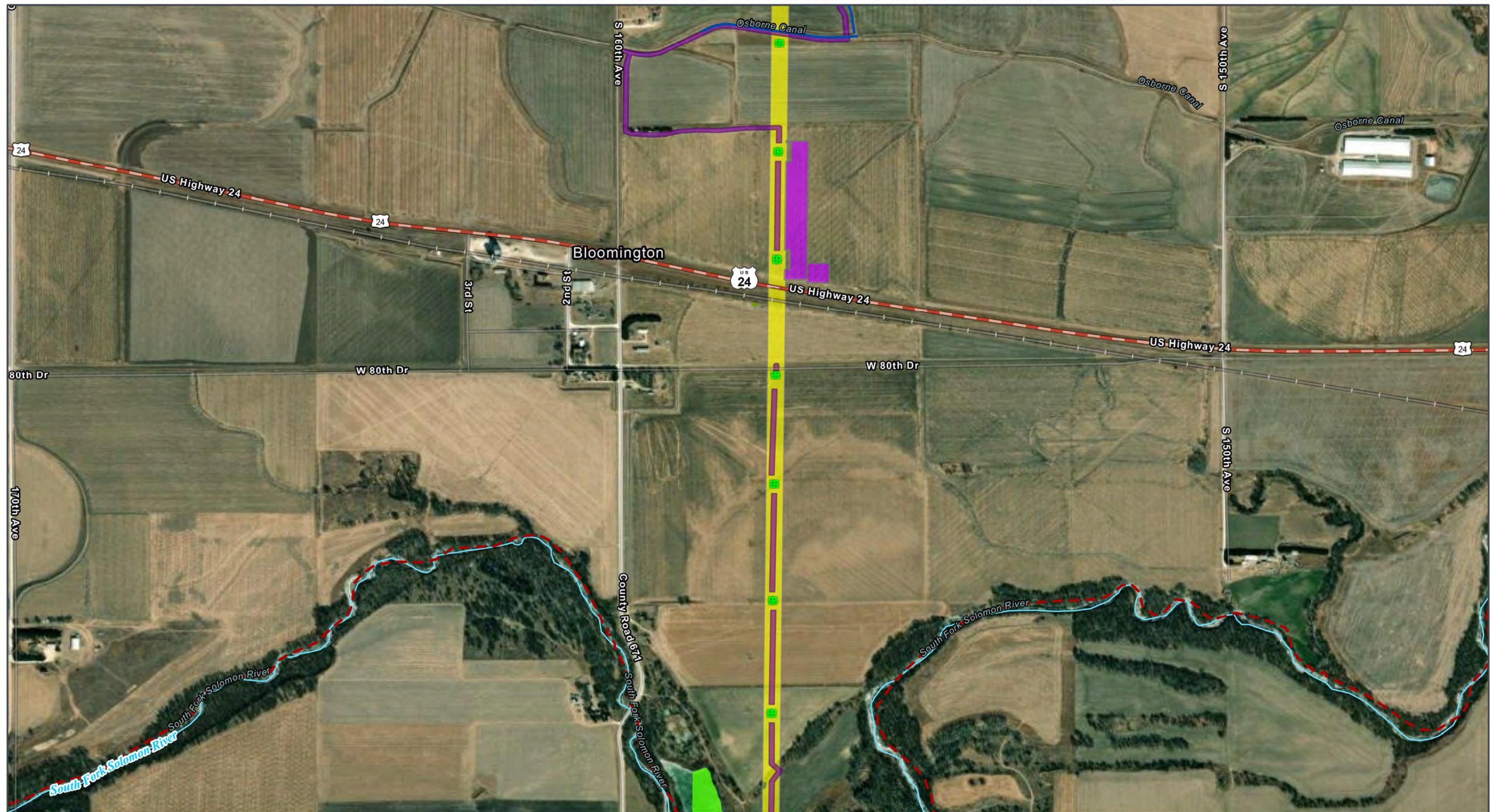
Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aero: WetlandMapBook\_12k











## GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT

## Wetlands Map Book

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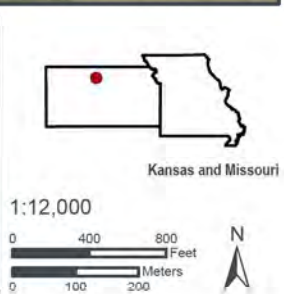
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|--|--|---|
|  ROW                    |  <b>Temporary Project Component</b> |  Impaired Waterway (303d)               |
| <b>Permanent Project Component</b>   |  Access Road                        | <b>Delineated Wetland</b>   |
|  Transmission Structure |  Helipad / Fly Yard                 |  Palustrine Emergent (PEM)              |
| <b>Habitat Conversion</b>  | <b>Hydrology</b>   |  Palustrine Unconsolidated Bottom (PUB) |
|  Vegetation Clearing    |  Delineated Stream                  | <b>Transportation</b>   |
|  |  NHD Stream/River                   |  U.S. Highway                           |

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented.

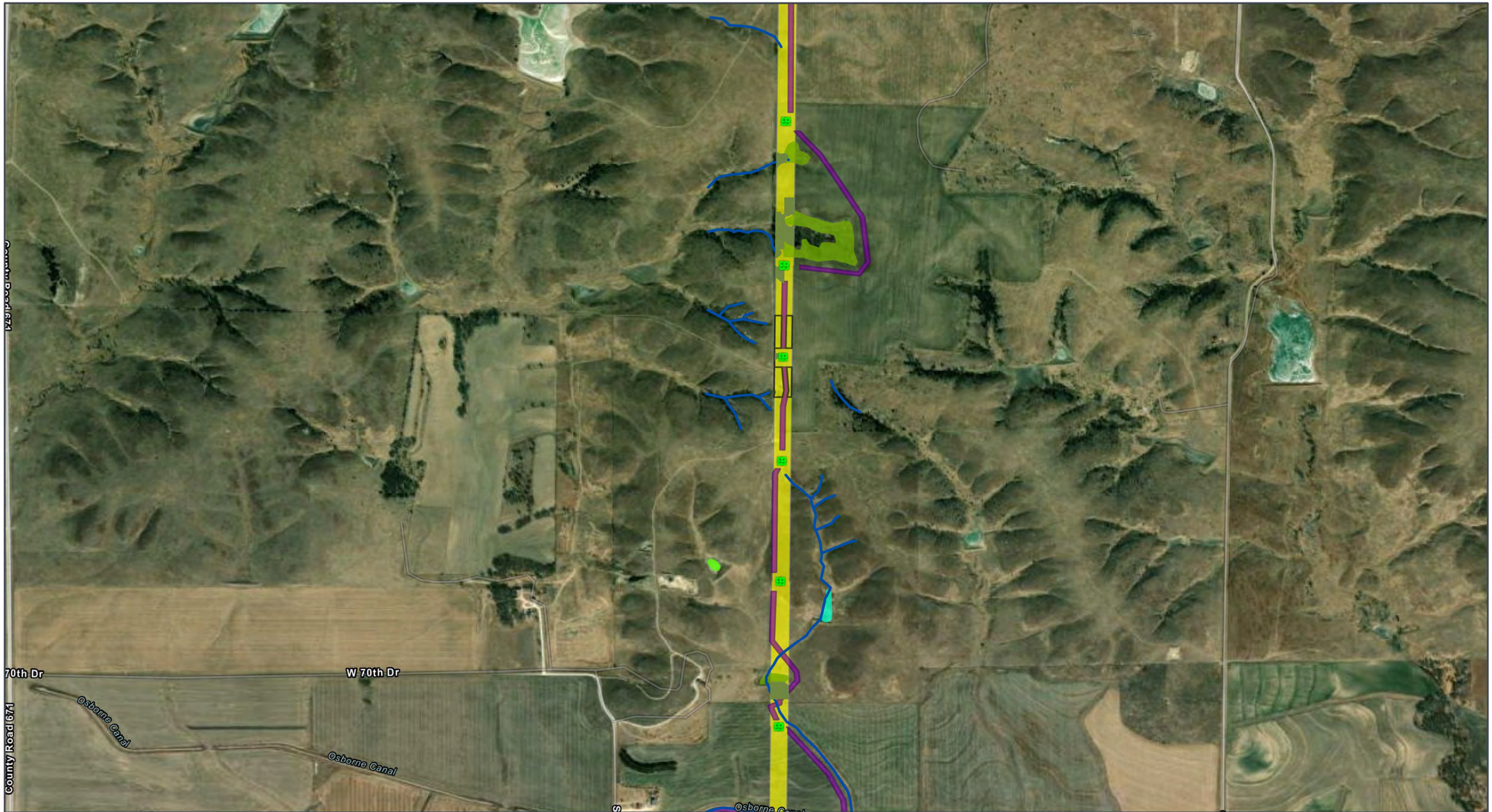


Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
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Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Apnx: WetlandMapBook\_12k







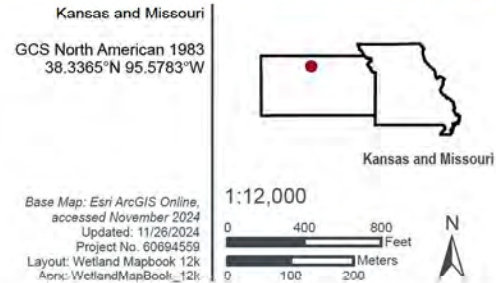
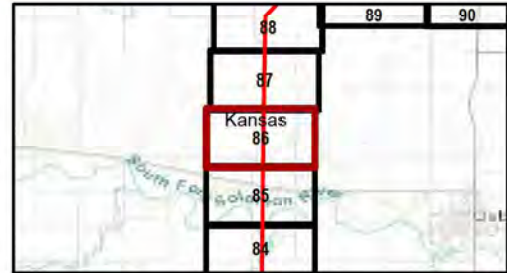
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
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**Permanent Project Component**  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

**Temporary Project Component**  
Access Road  
Pull Site/Tension Site  
**Hydrology**  
Delineated Stream

**Delineated Wetland**  
Palustrine Aquatic Bed (PAB)  
Palustrine Emergent (PEM)  
Palustrine Unconsolidated Bottom (PUB)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented







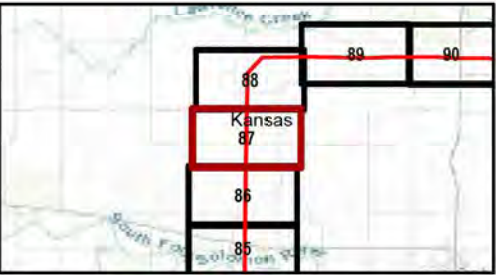
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
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**ROW**  
Permanent Project Component  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

**Temporary Project Component**  
Access Road  
**Hydrology**  
Delineated Stream  
NHD Stream/River

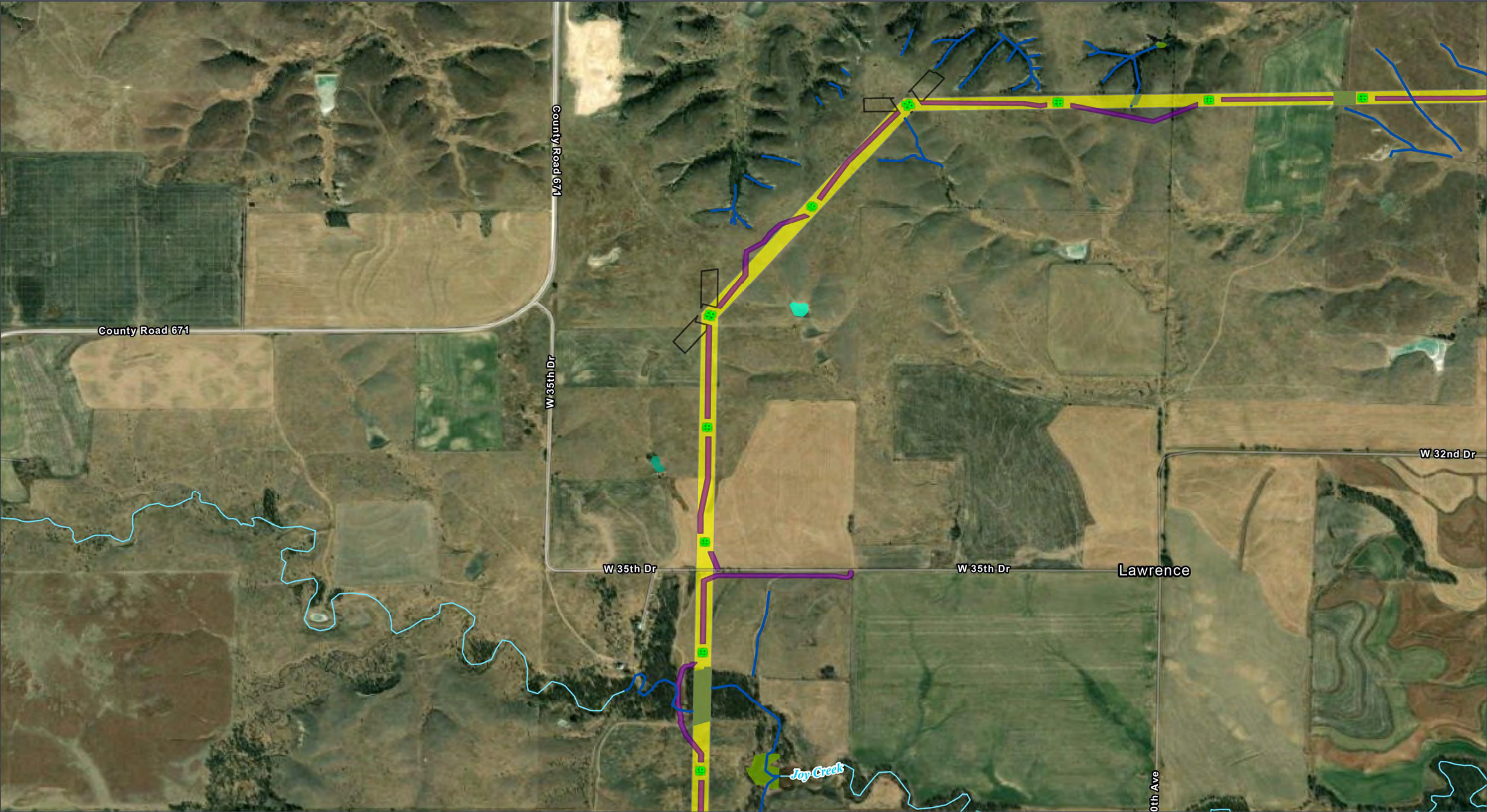
**Delineated Wetland**  
Palustrine Unconsolidated Bottom (PUB)

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W  
Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
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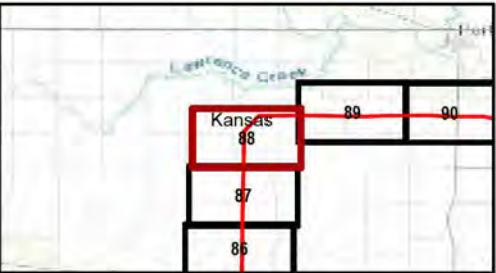
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
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- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

- Temporary Project Component**
- Access Road
- Pull Site/Tension Site
- Hydrology**
- Delineated Stream

- NHD Stream/River
- Delineated Wetland**
- Palustrine Aquatic Bed (PAB)
- Palustrine Emergent (PEM)
- Palustrine Forested (PFO)

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Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Acrs: WetlandMapBook\_12k

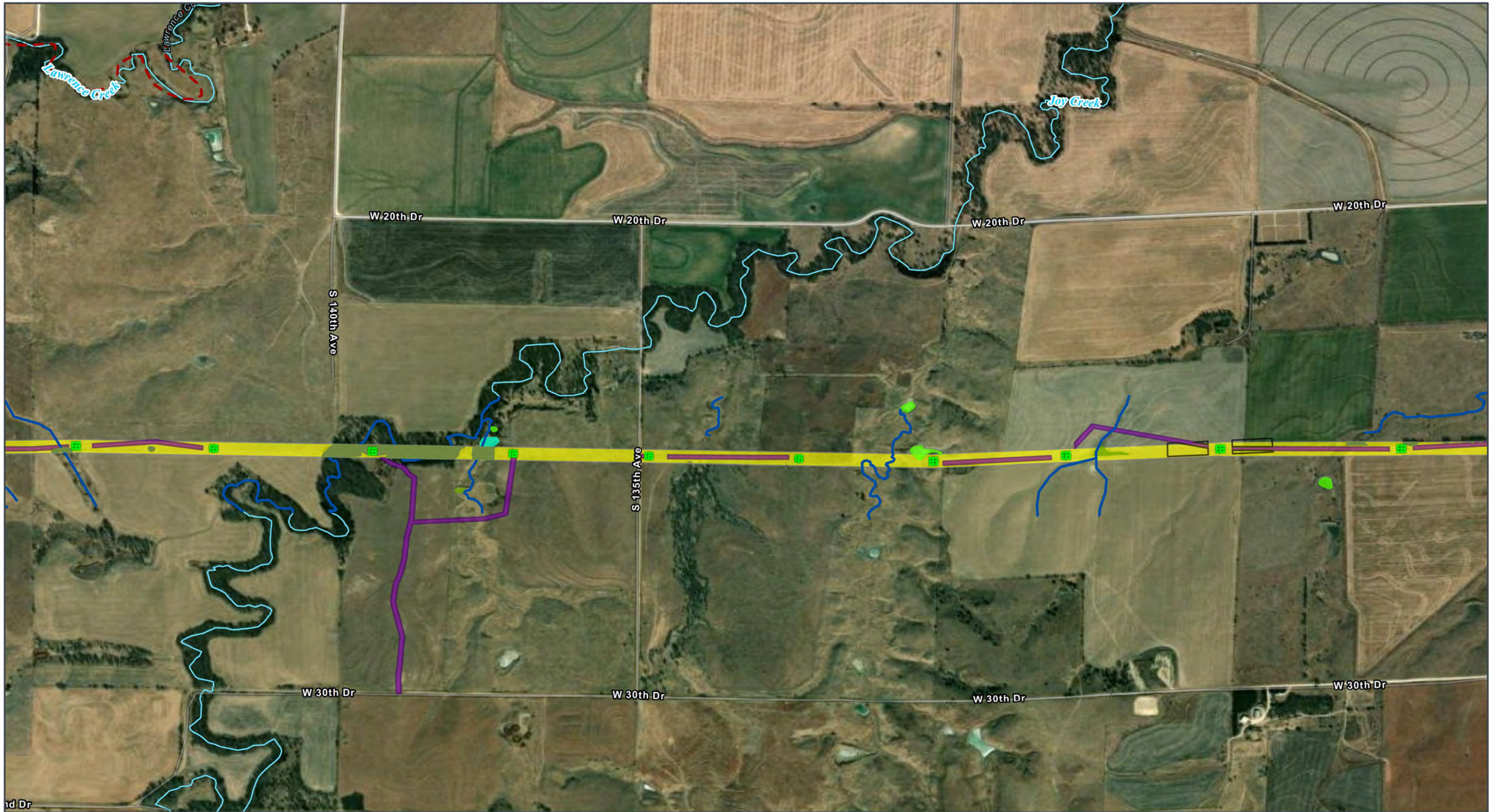
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Kansas and Missouri

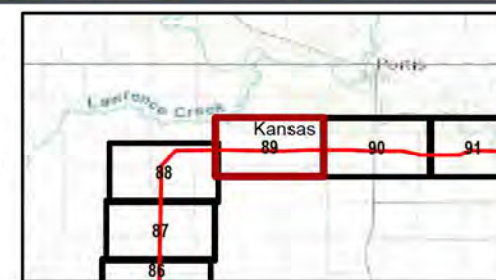




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 89 of 259

- |  |  |  |
|--|--|--|
| <b>ROW</b><br>Permanent Project Component<br>Transmission Structure<br>Habitat Conversion<br>Vegetation Clearing | <b>Temporary Project Component</b><br>Access Road<br>Pull Site/Tension Site<br><b>Hydrology</b><br>Delineated Stream<br>NHD Stream/River | <b>Delineated Wetland</b><br>Impaired Waterway (303d)<br>Palustrine Aquatic Bed (PAB)<br>Palustrine Emergent (PEM)<br>Palustrine Unconsolidated Bottom (PUB) |
|--|--|--|

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Kansas and Missouri  
GCS North American 1983  
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Project No. 60694559  
Layout: Wetland Mapbook 12k  
From: WetlandMapBook\_12k

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0 100 200 Meters

Kansas and Missouri



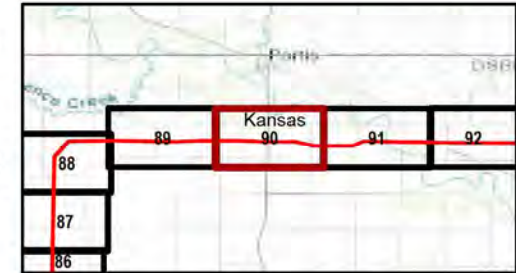


GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
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- |                                    |                               |
|------------------------------------|-------------------------------|
| <b>ROW</b>                         | <b>Helipad / Fly Yard</b>     |
| <b>Permanent Project Component</b> | <b>Pull Site/Tension Site</b> |
| Transmission Structure             |                               |
| <b>Habitat Conversion</b>          | <b>Hydrology</b>              |
| Vegetation Clearing                | Delineated Stream             |
| <b>Temporary Project Component</b> | NHD Stream/River              |
| Access Road                        | Impaired Waterway (303d)      |

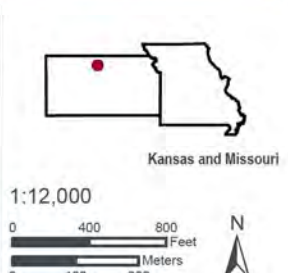
- Delineated Wetland**
- Palustrine Emergent (PEM)
  - Palustrine Unconsolidated Bottom (PUB)
- Transportation**
- U.S. Highway

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Layout: Wetland Mapbook 12k  
Acrs: WetlandMapBook\_12k







GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
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ROW

**Permanent Project Component**

Transmission Structure

**Habitat Conversion**

Vegetation Clearing

**Temporary Project Component**

Access Road

Pull Site/Tension Site

**Hydrology**

Delineated Stream

NHD Stream/River

Impaired Waterway (303d)

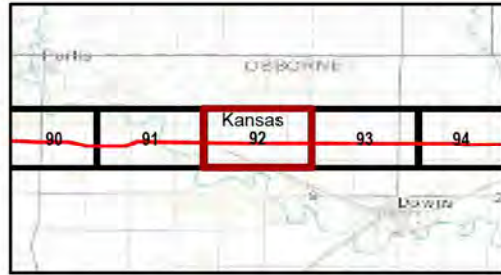
**Delineated Wetland**

Palustrine Emergent (PEM)

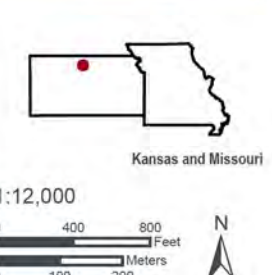
**Transportation**

Railroad

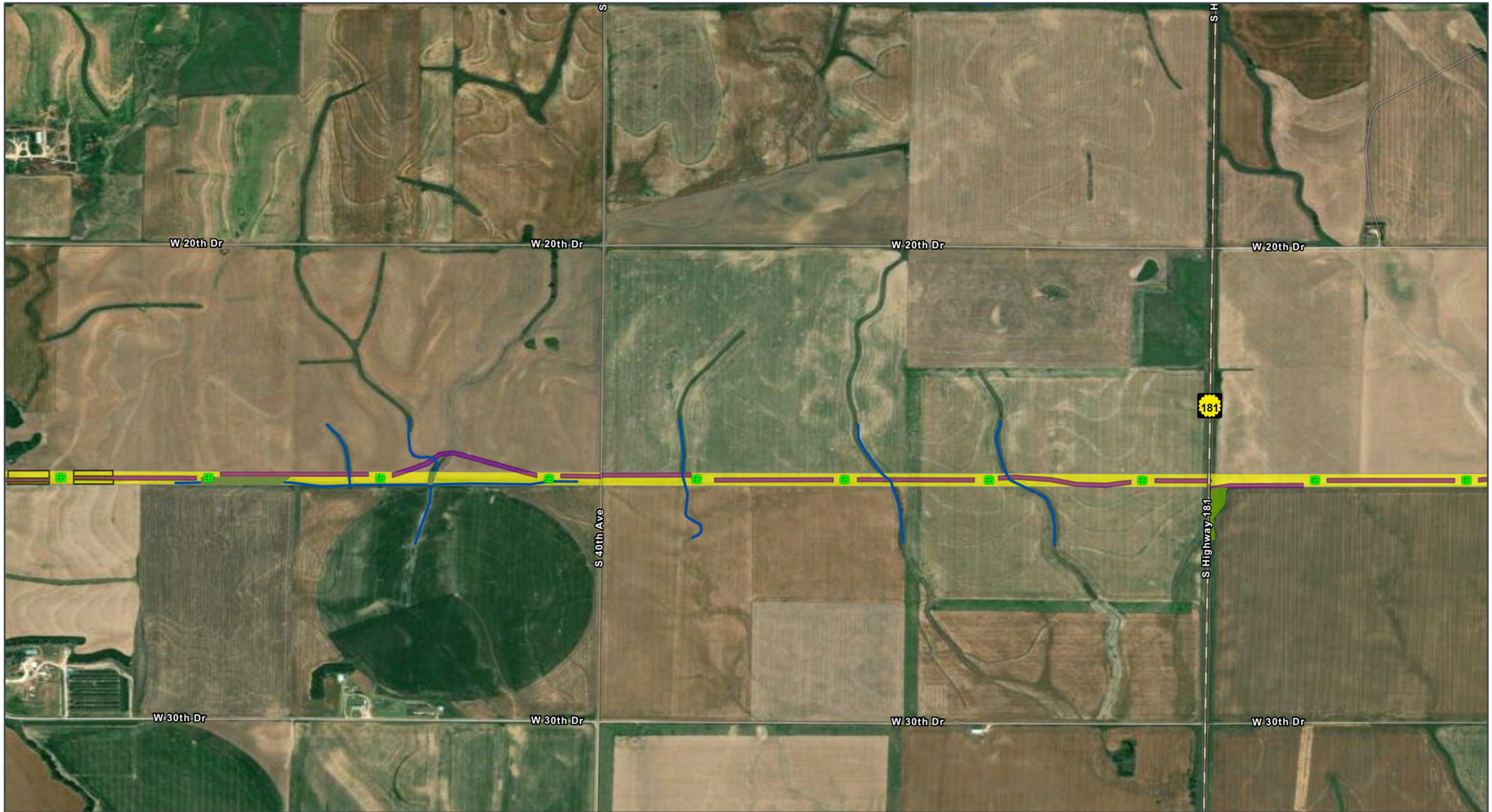
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Kansas and Missouri  
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Layout: Wetland Mapbook 12k  
Aron: WetlandMapBook\_12k



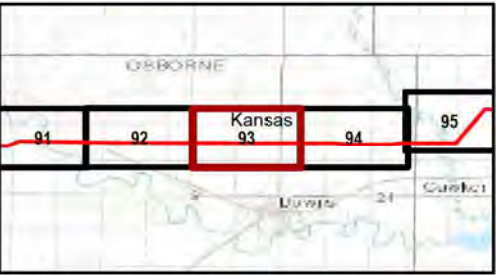




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
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- |   |   |  |
|---|---|--|
| <p><b>Permanent Project Component</b></p> <ul style="list-style-type: none"> <li>Transmission Structure</li> <li>Habitat Conversion</li> <li>Vegetation Clearing</li> </ul> | <p><b>Temporary Project Component</b></p> <ul style="list-style-type: none"> <li>Access Road</li> <li>Pull Site/Tension Site</li> <li>Hydrology</li> <li>Delineated Stream</li> </ul> | <ul style="list-style-type: none"> <li>PLJV Playa</li> <li>Delineated Wetland</li> <li>Palustrine Emergent (PEM)</li> <li>Transportation</li> <li>State Highway</li> </ul> |
|---|---|--|

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Kansas and Missouri

GCS North American 1983  
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Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aero: WetlandMapBook\_12k

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Kansas and Missouri





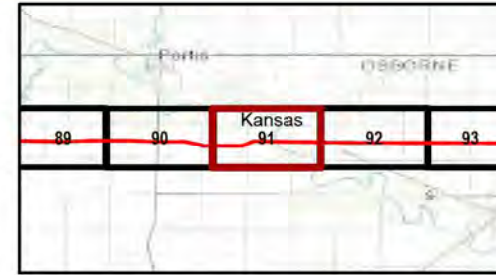
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 93 of 259

**Permanent Project Component**  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

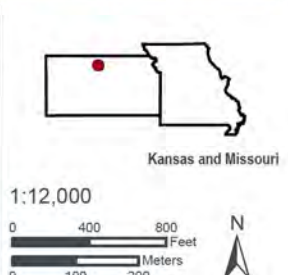
**Temporary Project Component**  
Access Road  
Helipad / Fly Yard  
Pull Site/Tension Site  
**Hydrology**  
Delineated Stream

NHD Stream/River  
Impaired Waterway (303d)  
**Delineated Wetland**  
Palustrine Emergent (PEM)  
**Transportation**  
Railroad

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Kansas and Missouri  
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Project No. 60694559  
Layout: Wetland Mapbook 12k  
From: WetlandMapBook\_12k







GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

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**Permanent Project Component**

- Transmission Structure
- Habitat Conversion
  - Vegetation Clearing

**Temporary Project Component**

- Access Road
- Pull Site/Tension Site
- Hydrology**
  - Delineated Stream
  - NHD Stream/River

**Delineated Wetland**

- Impaired Waterway (303d)
- Palustrine Aquatic Bed (PAB)
- Palustrine Emergent (PEM)
- Palustrine Unconsolidated Bottom (PUB)

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OSBORNE

Kansas

Garden City

Kansas and Missouri

GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aero: WetlandMapBook\_12k

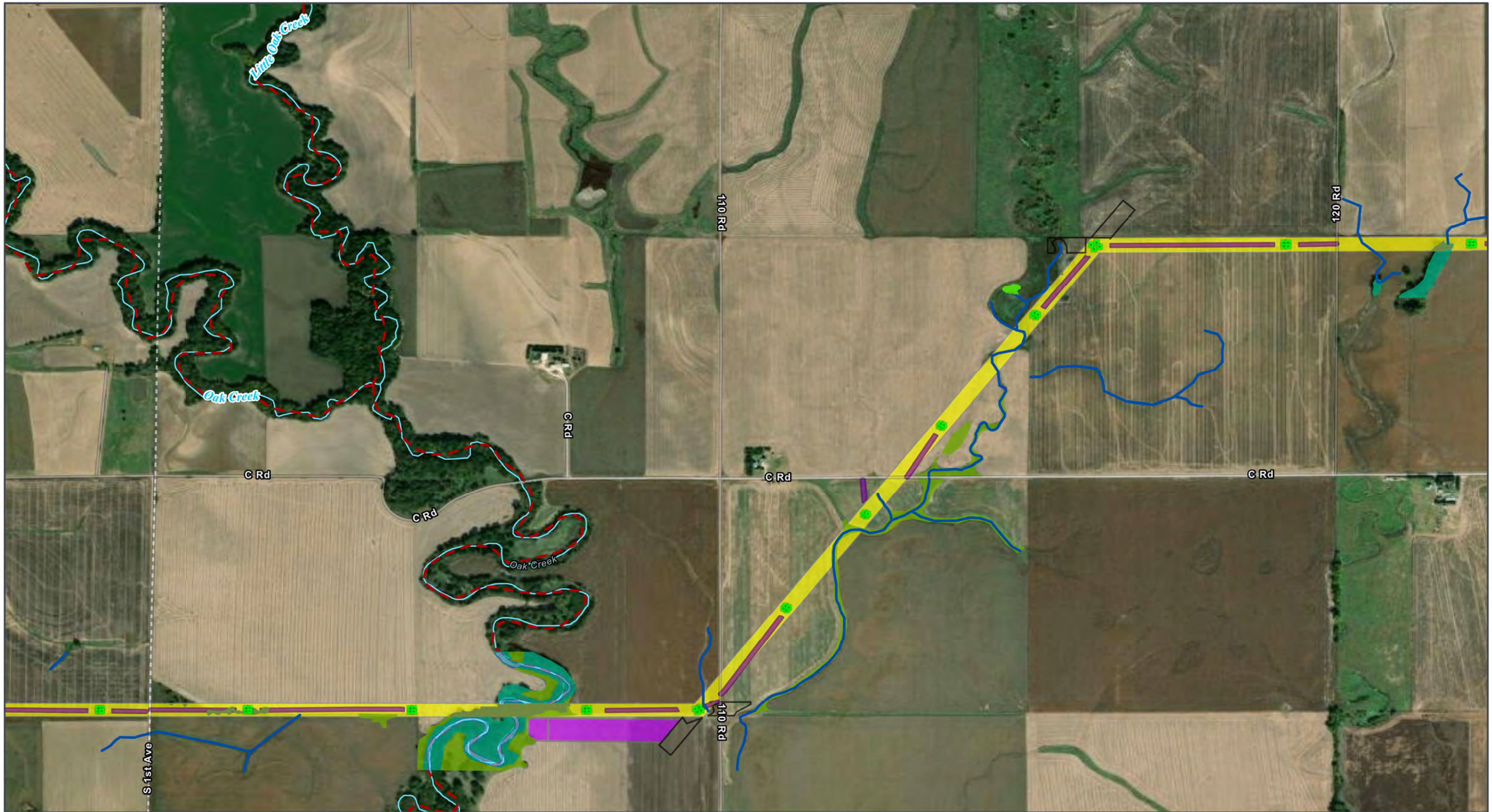
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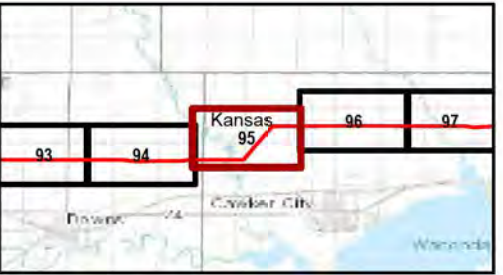


GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
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- |                                    |                               |
|------------------------------------|-------------------------------|
| <b>ROW</b>                         | <b>Helipad / Fly Yard</b>     |
| <b>Permanent Project Component</b> | <b>Pull Site/Tension Site</b> |
| Transmission Structure             |                               |
| <b>Habitat Conversion</b>          | <b>Hydrology</b>              |
| Vegetation Clearing                | Delineated Stream             |
| <b>Temporary Project Component</b> | NHD Stream/River              |
| Access Road                        | Impaired Waterway (303d)      |

- Delineated Wetland**
- Palustrine Emergent (PEM)
  - Palustrine Forested (PFO)
  - Palustrine Unconsolidated Bottom (PUB)
  - Delineated Waterbody

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Kansas and Missouri  
GCS North American 1983  
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Base Map: Esri ArcGIS Online,  
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Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aron: WetlandMapBook\_12k

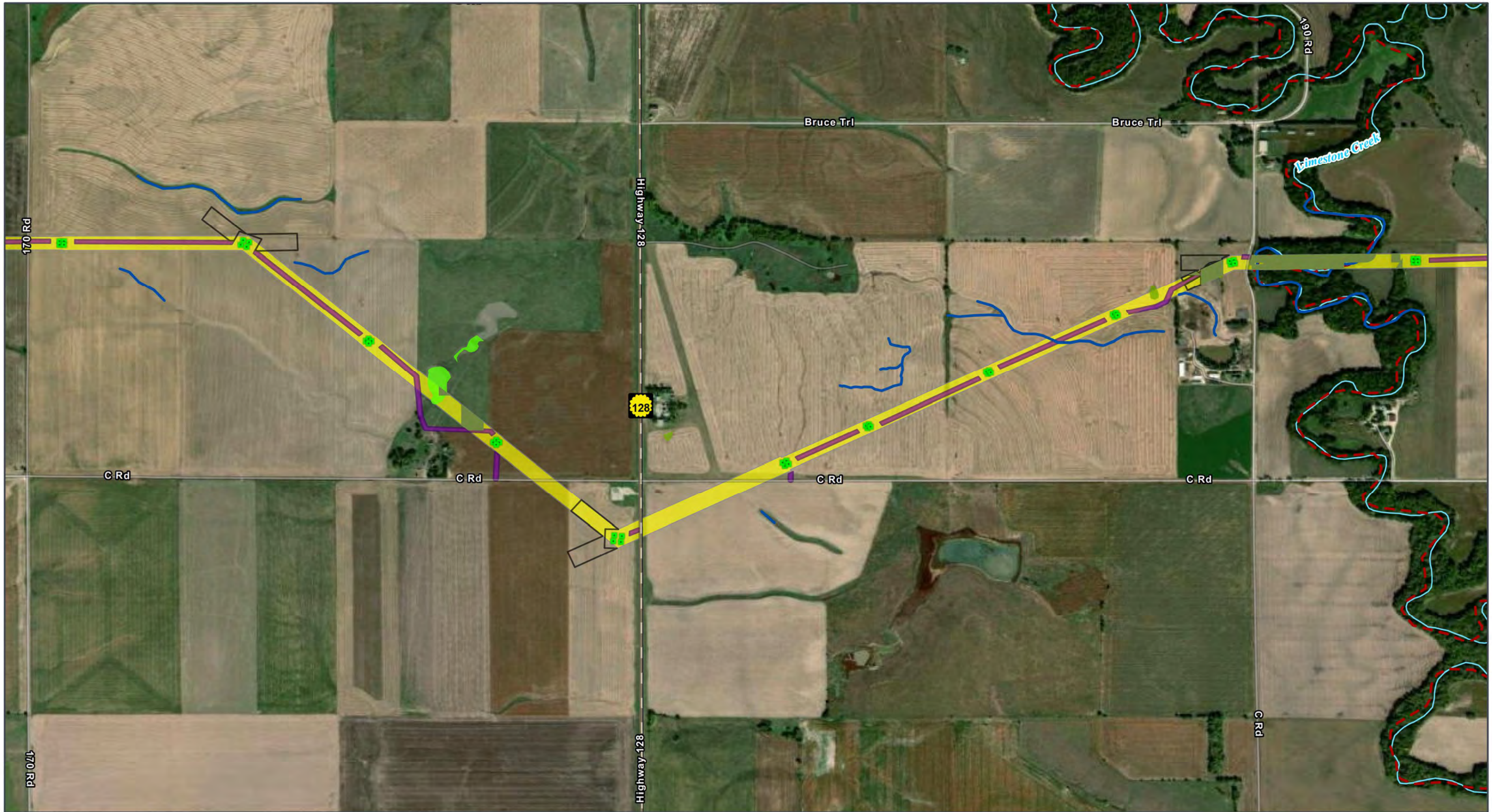
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Kansas and Missouri





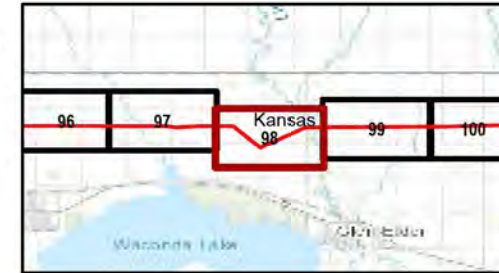
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
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**Permanent Project Component**  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

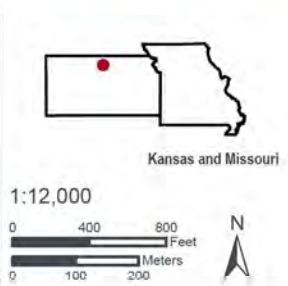
**Temporary Project Component**  
Access Road  
Pull Site/Tension Site  
**Hydrology**  
Delineated Stream  
NHD Stream/River

**Delineated Wetland**  
Palustrine Emergent (PEM)  
Palustrine Unconsolidated Bottom (PUB)  
**Transportation**  
State Highway

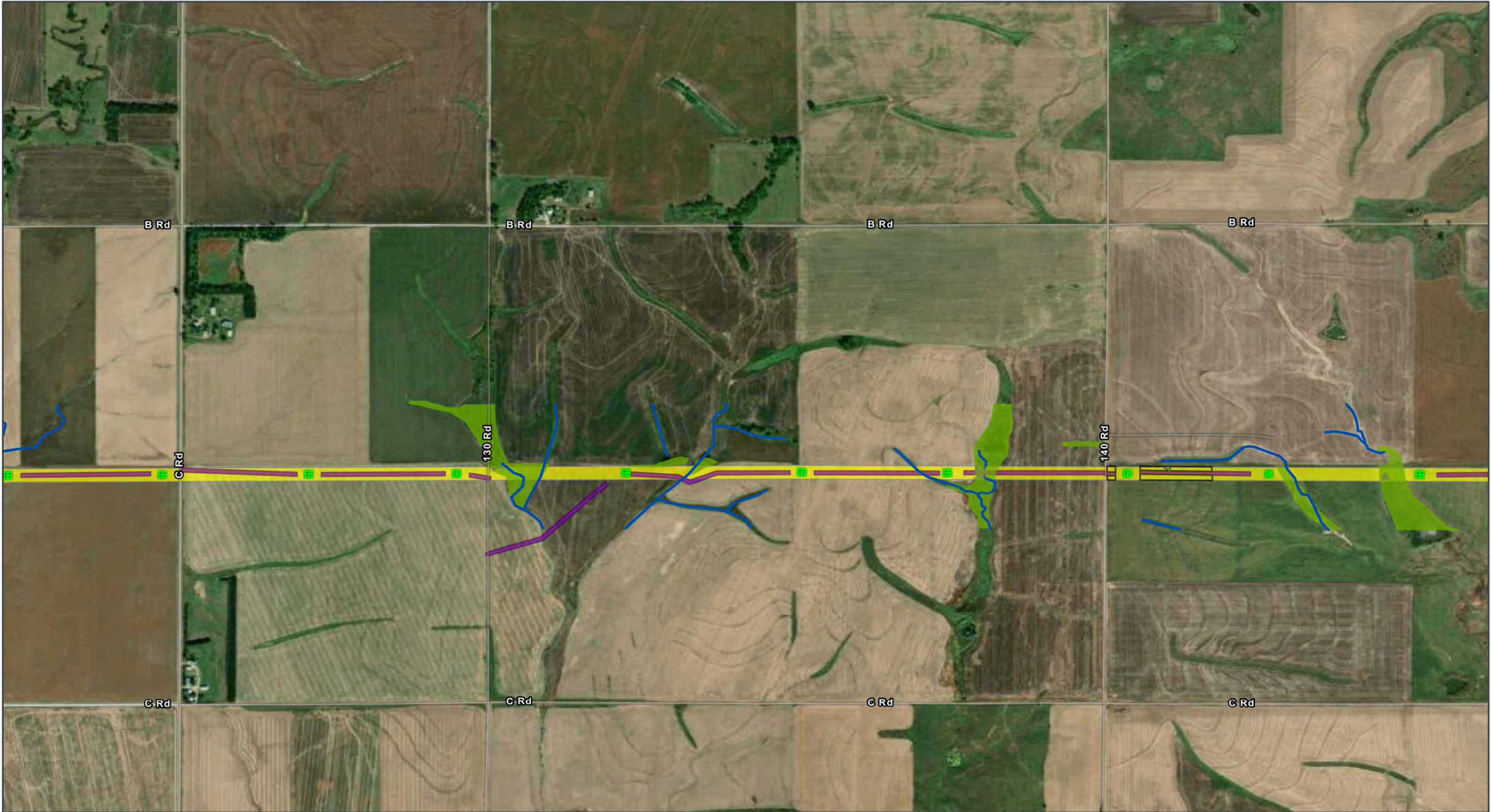
All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
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accessed November 2024  
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Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aron: WetlandMapBook\_12k







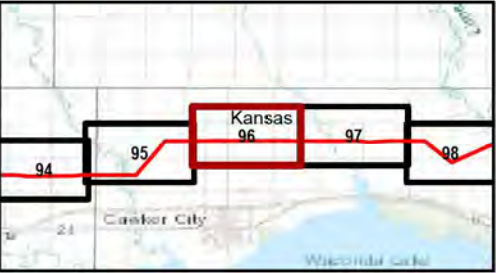
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
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**ROW**  
Permanent Project Component  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

**Temporary Project Component**  
Access Road  
Pull Site/Tension Site  
**Hydrology**  
Delineated Stream

**Delineated Wetland**  
Palustrine Emergent (PEM)

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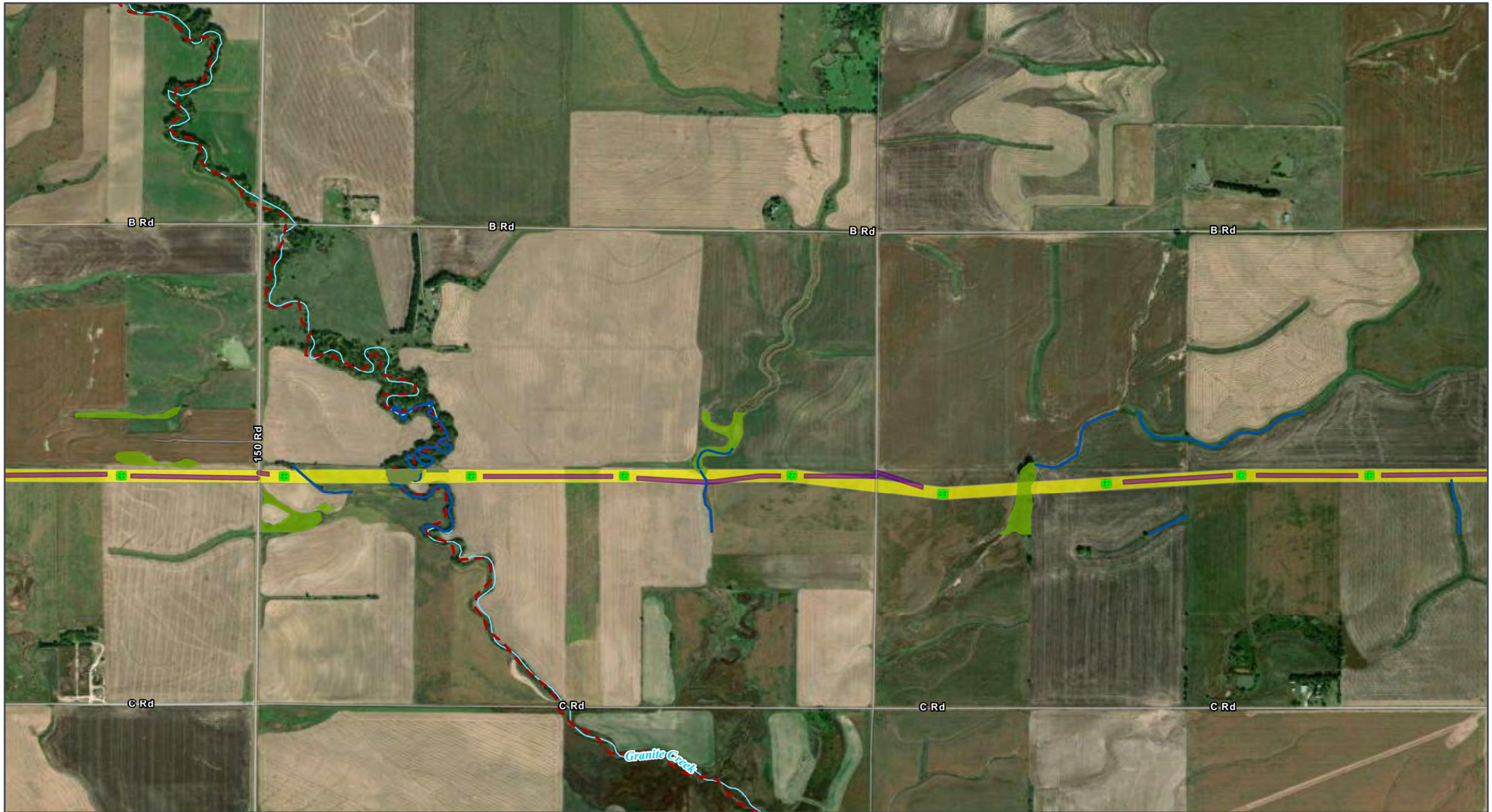


Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W



Kansas and Missouri





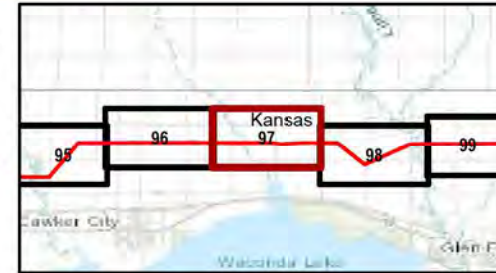
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
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**ROW**  
Permanent Project Component  
Transmission Structure  
**Habitat Conversion**  
Vegetation Clearing

**Temporary Project Component**  
Access Road  
**Hydrology**  
Delineated Stream  
NHD Stream/River

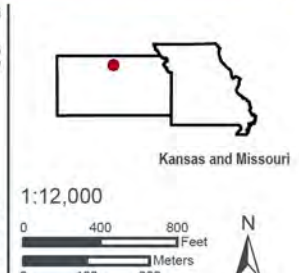
Impaired Waterway (303d)  
**Delineated Wetland**  
Palustrine Emergent (PEM)

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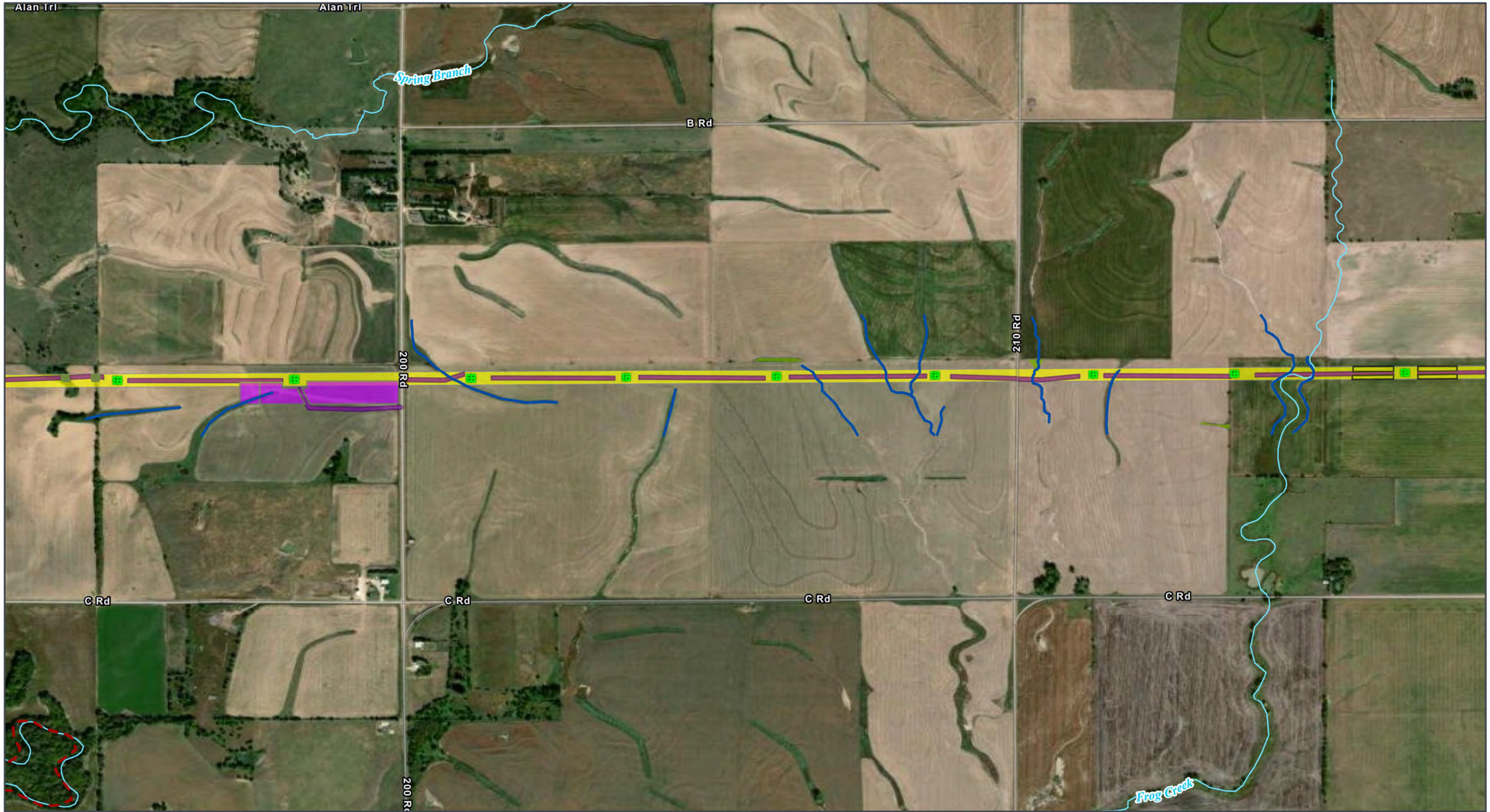


Kansas and Missouri  
GCS North American 1983  
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Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
From: WetlandMapBook\_12k







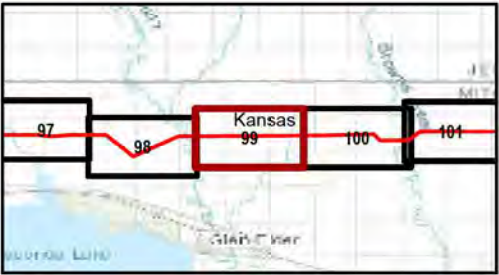
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
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- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

- Temporary Project Component**
- Access Road
- Helipad / Fly Yard
- Pull Site/Tension Site
- Hydrology**
- Delineated Stream

- NHD Stream/River
- Impaired Waterway (303d)
- Delineated Wetland**
- Palustrine Emergent (PEM)

All disturbance areas are likely an over-estimation of direct impacts and based on assumptions presented in the Chapter 2 disturbance model (Table 2-1). These impact areas will be refined and finalized once field surveys are complete and avoidance and/or mitigation measures are implemented



Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

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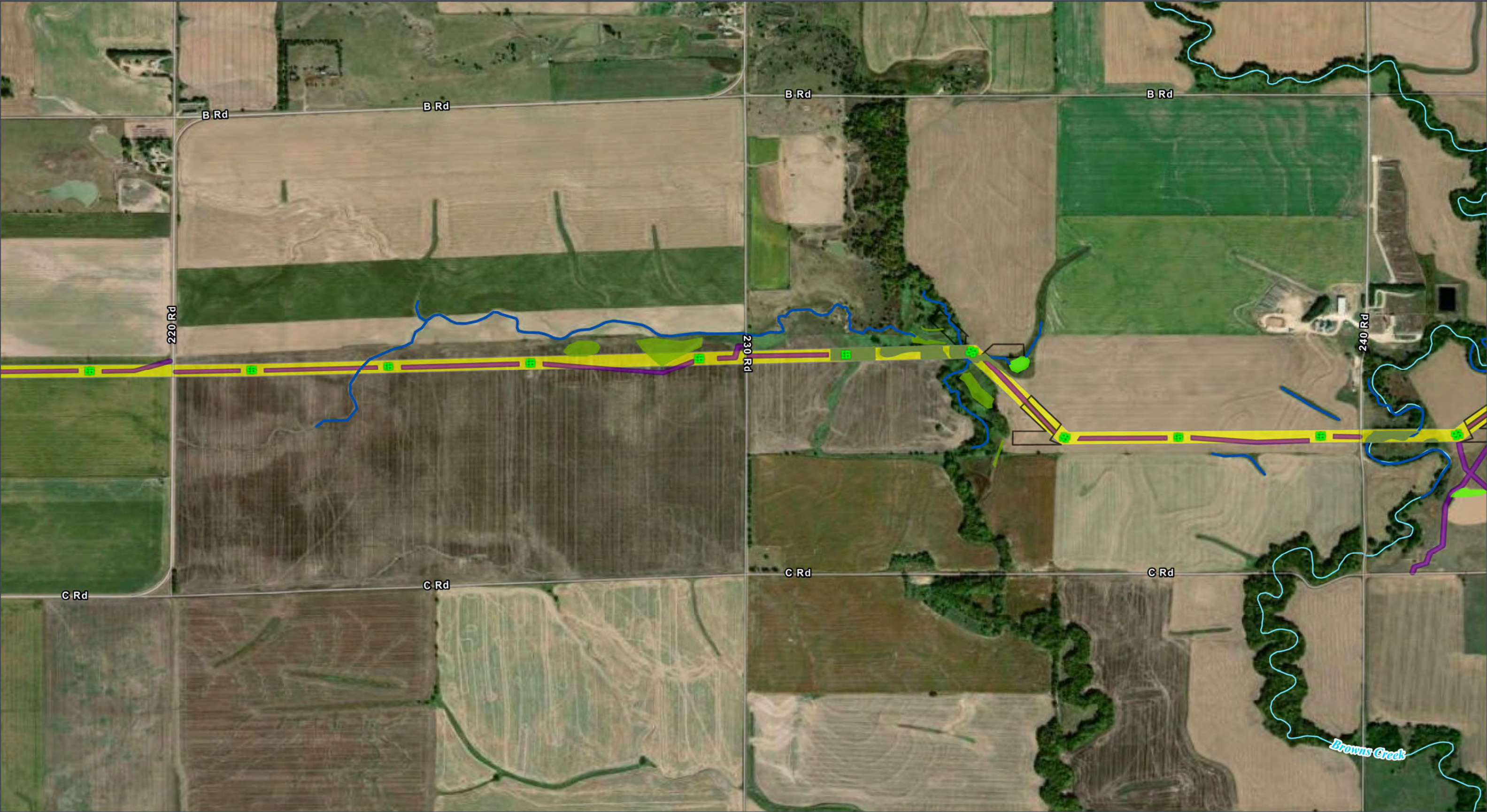
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Kansas and Missouri

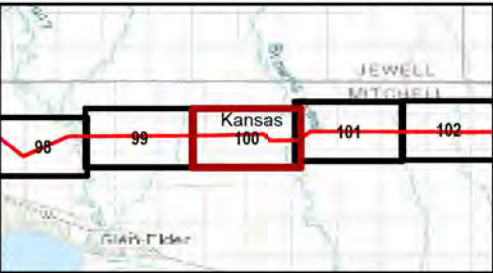




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
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- |                                    |                                    |  |
|------------------------------------|------------------------------------|--|
| <b>Permanent Project Component</b> | <b>Temporary Project Component</b> | <b>NHD Stream/River</b>                  |
| ■ Transmission Structure           | ■ Access Road                      | <b>Delineated Wetland</b>                |
| <b>Habitat Conversion</b>          | ■ Pull Site/Tension Site           | ■ Palustrine Emergent (PEM)              |
| ■ Vegetation Clearing              | <b>Hydrology</b>                   | ■ Palustrine Unconsolidated Bottom (PUB) |
|                                    | ■ Delineated Stream                |  |

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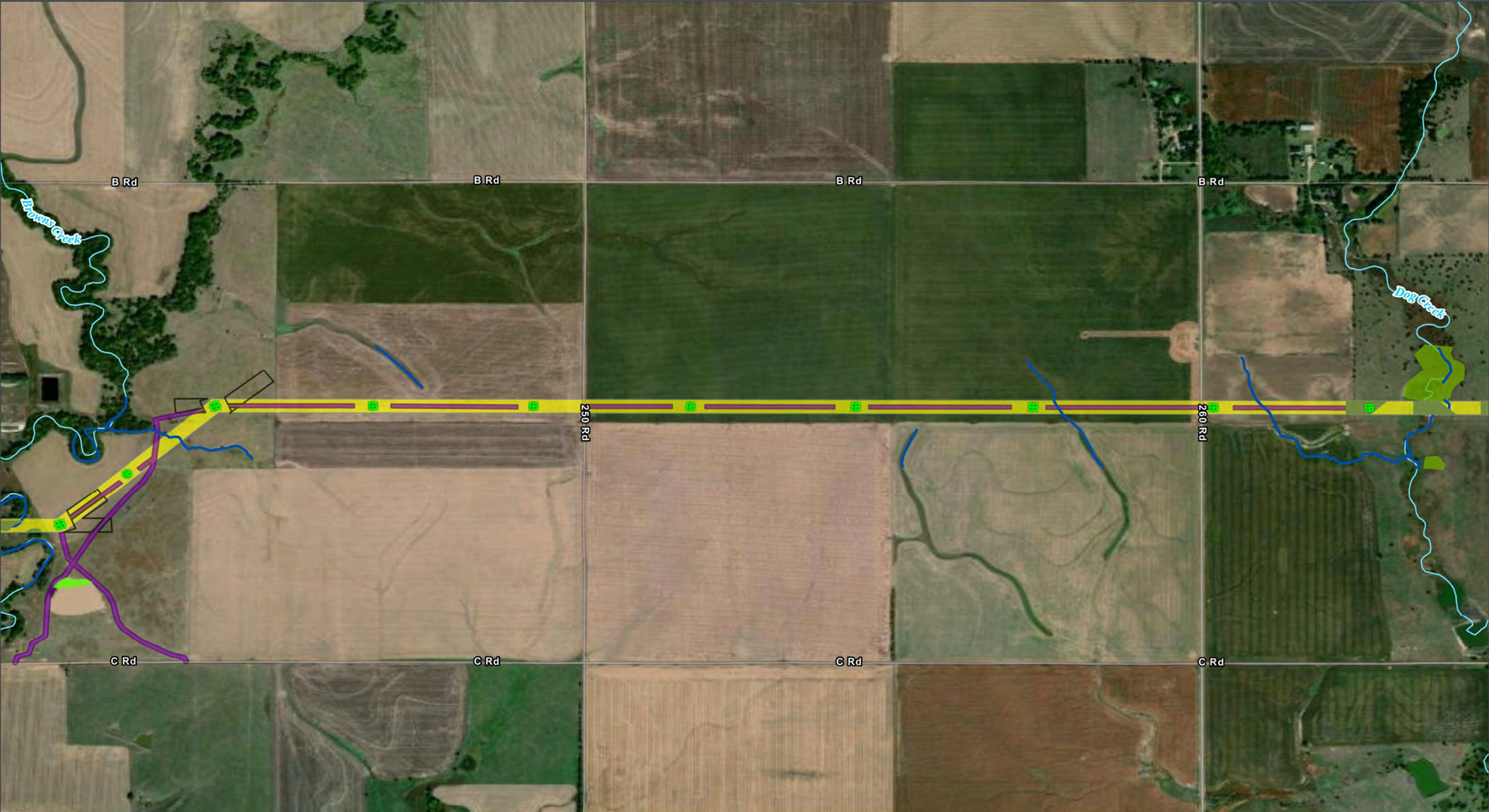
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Kansas and Missouri

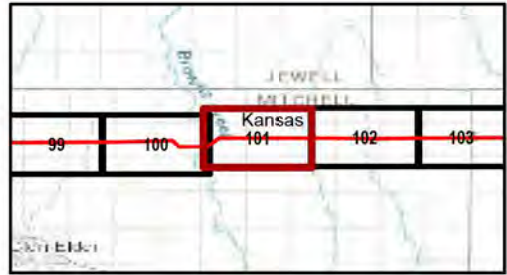




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 101 of 259

- |   |  |  |
|---|--|--|
| <b>Permanent Project Component</b> <ul style="list-style-type: none"><li>Transmission Structure</li></ul> <b>Habitat Conversion</b> <ul style="list-style-type: none"><li>Vegetation Clearing</li></ul> | <b>Temporary Project Component</b> <ul style="list-style-type: none"><li>Access Road</li><li>Pull Site/Tension Site</li></ul> <b>Hydrology</b> <ul style="list-style-type: none"><li>Delineated Stream</li></ul> | <b>Delineated Wetland</b> <ul style="list-style-type: none"><li>Palustrine Emergent (PEM)</li><li>Palustrine Unconsolidated Bottom (PUB)</li></ul> |
|---|--|--|

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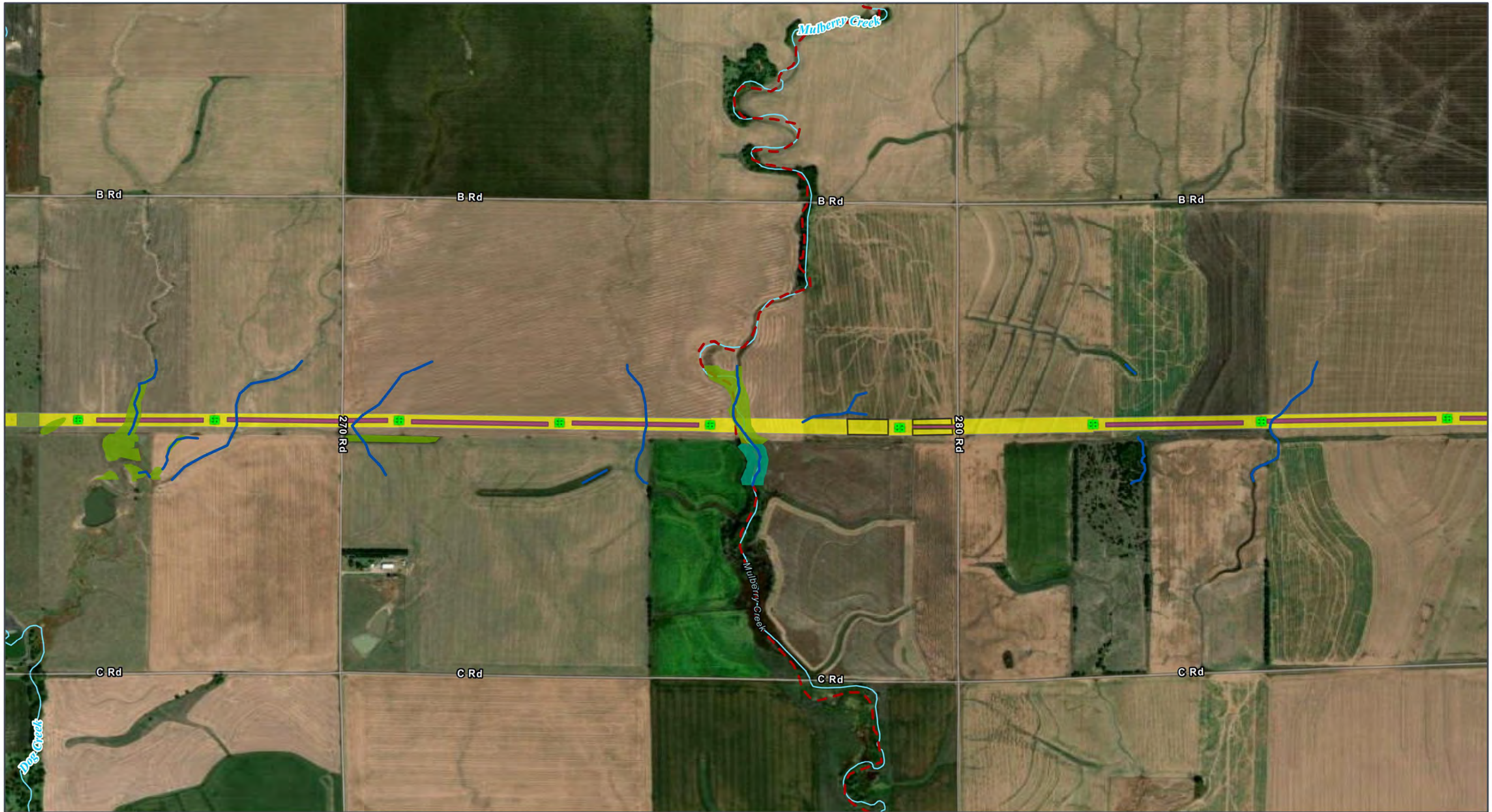
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Kansas and Missouri

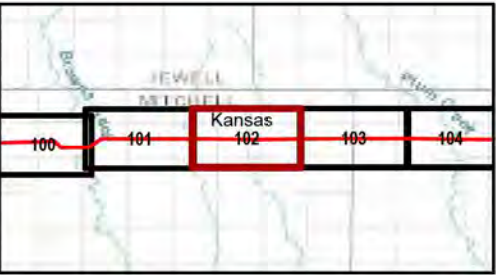




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
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- |                                      |  |  |  |
|--------------------------------------|--|--|--|
| <b>ROW</b><br>Yellow rectangle       | <b>Permanent Project Component</b><br>Green square: Transmission Structure<br>Dark green rectangle: Habitat Conversion<br>Light green rectangle: Vegetation Clearing | <b>Temporary Project Component</b><br>Purple rectangle: Access Road<br>White rectangle with black border: Pull Site/Tension Site<br><b>Hydrology</b><br>Blue line: Delineated Stream | <b>Delineated Wetland</b><br>Light green rectangle: Palustrine Emergent (PEM)<br>Teal rectangle: Palustrine Forested (PFO) |
| <b>NHD Stream/River</b><br>Blue line | <b>Impaired Waterway (303d)</b><br>Red dashed line   |  |  |

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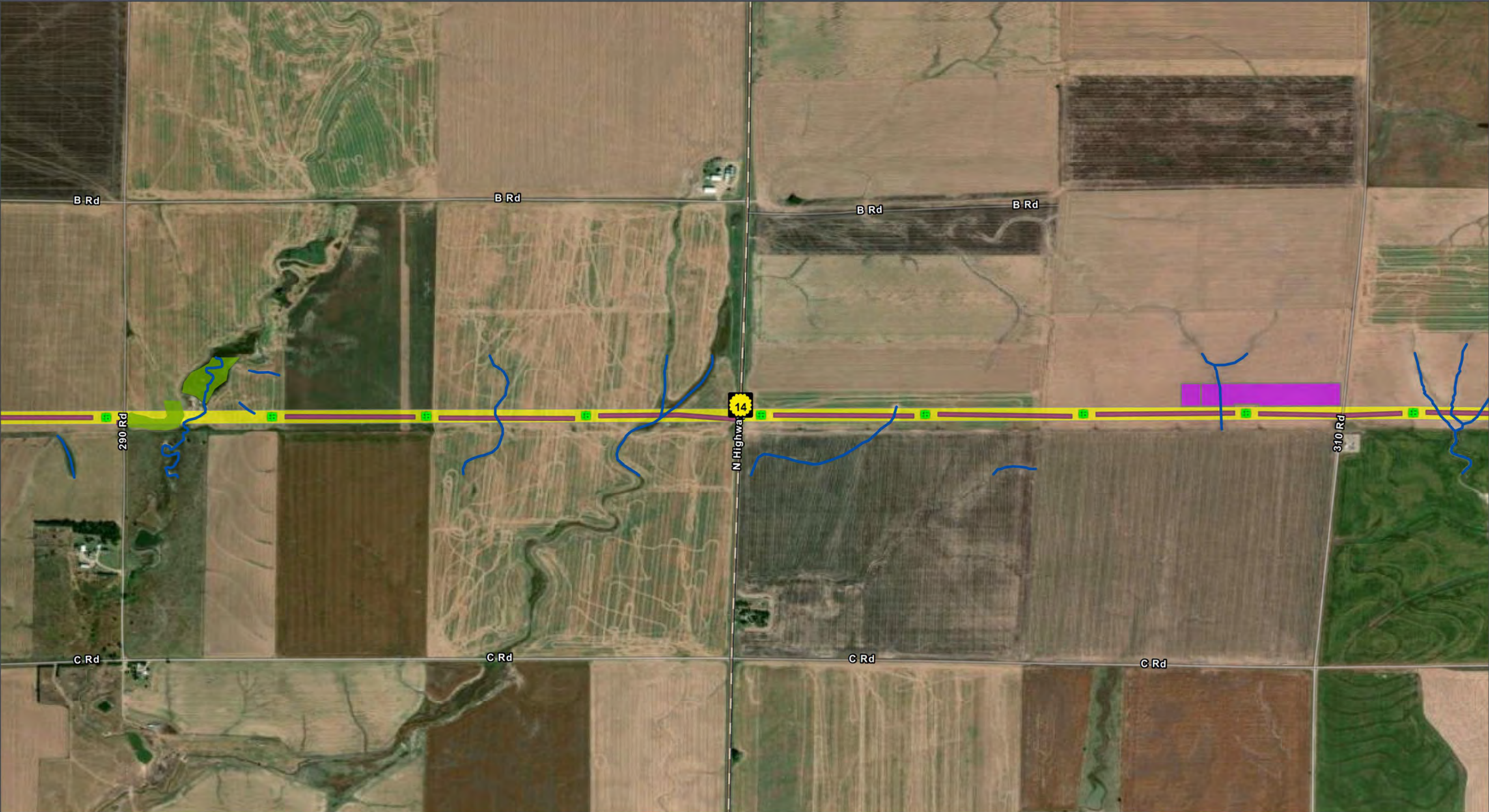
Kansas and Missouri  
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
accessed November 2024  
Updated: 11/26/2024  
Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aron: WetlandMapBook\_12k

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Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
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- ROW

Permanent Project Component

Transmission Structure

Temporary Project Component

Access Road
- Helipad / Fly Yard

Hydrology

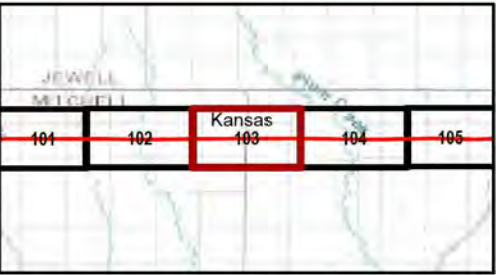
Delineated Stream

Delineated Wetland

Palustrine Emergent (PEM)
- Transportation

State Highway

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Kansas and Missouri

GCS North American 1983  
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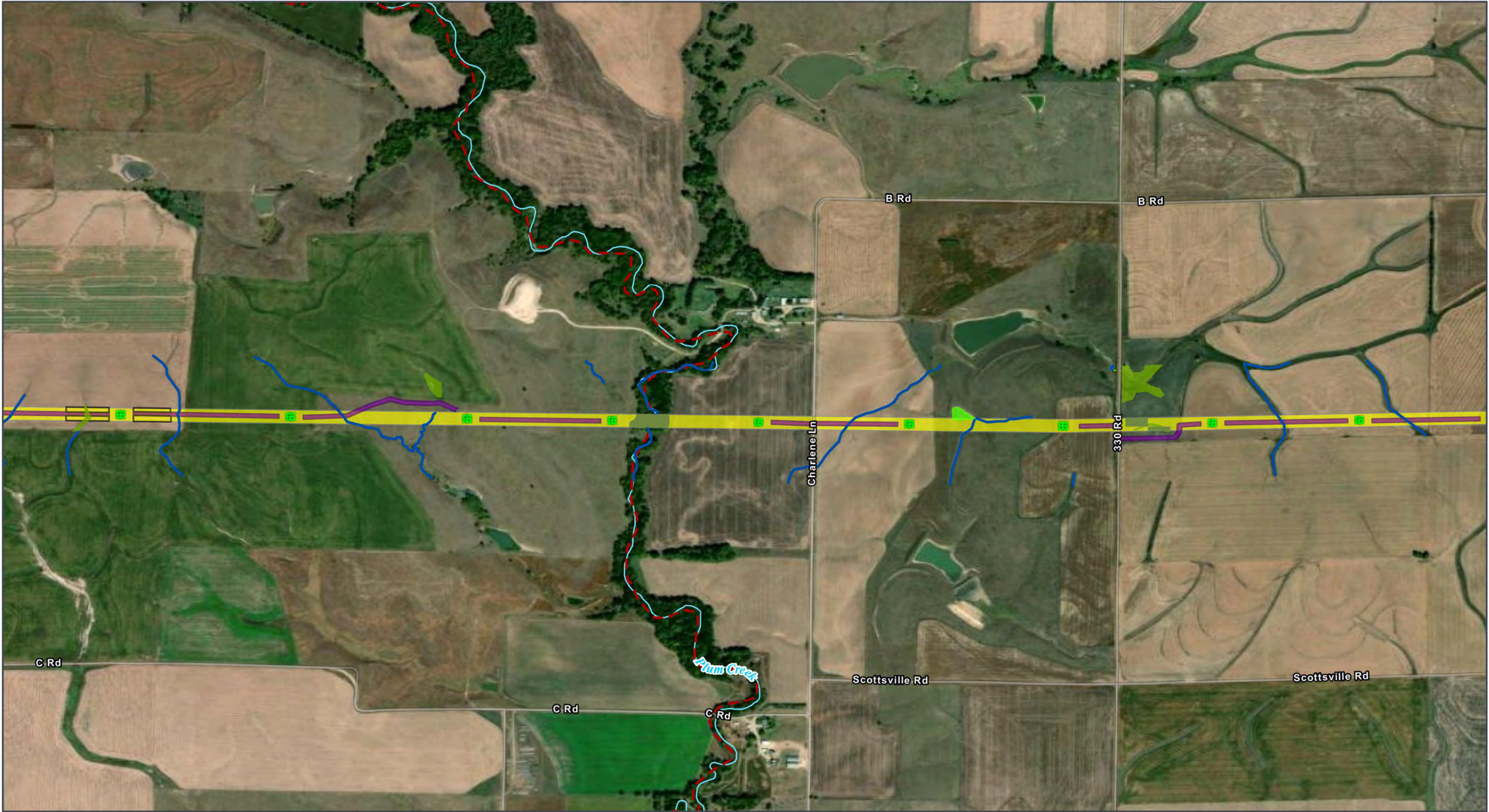
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Kansas and Missouri

Kansas

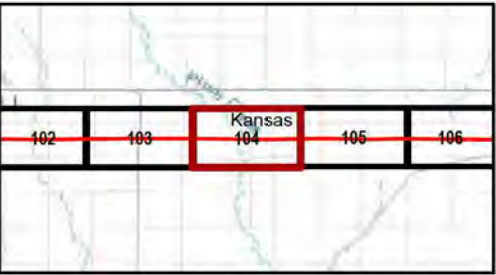




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
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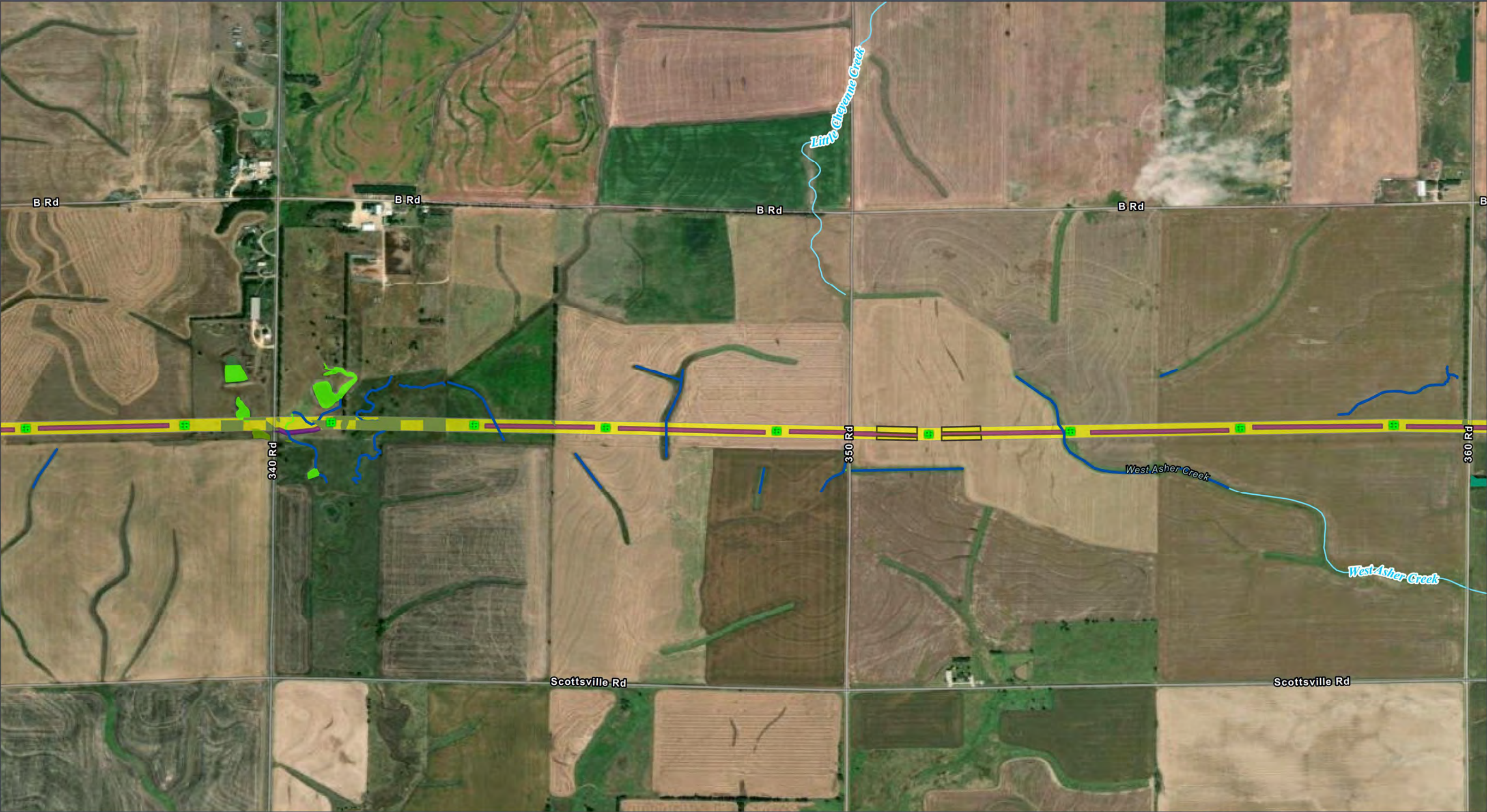
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| <b>Permanent Project Component</b><br>Transmission Structure<br><b>Habitat Conversion</b><br>Vegetation Clearing | <b>Temporary Project Component</b><br>Access Road<br>Pull Site/Tension Site<br><b>Hydrology</b><br>Delineated Stream | <b>Delineated Wetland</b><br>Palustrine Emergent (PEM)<br>Palustrine Unconsolidated Bottom (PUB) |
|--|--|--|

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Kansas and Missouri  
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Project No. 60694559  
Layout: Wetland Mapbook 12k  
Aron: WetlandMapBook\_12k  
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GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

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Grain Belt Express  
An Inveneyr Project

**Permanent Project Component**

- Transmission Structure

**Habitat Conversion**

- Vegetation Clearing

**Temporary Project Component**

- Access Road
- Pull Site/Tension Site

**Hydrology**

- Delineated Stream

NHD Stream/River

**Delineated Wetland**

- Palustrine Emergent (PEM)
- Palustrine Forested (PFO)
- Palustrine Unconsolidated Bottom (PUB)

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Kansas and Missouri

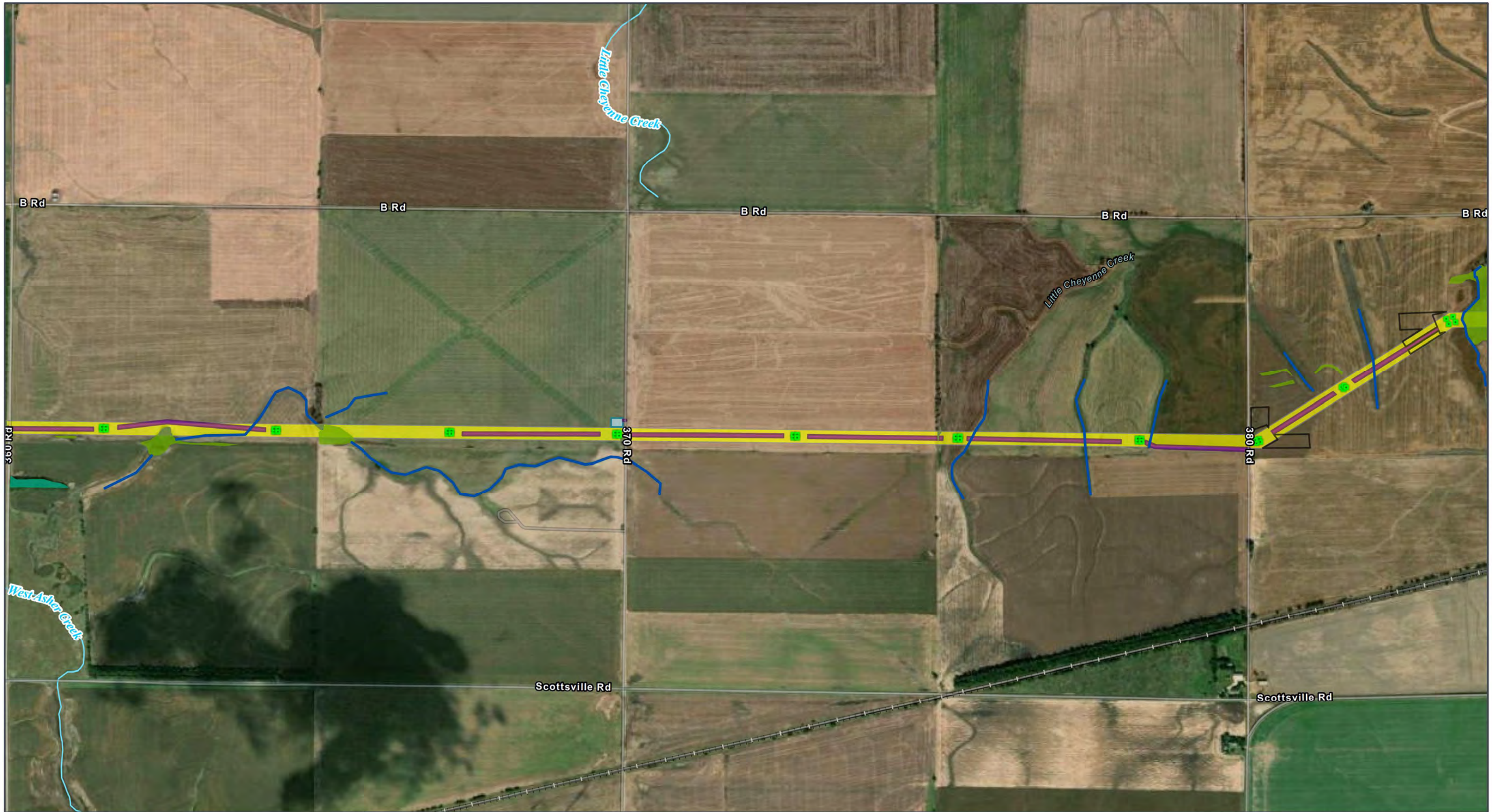
GCS North American 1983  
38.3365°N 95.5783°W

Base Map: Esri ArcGIS Online,  
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Project No. 60694559  
Layout: Wetland Mapbook 12k  
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GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
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Map 106 of 259

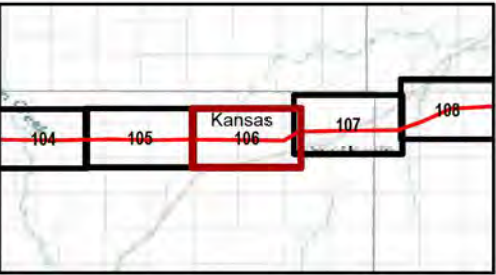


- ROW**
- Permanent Project Component**
- Transmission Structure
  - Optical Regeneration
  - OPGW Access

- Habitat Conversion**
- Vegetation Clearing
- Temporary Project Component**
- Access Road
  - Pull Site/Tension Site
- Hydrology**
- Delineated Stream

- NHD Stream/River**
- Delineated Wetland**
- Palustrine Emergent (PEM)
  - Palustrine Forested (PFO)
- Transportation**
- Railroad

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Kansas and Missouri  
GCS North American 1983  
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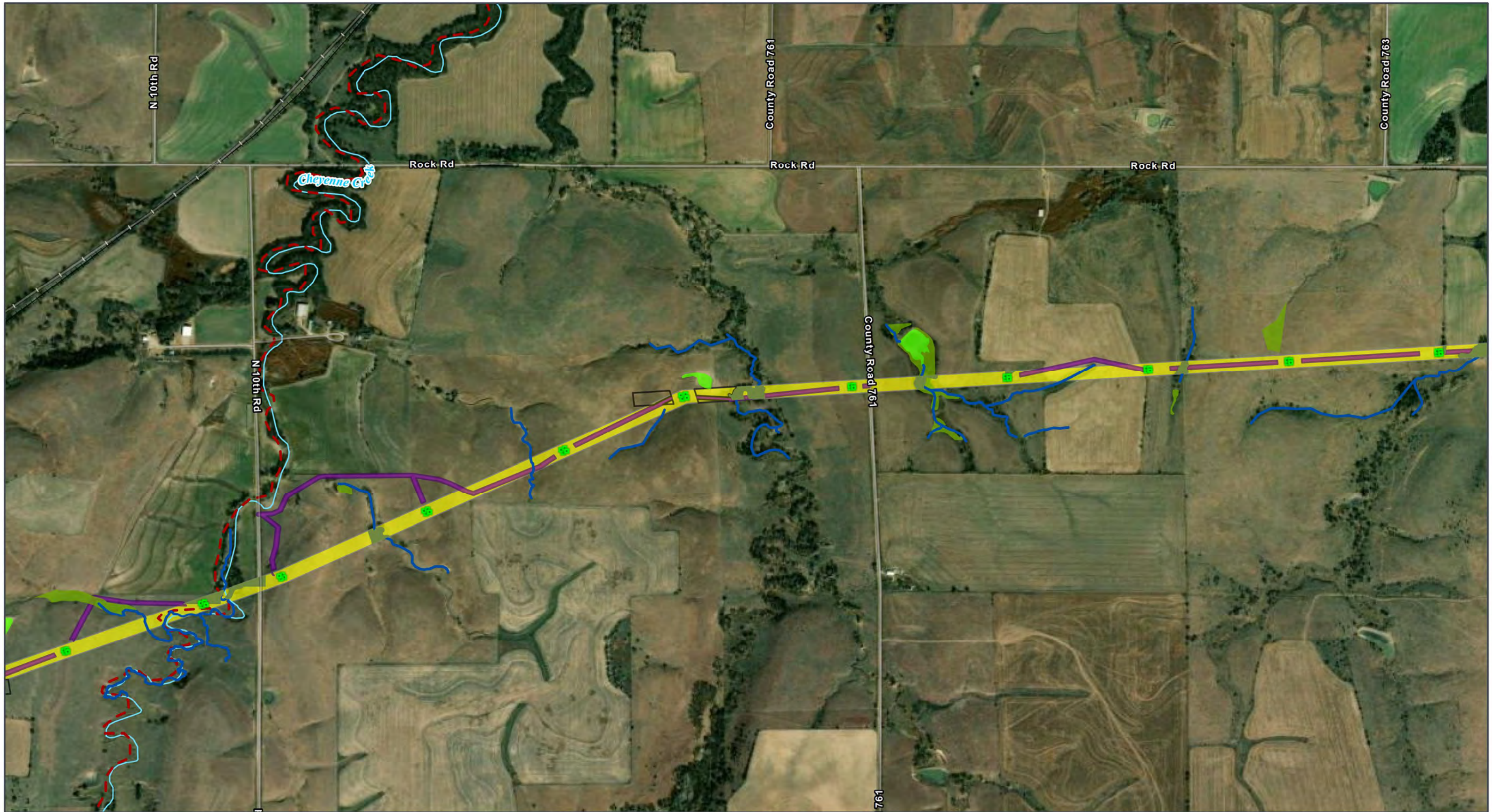
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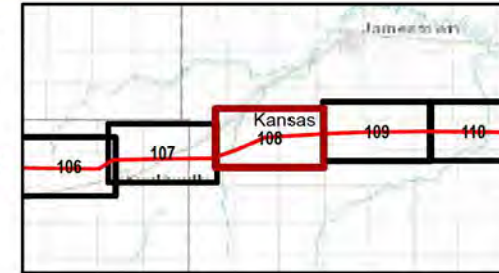
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
Map 107 of 259

- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

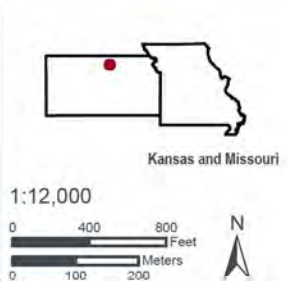
- Temporary Project Component**
- Access Road
- Pull Site/Tension Site
- Hydrology**
- Delineated Stream
- NHD Stream/River

- Impaired Waterway (303d)
- Delineated Wetland**
- Palustrine Emergent (PEM)
- Palustrine Unconsolidated Bottom (PUB)
- Transportation**
- Railroad

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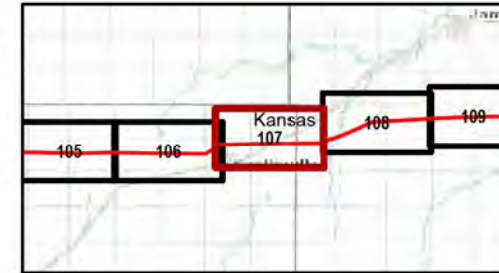
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
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- Municipal Boundary Near the Project
- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

- Temporary Project Component**
- Access Road
- Helipad / Fly Yard
- Pull Site/Tension Site
- Hydrology**
- Delineated Stream

- Delineated Wetland**
- Palustrine Emergent (PEM)
- Palustrine Unconsolidated Bottom (PUB)
- Transportation**
- Railroad

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Kansas and Missouri

GCS North American 1983  
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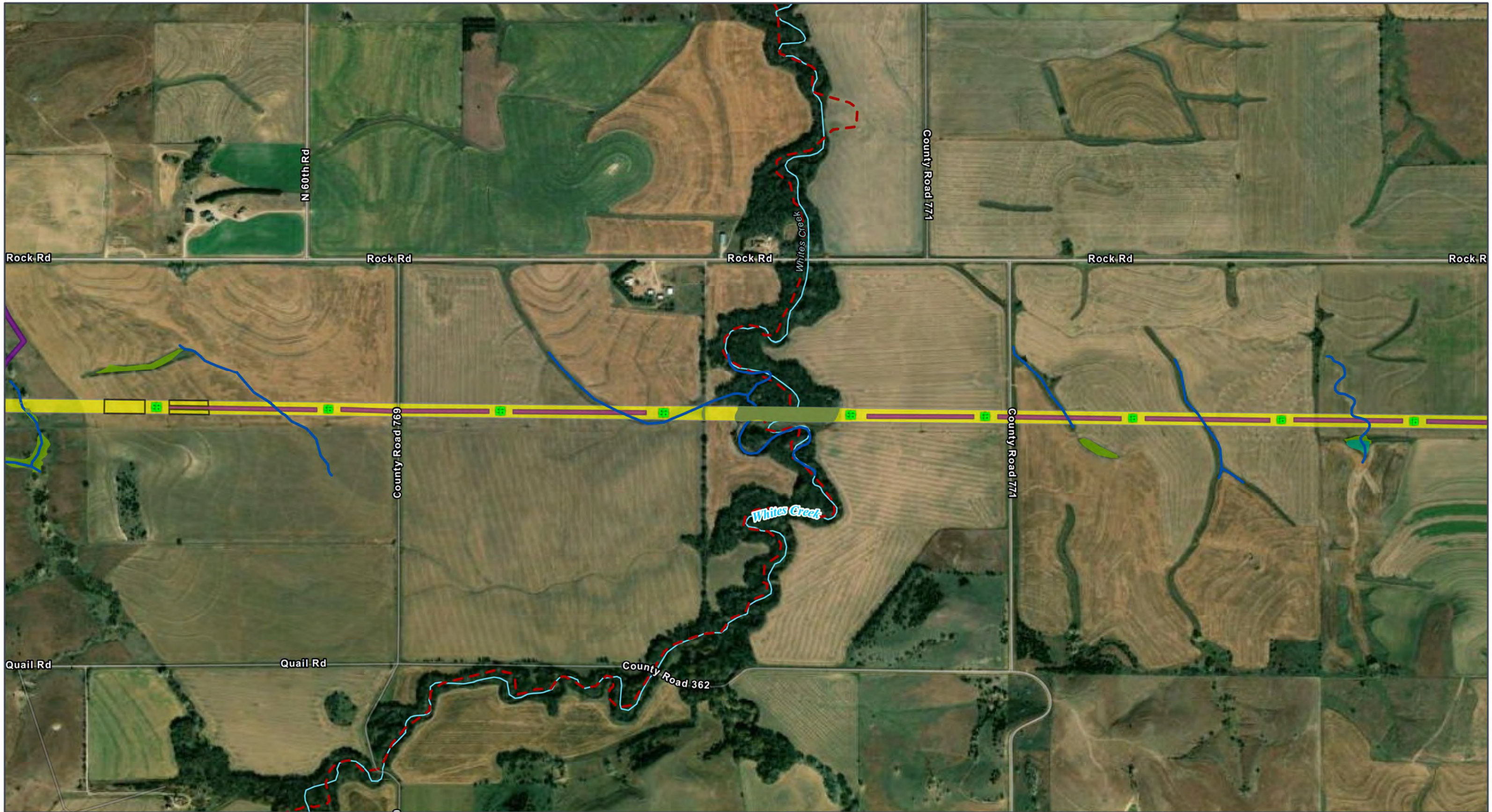
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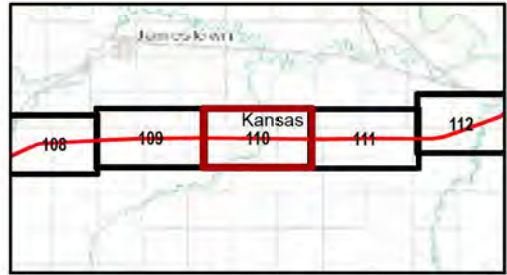




GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
**Wetlands Map Book**  
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- |  |   |   |
|--|---|---|
| <b>ROW</b><br>Permanent Project Component<br>Transmission Structure<br>Habitat Conversion<br>Vegetation Clearing | <b>Temporary Project Component</b><br>Access Road<br>Pull Site/Tension Site<br>Hydrology<br>Delineated Stream | NHD Stream/River<br>Impaired Waterway (303d)<br><b>Delineated Wetland</b><br>Palustrine Emergent (PEM)<br>Palustrine Forested (PFO) |
|--|---|---|

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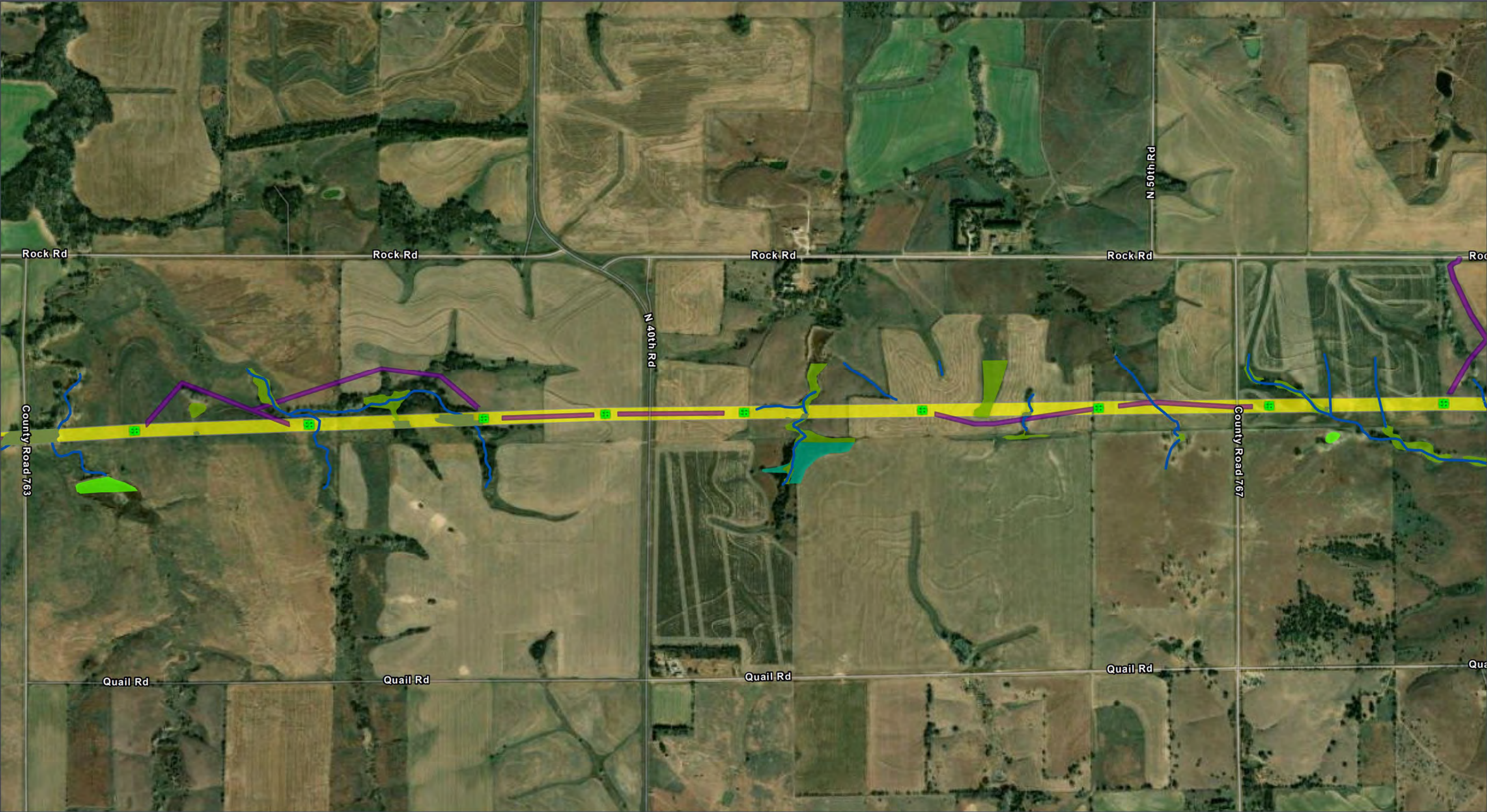
Kansas and Missouri  
GCS North American 1983  
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Kansas and Missouri





GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

**Wetlands Map Book**

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Grain Belt Express  
An Inveney Project

**Permanent Project Component**

- Transmission Structure
- Habitat Conversion
- Vegetation Clearing

**Temporary Project Component**

- Access Road
- Hydrology
- Delineated Stream

**Delineated Wetland**

- Palustrine Emergent (PEM)
- Palustrine Forested (PFO)
- Palustrine Unconsolidated Bottom (PUB)

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Kansas and Missouri

GCS North American 1983  
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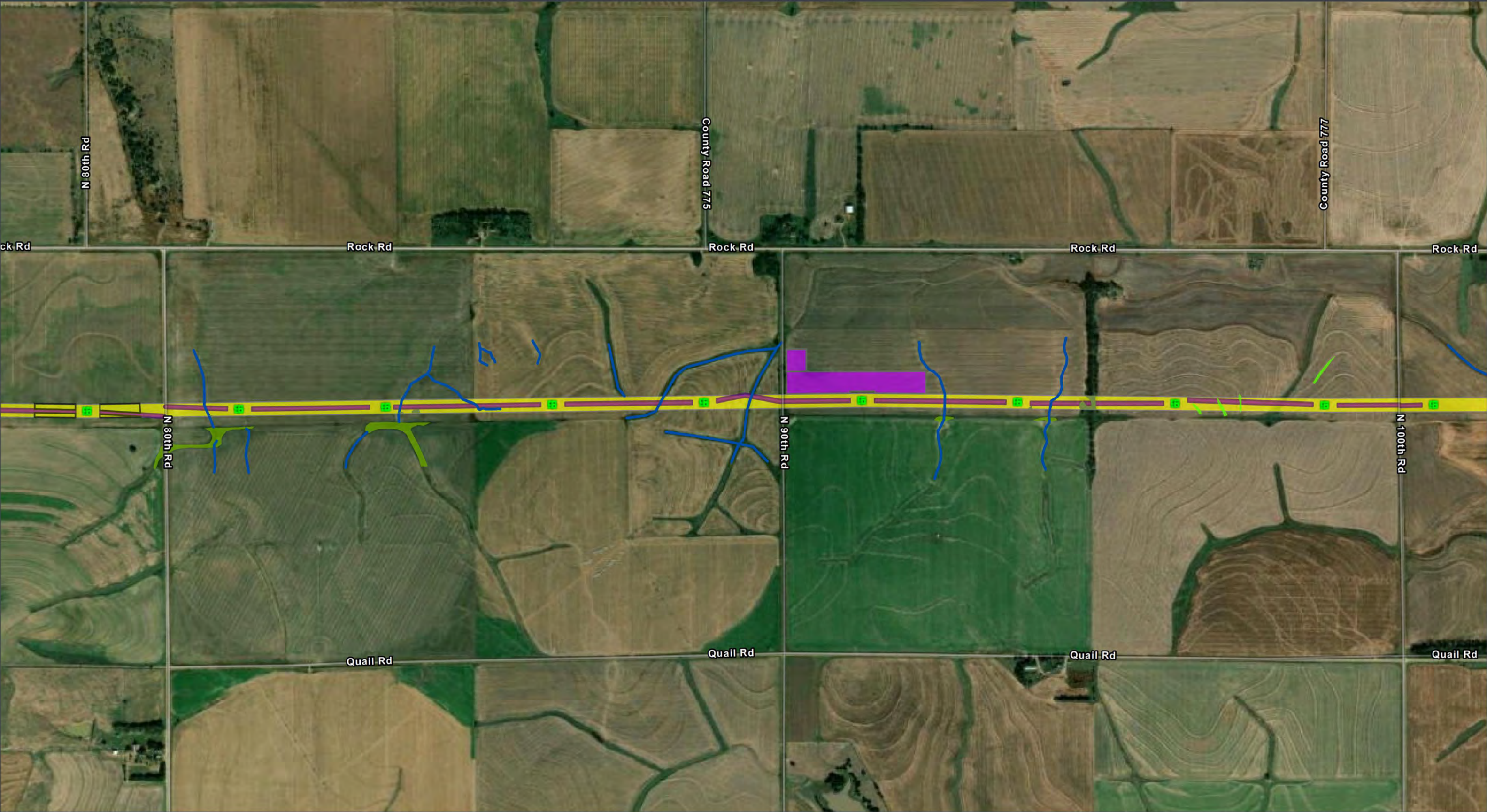
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GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT

**Wetlands Map Book**

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**Permanent Project Component**

- Transmission Structure

**Habitat Conversion**

- Vegetation Clearing

**Temporary Project Component**

- Access Road
- Helipad / Fly Yard
- Pull Site/Tension Site

**Hydrology**

- Delineated Stream

**Delineated Wetland**

- Palustrine Emergent (PEM)
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Kansas and Missouri

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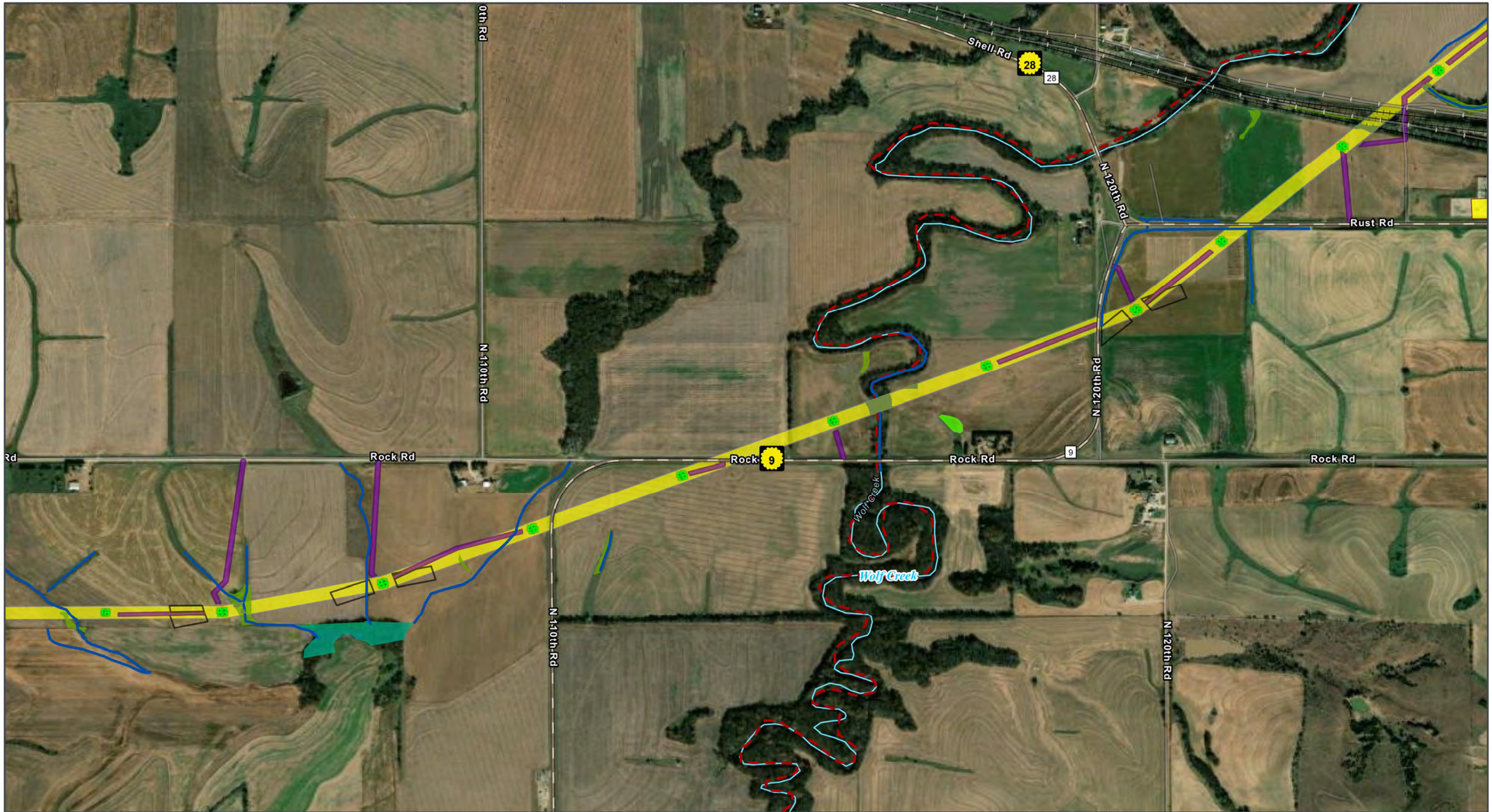
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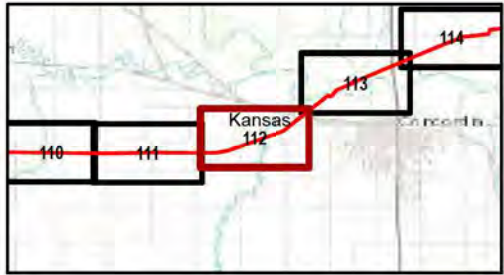
GRAIN BELT EXPRESS  
TRANSMISSION LINE PROJECT  
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- Municipal Boundary Near the Project
- ROW
- Permanent Project Component**
- Transmission Structure
- Habitat Conversion**
- Vegetation Clearing

- Temporary Project Component**
- Access Road
- Pull Site/Tension Site
- Hydrology**
- Delineated Stream
- NHD Stream/River
- Impaired Waterway (303d)

- Delineated Wetland**
- Palustrine Emergent (PEM)
- Palustrine Forested (PFO)
- Palustrine Unconsolidated Bottom (PUB)
- Transportation**
- State Highway
- Railroad

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Kansas and Missouri