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March 15, 2023

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Danielle Gosselin
Director
Office of Environmental Analysis
Surface Transportation Board
395 E Street, SW
Washington, DC 20423

Re: Docket No. FD 36500, Construction Monitoring Plans

Dear Ms. Gosselin:

On behalf of Applicants, enclosed please find for your review and coordination with appropriate THPOs construction monitoring plans and supporting materials in compliance with MM-Cultural-01.

Please do not hesitate to contact me if you have any questions.

Sincerely,

A handwritten signature in dark ink, appearing to read "Kathryn K. Floyd".

Kathryn K. Floyd

cc: Sean Cline
Glen Wilson
Joe Van Humbeck
David L. Meyer
Jeffrey Songer
Kayden Howard
William Mullins
Erin Glavich
Joshua Wayland
Victoria Rutson

Danielle Gosselin

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Alan Summerville

Alan Tabachnick

Attachments:

1. LA-AR-OK Monitoring Plan
2. MN-IA-IL Monitoring Plan
3. Daily Monitoring Log
4. Updated Training Materials

Monitoring Plan

Monitoring and Discovery Plan for the Treatment of Cultural Resources Encountered During Construction for the Canadian Pacific Acquisition of Kansas City Southern Project

Louisiana, Arkansas, and Oklahoma

1 Introduction

This plan describes the protocols to be followed in the event that cultural resources, human remains and/or funerary objects, sacred objects, and objects of cultural patrimony are inadvertently exposed during construction activities performed in the Areas of Potential Effect (APEs) identified for the Capital Improvement Projects associated with the Canadian Pacific Acquisition of Kansas City Southern Project (Project).

1.1 Regulatory Framework

The Surface Transportation Board's (Board's) decision whether to grant authority for Canadian Pacific (CP) to acquire Kansas City Southern (KCS) is a federal action under the National Environmental Policy Act (NEPA) and is also a federal undertaking under Section 106 of the National Historic Preservation Act (NHPA) (54 United States Code [U.S.C.] § 306108). In this case, the Office of Environmental Analysis (OEA) is coordinating the environmental review process under NEPA with the Section 106 process.

If the Board authorizes the proposed Project, the Project Applicants (CP and KCS jointly) intend to build 25 capital improvements within the rail right-of-way. Those capital improvements would include adding 10 new passing sidings, extending 13 existing sidings, adding a section of facility working track, and adding a section of double track. These 25 planned capital improvements have the potential to alter historic properties, including previously unidentified archaeological sites. This monitoring plan references the portion of work to be performed within the states of Louisiana, Arkansas, and Oklahoma (**Figures 1 to 7**).

1.2 Purpose

The purpose of this monitoring and discovery plan is to prevent or address unintended adverse effects to historic properties that may occur during the construction of the Project. This plan was prepared in accordance with the mitigation requirements as outlined below in Section 4.10.2 of the Final Environmental Impact Statement (FEIS).

Prior to beginning any construction activities related to the 25 planned capital improvements, the Applicants shall prepare a construction monitoring plan that addresses the following:

- *Training procedures to familiarize construction personnel with the identification and appropriate treatment of historic properties;*

- *Monitoring of construction activities by a qualified professional archaeologist;*
- *Provisions for monitoring and coordination for work within tribal reservation boundaries;*
- *Provisions for the unanticipated discovery of archaeological sites or associated artifacts during construction activities, including procedures for notifying OEA and the appropriate State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO), pursuant to 36 Code of Federal Regulations (C.F.R.) § 800.13(b) in the event of an unanticipated discovery; and*
- *Provisions for complying with the Native American Graves Protection and Repatriation Act (25 U.S.C. § 3001-3013) and other applicable federal, state, and local laws and regulations in the event of inadvertent discoveries of an unanticipated discovery of unmarked human remains during construction activities.*

The Applicants shall provide the construction monitoring plan to OEA and appropriate THPOs for review no later than 30 days prior to the start of any construction activities related to the 25 planned capital improvements and shall abide by the provisions of the plan, including any revisions by OEA and appropriate THPOs, during construction activities (FEIS 2023: Section 4.10.2).

The ensuing archaeological monitoring will be conducted in compliance with the above referenced mitigation requirements.

Archaeological Monitoring is generally defined as the observation of ground-disturbing construction activities by a qualified archaeologist in order to identify, document, protect, and/or recover archaeological information or materials.

2 Training Procedures

An archaeological monitor will provide on-site archaeological orientation and training in advance of the start of construction to all construction workers, including managers and supervisors. Training will be provided as-needed for new workers and visitors as construction continues. The training, which will last no longer than 30 minutes, will outline the steps to be taken in the event of an unanticipated discovery. During the training the archaeological monitor will:

- Give information and examples of the types of cultural resources that may be encountered in the area, including how to identify stone tools, bone, and ceramics;
- Outline the laws that protect cultural resources;
- Outline applicable penalties for damaging sites; and
- Provide contact information for the archaeological monitor, the Principal Investigator (PI), and any backup.

All individuals attending a training session will sign a sheet indicating the date and time of their attendance, which will be maintained by the archaeological monitor. See **Appendix B** for applicable training materials.

All archaeological monitors must participate in safety training prior to entering construction areas. That training will be provided at regular intervals before and during construction and updated in daily safety meetings. The Construction Contractor will provide a list of personal protective equipment that will be required for all monitors.

3 Monitoring Procedures

The following procedures will be adhered to during archaeological monitoring of the ground-disturbing activities taking place during construction.

3.1 Monitoring by a Qualified Professional Archaeologist

Work under the terms of the monitoring plan is to be carried out under the supervision of a PI meeting at a minimum the *Secretary of the Interior's Professional Qualifications Standards for Archaeologists* (48 Federal Register 44738-44739). The archaeological monitor will possess at minimum a bachelor's degree in anthropology, archaeology, or a related field.

3.2 Responsibilities During Fieldwork

The archaeological monitor will be responsible for ensuring that the proper steps are followed to assess and protect cultural resources. It is the responsibility of the archaeological monitor to stop work on site if needed. The archaeological monitor has the authority and responsibility to stop work in a specific location if any previously unidentified cultural resources are encountered during ground-disturbing activities.

The archaeological monitor will be present where monitoring is required and will be responsible for the recordation of all unanticipated discoveries. The archaeological monitor will be equipped with:

- A digital camera;
- Global Positioning System (GPS) unit;
- Monitor's daily logs;
- Relevant Project contact information;
- Safety evacuation information.

Other equipment will be determined by the Project design and needs.

To minimize the natural hazards associated with construction, close coordination between the monitors and construction personnel will be emphasized at all times. During fieldwork, the archaeological monitor will be responsible for the following tasks:

- Be present during mechanical scraping, grading, excavating, and other ground-disturbing activities in all required monitoring areas in the Project APE.

- Inspect the newly exposed surface as sediment is moved by heavy equipment.
- Identify cultural materials and ascertain whether the material is archaeological.
- Determine the significance of unanticipated discoveries.
- Consult and coordinate with the PI, HDR, and OEA as appropriate in order to mitigate unanticipated discoveries.
- Coordinate with relevant construction personnel when unanticipated discoveries are made.

If cultural remains, or possible human remains are noted, construction activities will immediately be halted within a 300-foot-radius of the discovery. Construction may proceed in other areas of the Project APE.

Archaeological monitoring will not be required once all surface and subsurface ground disturbance in a construction area is completed or if equipment or vehicles are traveling over previously disturbed surfaces. Routine travel on existing or disturbed roads will not be monitored for cultural resources.

However, additional blading or excavating at a depth beyond the previously disturbed area will be monitored for cultural resources, even within previously graded or bladed areas, where the potential exists for impacting intact subsurface deposits.

3.3 Responsibilities for Reporting

Archaeological monitors will maintain all monitoring records, photographs, and digital data, and will maintain daily logs of Project-related construction monitoring activities comprising the following:

- Date, time of work, and amount of time spent at a construction monitoring location;
- Area of work;
- Type of work, equipment present, and name of construction contracting company and crew foreman being monitored;
- If archaeological deposits are encountered, documentation including a sketch map showing locations of all excavations, surface structures, topography, and identified archaeological deposits within the APE;
- Activities for which there are circumstances that limit or prevent visual examination of Project excavations (including delimiting those areas on a Project area map), cultural resource problems, non-compliances, or other concerns;
- Identification of an unanticipated discovery, steps taken to protect the discovery, and documentation of notifications (name, agency, time, and notes); and
- Color digital photographs taken (as appropriate) to document construction and monitoring activities and submitted as attachments to the daily log.

Archaeological monitors will prepare and provide their monitoring logs daily to the PI, who will prepare and provide monthly summary reports on the progress or status of cultural resources-related activities during active construction. See **Appendix C** for a daily report template.

- The monthly reports will summarize construction progress, monitoring (including monitor name, dates worked, finds, issues, etc.), and status of cultural resources-related issues.
- These reports will also include the appropriate state archaeological isolate or site forms for finds identified under the monitoring program.
- Site forms for any newly discovered properties will include recommendations for National Register of Historic Places (NRHP) eligibility and Project effect.

The archaeological monitor/consultant will submit monthly reports to HDR, who will be responsible for providing updates to CP.

3.4 Detailed Procedures

This section includes detailed information regarding the construction and post-construction tasks to be performed by the archaeological monitor and other parties, as well as the procedure for documenting and reporting inadvertent discoveries made during construction.

3.4.1 Construction Tasks

While construction activities are ongoing, the archaeological monitor will observe ground-disturbing activities. If an unanticipated discovery is made and that find is determined significant by the archaeological monitor, construction work within the site boundary will halt temporarily.

In the event of an unanticipated discovery, the Inadvertent Discovery Plan (**Section 3.5** below) will be followed. If the discovery is found to be eligible for the NRHP, the PI will notify HDR (Rachael Crandley and Zack Overfield), who will consult with the OAE and SHPO. No construction work can occur at the discovery location until agency concurrence is made and the relevant data recovery is completed.

3.4.2 Post-Construction Tasks

Once the archaeological monitor has reviewed the condition of the site and documented damage (if any), they will remove all site-defining flagging, fencing, or barricading.

3.5 Inadvertent Discovery Plans

Any personnel working on the Project can make an unanticipated discovery. An unanticipated discovery can consist of either human remains (i.e., unmarked burial) or other cultural material (such as a subsurface deposit of debitage, semi-subterranean house pits, etc.). A discovery plan for human remains has been prepared for the Project and is provided in **Section 3.5.2**.

3.5.1 Methods

If an isolated find (a single artifact or fewer than 5 artifacts within a 10 meter radius) is encountered the archaeological monitor will halt work in the area long enough to ensure no other archaeological deposits are located within the vicinity. If 5 or more artifacts are encountered within a 10 meter radius, or an archaeological feature is encountered during surface-disturbing activities, all construction activities within a minimum 300-foot buffer will be immediately stopped. The archaeological monitor will notify the PI, who is responsible for notifying HDR of the find. HDR will then contact CP and the OEA immediately, and no later than 24 hours (see **Appendix A** for list of contact information).

The discovery will be secured by the archaeological monitor using standard construction fencing until it can be evaluated by the OEA. After notification is acknowledged and the site is secured, construction activities may continue in other areas of the Project at a minimum of 100 feet from the discovery. The eligibility determination will be made within 48 hours of discovery. If personnel availability does not allow the determination to be made within that timeframe, the OEA will establish a deadline for making the determination no more than 1 week after discovery and the OEA will follow up the verbal notification with an email notification within 24 hours to the Construction Contractor and other appropriate parties.

The OEA/SHPO will consult with the appropriate Tribal authorities and consulting parties at this time. The discovery will be evaluated under all four eligibility criteria and all seven aspects of integrity. Evaluative testing may be necessary to determine the nature and extent of the cultural materials. The OEA will make the determination of eligibility and effect and will consult with the SHPO as specified below.

Discovered Property is Not Eligible with a No Historic Properties Affected Determination

If the OEA determines that the discovery is not eligible for inclusion in the NRHP, a “No Historic Properties Affected” determination will be made. The archaeological monitor will prepare the documentation and submit it to HDR within 24 hours of the discovery. HDR will review and submit the documentation to the OEA, who will submit the documentation to the SHPO. The OEA will issue a written Notice to Proceed (NTP) to the Construction Contractor within 24 hours of the eligibility determination and construction will be allowed to resume in the area of discovery.

Discovered Property is Eligible with a No Adverse Effect Determination

If the OEA determines that the overall cultural resource is eligible for inclusion in the NRHP, but the discovery does not contribute to its eligibility or the continuation of Project activities will not cause adverse effects, a “No Adverse Effect” determination will be made. The archaeological monitor will prepare the documentation and submit it to HDR within 24 hours of the discovery. HDR will review and submit the documentation to the OEA, who will submit the documentation to the SHPO within 24 hours of receipt. If the SHPO does not respond within 30 days, the OEA may assume concurrence with the determinations of eligibility and effect.

The OEA will issue a written NTP to the Construction Contractor within 24 hours of SHPO concurrence or the end of the 30-day consultation period and construction will be allowed to resume in the area of discovery.

Discovered Property is Eligible with an Adverse Effect Determination

If the OEA determines that the discovery is eligible for inclusion in the NRHP or that it contributes to the eligibility of a known historic property, and was adversely affected by the undertaking, or will be adversely affected by the continuation of Project construction, a determination of “Adverse Effect” will be made. The archaeological monitor will prepare the documentation and submit it to HDR within 24 hours of the discovery. HDR will review and submit the documentation to the OEA, who will submit it to the SHPO within 24 hours of receipt. If the SHPO does not respond within 30 calendar days, the OEA may assume concurrence with the determinations of eligibility and effect.

All discoveries will be protected and if necessary stabilized as soon as feasible after discovery according to standard industry practices. The PI will determine the appropriate measures to take in consultation with HDR and the OEA and these measures will be taken and remain in place until a Treatment Plan can be developed and implemented.

Upon receipt of SHPO concurrence with the Treatment Plan, the OEA will immediately notify CP and HDR that the plan is acceptable. The archaeological monitor and construction company will implement the terms of the Treatment Plan as soon as practical considering weather and access conditions and will notify HDR, who will notify the OEA immediately upon completion of the terms. The OEA will verify completion of the Treatment Plan terms within 24 hours of completion notification. Upon verification that the terms of the Treatment Plan have been completed by the archaeological monitor and Construction Contractor, the OEA will issue a written NTP to the Construction Contractor and construction will be allowed to resume in the area of the discovery within 24 hours of receipt. Additional construction activities may be subject to an archaeological monitor at the OEA's discretion.

3.5.2 Inadvertent Discovery of Human Remains

In the event human remains are encountered during archaeological monitoring the procedures outlined in the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 (25 U.S.C. 3001 et seq. and the implementing regulations, 43 CFR Part 10) for inadvertent discoveries will be followed. Work in the vicinity must stop immediately and the remains left in place and protected until the appropriate personnel can be reached. Any human remains encountered must be treated with the utmost dignity and respect. The remains will be treated as an archaeological discovery if no conclusive evidence of a crime scene is apparent, including modern clothing or items such as jewelry, dental fillings, etc.

Immediate notice of the discovery should be made to CP and HDR, the appropriate local law enforcement agency, the local coroner's office, the OEA, and the SHPO (see **Appendix A** for a list of contacts). Within 24 hours of the notification, the SHPO/OEA will notify any Tribal authority that has indicated interest in the area of the discovery. Local

law enforcement officials will assess the nature and age of the human remains. No remains will be removed until jurisdiction is established.

4 Responsibilities of all Parties

4.1 Monitor/PI

The monitor and PI are responsible for:

- Project training for construction workers and visitors for protection of cultural resources;
- Physical monitoring during ground-disturbing activities;
- Notification of discovery to HDR immediately and no later than 24 hours;
- Establishing 300-foot discovery buffer;
- Recording discovery;
- Evaluative testing if allowed by permit;
- Submittal of initial documentation to HDR (e.g., site forms, description, photos, etc.) to facilitate eligibility consultation, NTPs, and monitor report requirements (within 24 hours of discovery);
- Protection and stabilization of eligible sites as necessary;
- Daily Monitoring Logs;
- Progress Reports;
- Summary Reports;
- Final Treatment/Monitoring Report;
- Completing required tasks and communications before and no later than applicable timeframes described.

4.2 Construction Contractor

The Construction Contractor is responsible for:

- Attending daily tailgate and plan of day meetings with archaeological monitor;
- Notification of unanticipated discoveries (without an archaeological monitor present) to the OEA (immediately and within 24 hours of discovery);
- Managing field communication between the archaeological monitor and CP via HDR;
- Completing required tasks and communications before but no later than applicable timeframes described.

4.3 OEA

The OEA is responsible for:

- Consultation with appropriate Tribal authorities and consulting parties in regard to discoveries during construction;
- Submitting documentation to SHPOs and issuing written NTP upon concurrence with not eligible and “No Historic Properties Affect” determination (within 24 hours);
- Consultation with SHPOs for “No Adverse Effect” determination (maximum 30 days);
- Issuing written NTPs upon concurrence with eligible and “No Adverse Effect” determination (within 24 hours);
- Consultation with SHPOs for “Adverse Effect” determination (maximum 30 days);
- Review of Treatment Plan;
- Consultation with Tribes and SHPOs on Treatment Plans;
- Issuing NTPs upon completion of terms of Treatment Plan (within 24 hours);
- Completing required tasks and required communications before but no later than applicable timeframes described.

4.4 SHPO

The SHPO is responsible for:

- Consultation with the OEA for eligible discoveries (maximum of 30 days);
- Consultation with the OEA for Treatment Plans.

5 Artifact Collection and Curation

If artifacts are collected, they will be prepared for curation at the state designated curatorial facility, or as otherwise directed by the OEA.

6 Reporting

6.1 Daily Monitoring Logs

All archaeological monitors will keep daily logs. These logs will capture the Project name and number, which GPS system unit was used, the camera used and associated photograph numbers, the monitor’s and any visiting personnel’s names, the company whose work is being monitored, the location of the area(s) monitored, the actions monitored (excavation, drilling, etc.), the number of sites (if any) that were monitored and their Smithsonian trinomial, any sites or cultural material discovered while monitoring that

day, any safety incidents, and a narrative for the daily activities. All in-field recordation will be made digitally for reporting purposes.

6.2 Progress Reports

The archaeological monitoring project manager will complete a monthly progress report, due at the time of invoice delivery and sent via email to HDR. This progress report will summarize the past month's daily logs and will give a brief outlook for the following month's archaeological monitoring activities. Unexpected discoveries should be noted in the progress report but should not be the primary form of communication to HDR and/or OEA for an unexpected discovery.

6.3 Summary Reports

When construction activities have concluded at each monitoring location, and the archaeological monitor has conducted the post-construction tasks, a summary of the activity affecting the cultural resources in that area will be produced by the project manager. The report will include a summary of the monitor's daily logs, progress reports, any data recovery that was conducted, and any necessary condition assessments for the relevant archaeological sites.

The summary reports will be submitted to HDR within two weeks of construction ceasing. Once approved, HDR will submit the summary report to OEA and the relevant SHPO if required. This report does not replace the technical report required once the construction project is completed but rather is meant as a management tool for HDR, OEA, and local SHPOs.

6.4 Technical Reports

When construction activities have ceased and there is no longer a need for archaeological monitoring, technical reports, grouped by state, will be prepared. These reports will synthesize all monitoring activities, including photographs of sites before, during, and after construction. For any unanticipated discoveries, the reports will cover the treatment activity completed (including excavation summaries if applicable) and any necessary site updates or new site forms created due to ground-disturbing activities.

Technical reports will abide by relevant agency guidelines, and a draft will be submitted within 60 days of archaeological monitoring completion.

7 Archaeological and Historical Context

7.1 Southeast Woodlands Region: Louisiana, Arkansas, and Oklahoma

In compiling the archaeological and historical context below, a review of the following sources was conducted: Charles Cobb's *The Archaeology of Southeastern Native American Landscapes of the Colonial Era* (2019); Charles Gayarre's *History of Louisiana* (1854-1856); Morgan Gibson's *The History of Oklahoma* (1984); Juliet Morrow's "Paleoindian Period" entry in the *Encyclopedia of Arkansas* (2021); Rebecca Saunders' article on "Prehistoric Archaeology in Louisiana" (2022); Jeannie Whayne's *Arkansas: A Narrative History* (2013); and David Wishart's *Encyclopedia of the Great Plains Indians* (2007).

Pre-Contact Period (11,500 BCE – 1500 CE)

The Southeast Woodlands region of the United States is an area of converging geographical and cultural regions with traditional tribal groups in the western portion including the Caddo, Atakapa, Natchez, and Wichita. The first inhabitants of this area were Paleoindians, the earliest ancestors of present-day indigenous peoples. Paleoindian people migrated from Asia to North America over emerging land masses and ice that formed on the Bering Strait as long as 20,000 to 35,000 years ago. The precolonial past of indigenous peoples is typically categorized by archeologists as Paleoindian (11,500–8000 BCE), Archaic (8000–800 BCE), Woodland (800 BCE–1200 CE), and Mississippian (1200–1700 CE) (Morrow 2021; Saunders 2022).

The Paleoindian period began at the end of the last glacial period and, as the climate warmed, indigenous peoples adapted to changing natural and social landscapes. Sophisticated stone Clovis spear points were used for hunting large mammals, or megafauna, all of which are now extinct. Although previously thought to be primarily nomadic people following herds of megafauna, it now appears that Clovis people were more sedentary with very diverse diets (Morrow 2021; Saunders 2022).

The Archaic period was a time of dynamic environmental change as sea-levels rapidly rose, causing major shifts in wildlife and vegetation. Adaptation to these major environmental shifts can be seen in the archaeological record as projectile points became smaller and axes and grinding stones were more prominent to accommodate for the change in subsistence strategies. Earthworks first appear in modern-day Louisiana at this time and, while some may have been associated with permanent settlements, most are considered to have been sacred places where isolated groups would come together periodically (Saunders 2022).

During the Woodland Period, indigenous societies grew increasingly sedentary and adapted to a changing environment. This included new tools and foodways following domestication of select plant species. Earthworks continued and burial practices changed to include the building of domed mounds to cover the dead. Maize agriculture began relatively early with Caddo groups in parts of Louisiana and Arkansas, but many groups continued a semi-nomadic way of life (Saunders 2022).

Agriculture continued into the Mississippian period with an onset of technological innovations, including small projectile points for use with a bow, and new ceramic techniques. There was extensive trade between the coast and the interior, including items such as shells, furs, and stone. Large flat-topped earthen mounds began to appear in Arkansas. With an increase in food production, population began to rise, and more multifaceted social, political, and economic structures developed. The standard settlement unit was the local village or town ranging from a few hundred to over one thousand people, each governing their own locale (Cobb 2019; Payne 2019; Saunders 2022).

The Project APEs border and cross into the Plains cultural region in northern Arkansas. Before 1100 CE, the Plains were very sparsely populated by humans. Plains people were traditionally hunter-gatherers who migrated and foraged widely over the landscape. By 850 CE, many groups shifted to more permanent settlements, with the advent of agriculture leading to substantial villages along the major rivers. The buffalo was a crucial part of Plains people's lifeways as a source of food and shelter (Wishart 2007).

Contact Period (1500 CE – 1800 CE)

Spanish and French exploration began in the southeast during the sixteenth and seventeenth centuries, with the first permanent settlements in the late seventeenth and early eighteenth centuries. This exploration and settlement began to disrupt traditional ways of life. Direct warfare and disease caused thousands of indigenous deaths, and the subsequent effects of these losses further devastated indigenous groups (Cobb 2019).

During the seventeenth century, trade in deerskins and indigenous reliance on European firearms and goods greatly increased. This century also saw the establishment of missions and the introduction of Roman Catholicism among indigenous people, but these missions were abandoned by 1706 (Cobb 2019).

Early American Settlement in the South Central Region (1800 CE – 1900)

President Thomas Jefferson bought the Louisiana territory in the Louisiana Purchase of 1803, which included most of the territory from the Mississippi River to the Rocky Mountains. Louisiana and Arkansas saw a period of agricultural boom in the early 1800s, which became heavily dependent on the institution of slavery (Bush 2013; Gibson 1984; Whayne 2013).

By the early nineteenth century, many indigenous groups merged with larger tribes as a way to survive after overwhelming losses and displacement as European and Euro-American populations in the region increased. Indigenous groups faced increasingly restrictive policies as settlers were drawn to desirable locations inhabited by indigenous peoples. These policies sparked a number of physical and legal battles, and ultimately led to the passing of the Indian Removal Act of 1830. Land was designated west of the Mississippi River for indigenous people in exchange for their land in the east, as well as funds for transportation. A lack of food, sanitation, shelter, and transport ultimately caused many indigenous deaths. The Removal Act was enforced throughout the Southeast and by 1840 over 100,000 indigenous people were forced from their

homelands, with around 15,000 people dying along the way on what became known as the Trail of Tears (Cobb 2019).

The onset of the Civil War in 1861 was a tumultuous time as institutional slavery was threatened, causing violent outbreaks. The states of Louisiana and Arkansas joined the Confederacy with the Oklahoma territory as an ally. Confederate defeat in 1865 triggered the establishment of a sharecropping system of tenant farming and widespread poverty, with the continuation of racial tensions during the Reconstruction and Jim Crow eras.

The introduction of the horse and European guns made many Plains groups a formidable force against smaller tribes and European settlers. However, in the 1880s, U.S. policy makers turned to the destruction of the Plains nations' food supply and, after the buffalo disappeared, Plains indigenous groups began to starve, forcing them to relocate to reservations (Wishart 2007).

By the 1890s indigenous lifeways were further disrupted by the U.S. policy of allotment, dividing tribal land into small undesirable parcels, and ceding over half of Indian Territory to Euro-American settlers (Bush 2013; Cobb 2019; Gibson 1984; Whayne 2013).

Recent Cultural Developments in the South Central Region (1900 CE – Present)

In 1906 tribal governments, schools, and other institutions formerly managed by the tribes fell to U.S. government control as a way to force assimilation on indigenous people. The events of the twentieth century, including the Great Depression and both World Wars, caused the diversification of southern states' economies to include more manufacturing and service components, as well as the oil boom in Louisiana and Oklahoma (Bush 2013; Cobb 2019; Gibson 1984; Whayne 2013).

Concurrently, racial tensions in the south grew as segregation continued and discrimination against African Americans was commonplace. These tensions led to the development of widespread civil rights movements beginning in the 1930s and 1940s, reaching a nationwide scale in the 1950s and 1960s. These civil rights movements caused the strengthening of traditional indigenous cultures and pressure from indigenous groups to receive compensation for lost lands, and during the 1970s the federal government relinquished control of Tribal institutions and the right to appoint Tribal governments (Cobb 2019).

Today Louisiana, Arkansas, and Oklahoma continue to be major hubs for agriculture and manufacturing. Louisiana and Oklahoma are also major suppliers for oil and natural gas, and Oklahoma contributes to the aerospace and national defense sectors. Though in many cases removed from their ancestral homelands, indigenous groups maintain a strong presence in Louisiana, Arkansas, and Oklahoma through contemporary Tribal Nation governments. These include: the Alabama-Coushatta Tribe of Texas; the Alabama-Quassarte Tribal Town; the Apache Tribe of Oklahoma; the Caddo Nation of Oklahoma; the Cherokee Nation; the Cheyenne and Arapaho Tribes of Oklahoma; the Choctaw Nation; the Coushatta Tribe of Louisiana; the Jena Band of Choctaw Indians; the Mississippi Band of Choctaw Indians; the Muscogee (Creek) Nation; the Osage Nation; the Quapaw Tribe of Indians; and the Wichita and Affiliated Tribes (Wichita,

Keechi, Waco & Tawakonie) of Oklahoma. All of the tribes listed here have traditional ties to the current study areas (Bush 2013; Gibson 1984; TDAT 2023; Whyne 2013).

8 References

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Figure 1. General Location of the Project

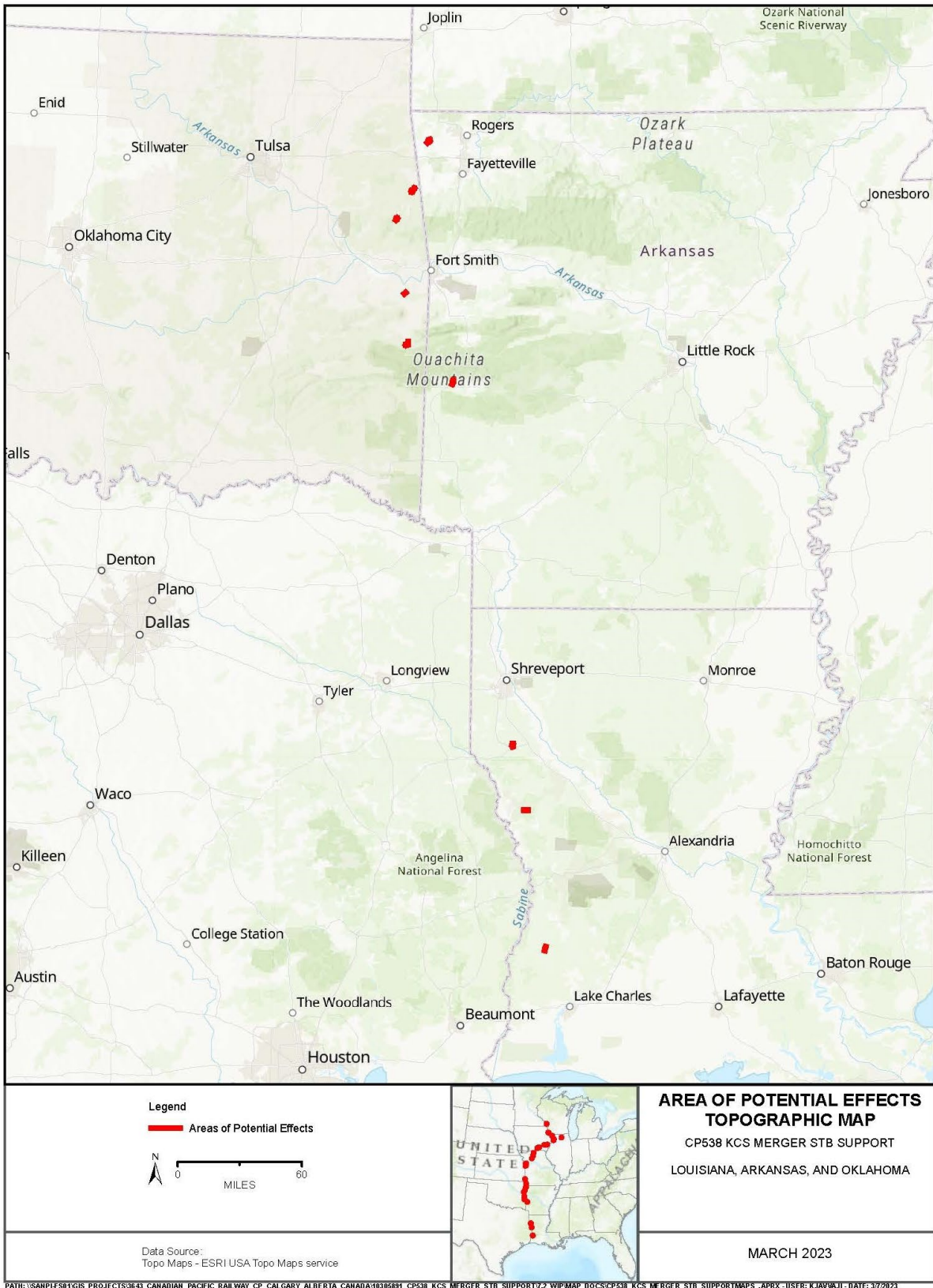


Figure 2. APE within Beauregard Parish, Louisiana

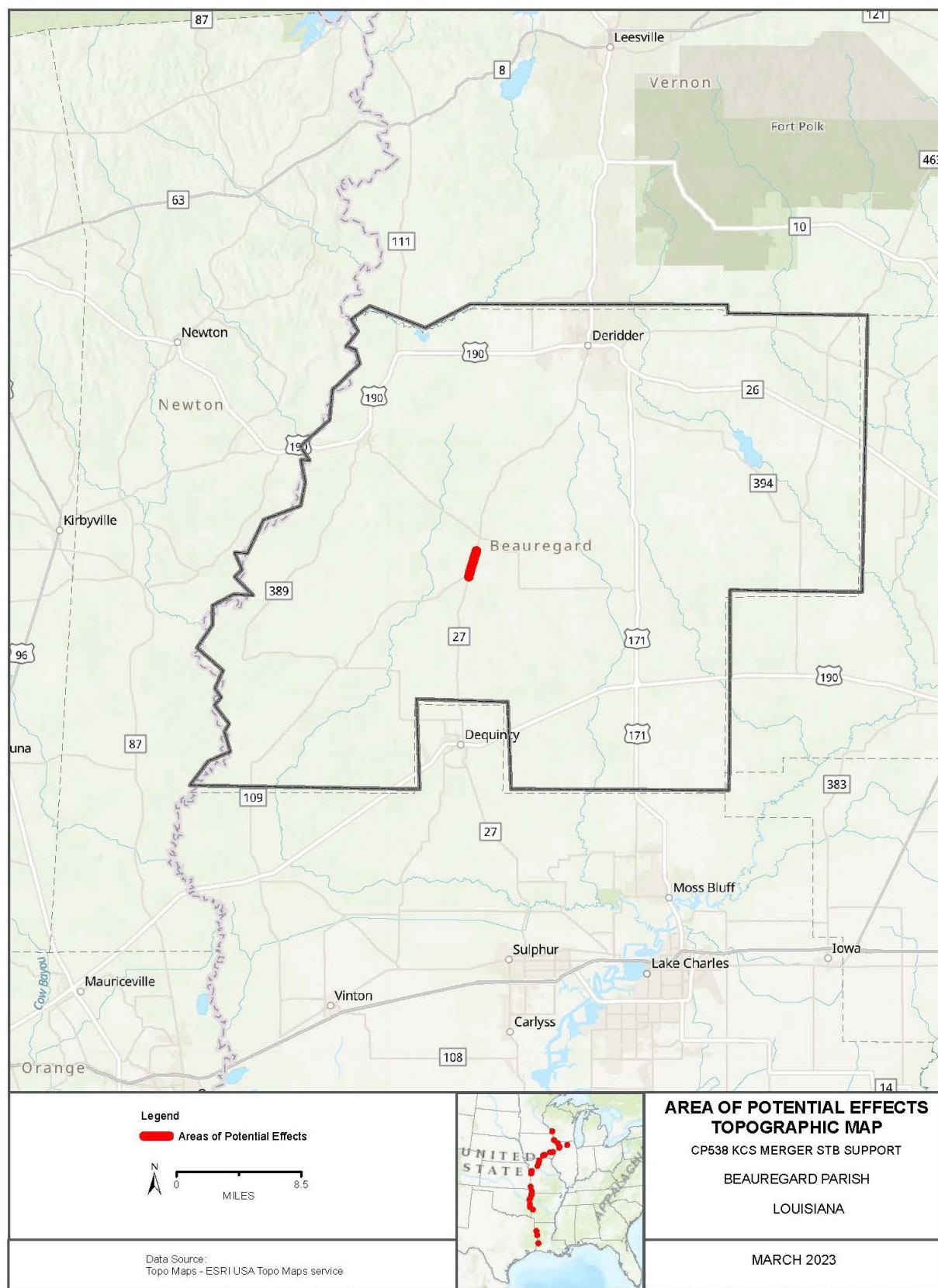


Figure 3. APEs within De Soto and Sabine Parishes, Louisiana

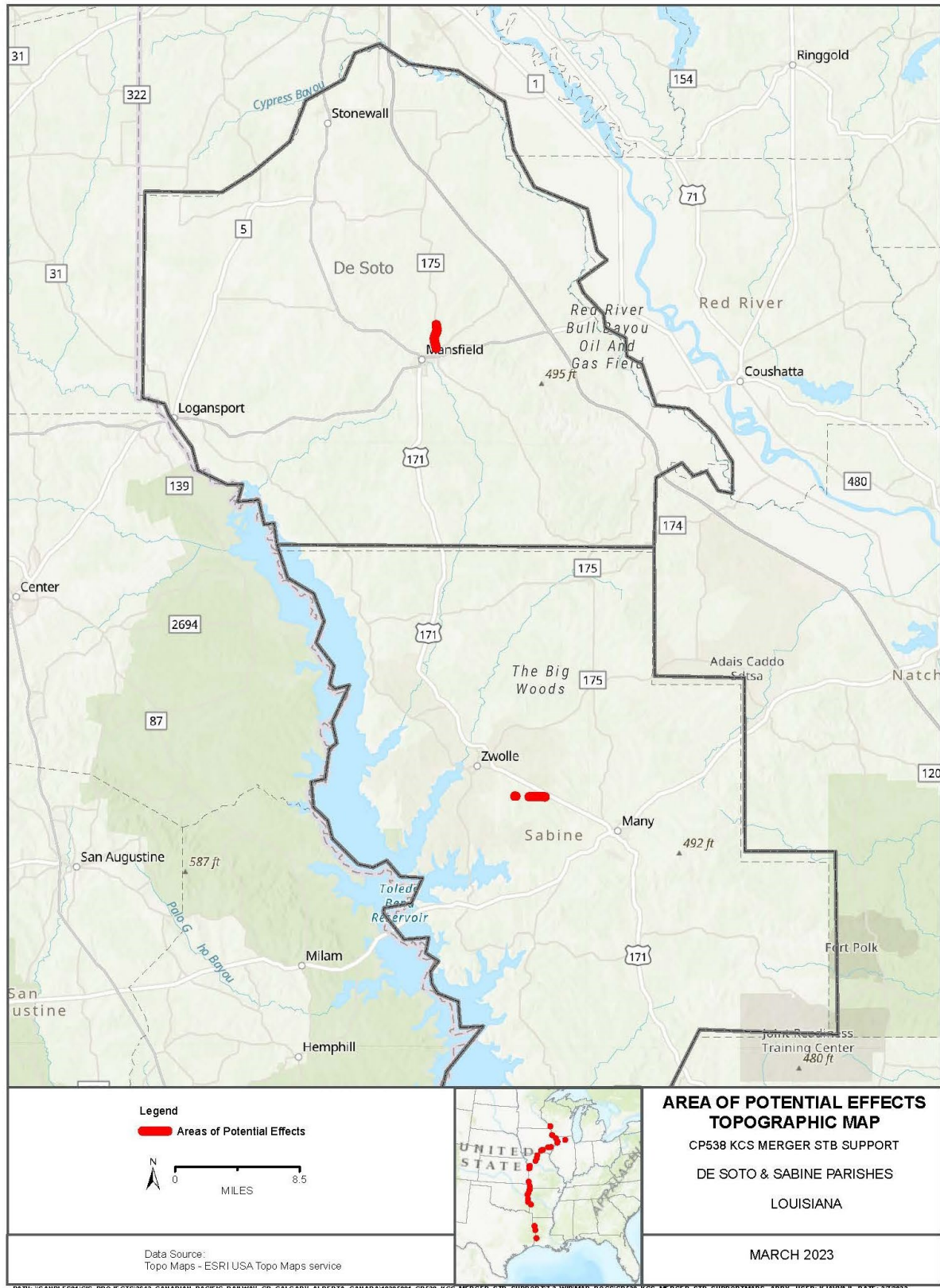


Figure 4. APEs within Le Flore County, Oklahoma

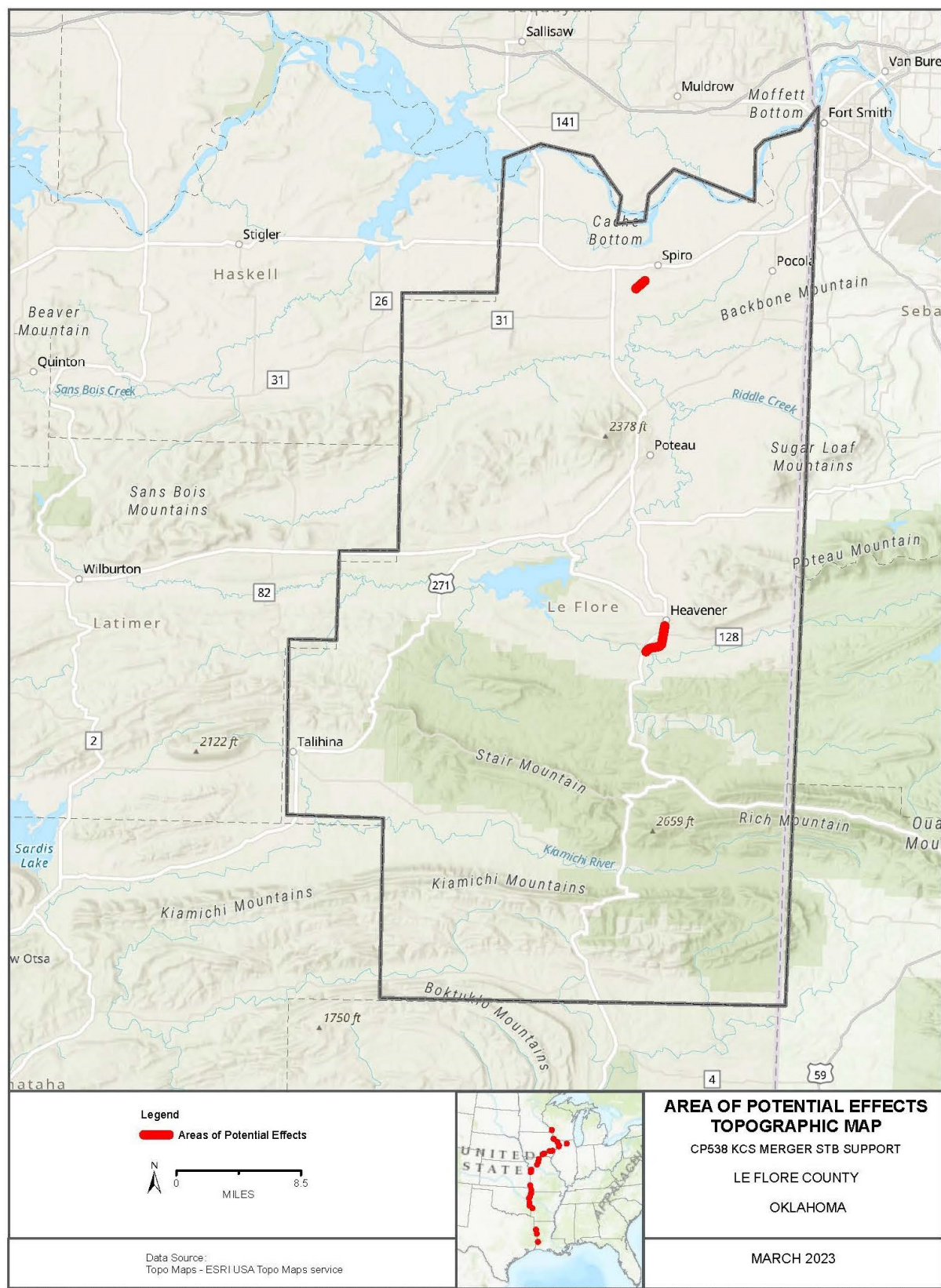


Figure 5. APEs within Adair County, Oklahoma

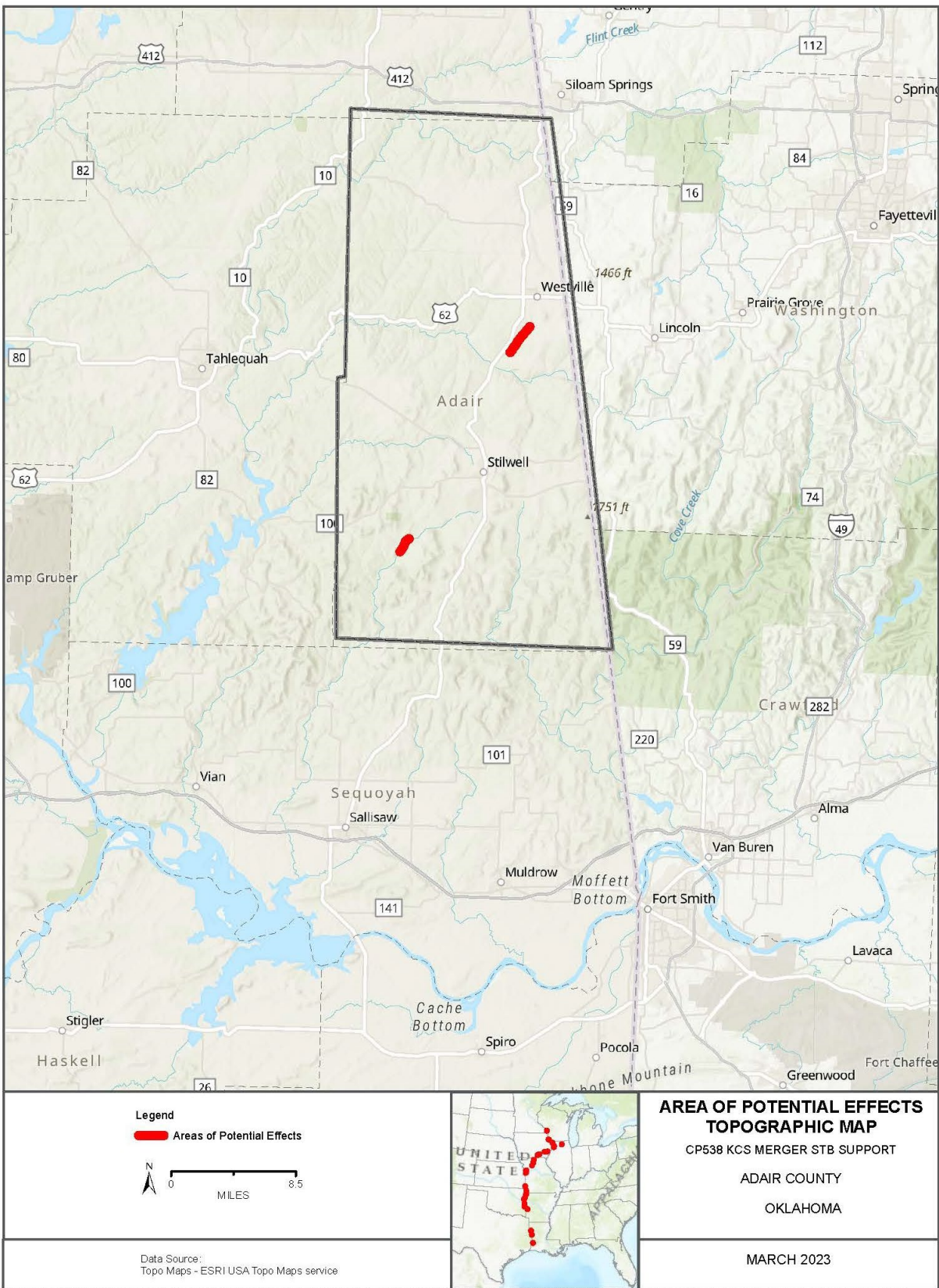


Figure 6. APE within Polk County, Arkansas

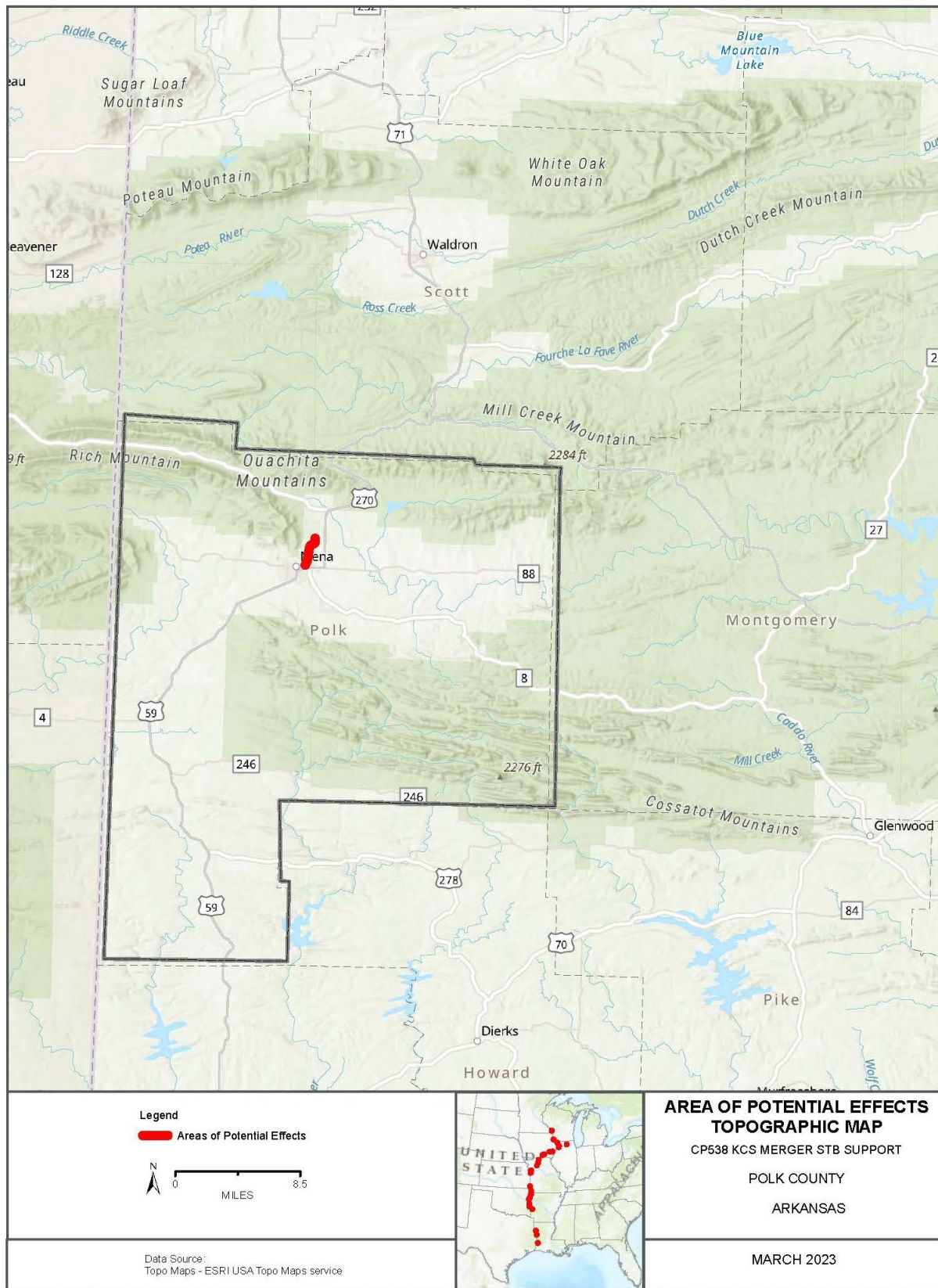
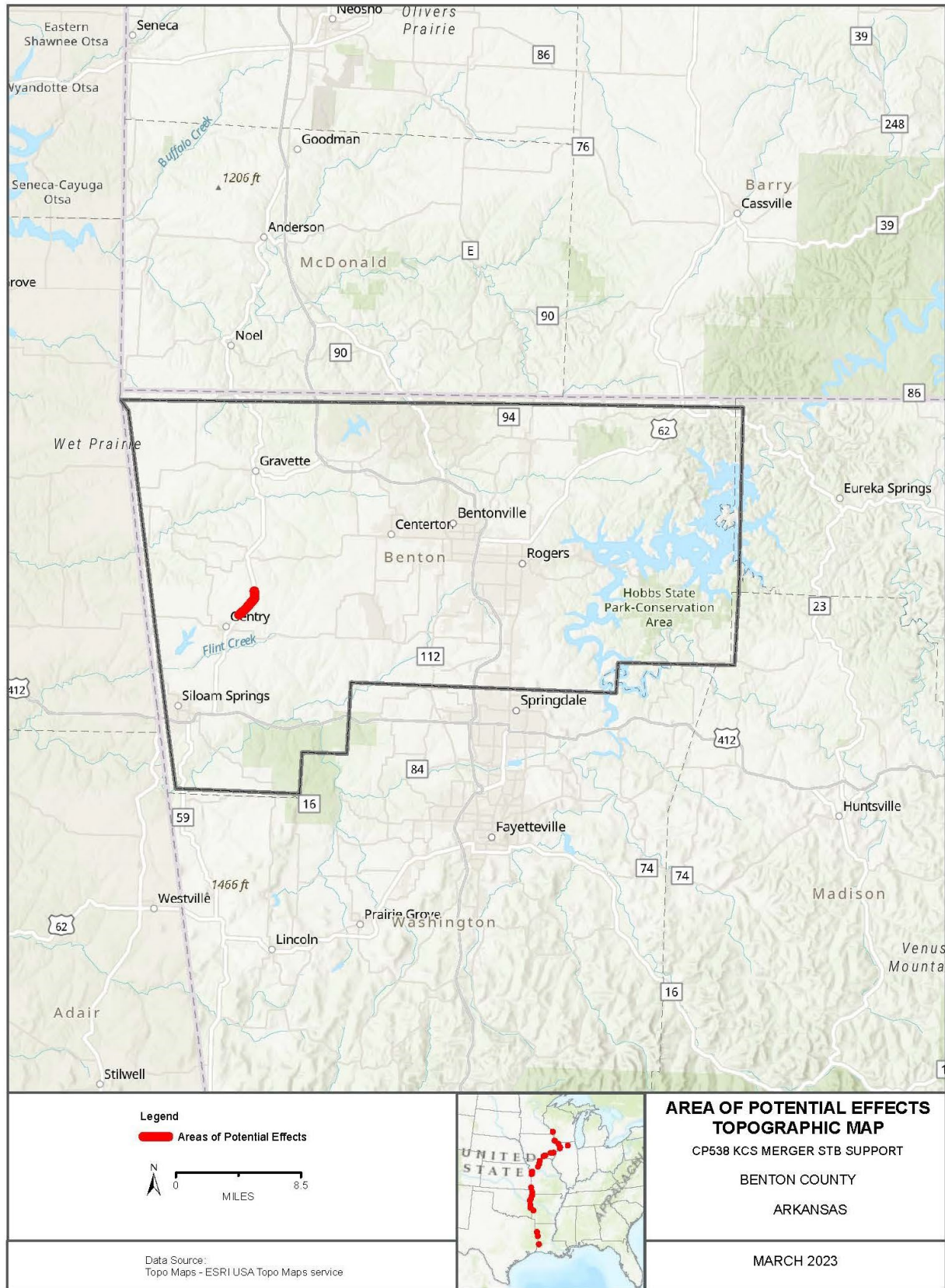


Figure 7. APE within Benton County, Arkansas



Appendix A

Contact Information

Affiliation	Role	Name	Phone Number	Email	Address
Canadian Pacific	Director, Impact Assessment & Natural Environment	Joe Van Humbeck	403.809.2530	Joe_VanHumbeck@cpr.ca	Building 1, Ogden Dale Rd. SE, Calgary, Alberta T2C 4X9
HDR	Senior Project Manager, Railway Development	Rachael Crandley	215.870.8987	Rachael.Crandley@hdrinc.com	1515 Market St, Suite 2020 Philadelphia, PA 19102
HDR	Cultural Resources Practice Leader	Zachary Overfield	210.552.0314	Zachary.Overfield@hdrinc.com	17111 Preston Road, Dallas TX 75248-1229
SWCA	Principal Investigator				
OEA					
Construction Contractor					

Louisiana

Affiliation	Role	Name	Phone Number	Email	Address
Office of Cultural Development	SHPO	Kristin Sanders	225.342.8200	ksanders@crt.la.gov	P.O. Box 44247 Baton Rouge, LA 70804
Beauregard Parish	Sheriff's Office	Mark Herford	337.463.3281	jmorton@bpsheriff.org	120 South Stewart St., DeRidder, LA 70634
Beauregard Parish	Coroner	Flynn A. Taylor	337.462.2659	tiwanna9@bellsouth.net	1332 Blankenship Dr., DeRidder, LA 70634
DeSoto Parish	Sheriff's Office	Jayson Richardson	318.872.3956	info@dpso.org	205 Franklin St, Mansfield, LA 71052
DeSoto Parish	Coroner	William Joshua Pounders	318.872.0516	jjpounders@desotocountymys.gov	P.O. Box 899 Mansfield, LA, 71052
Sabine Parish	Sheriff's Office	Aaron Mitchell	328.256.9241	Not available	400 Capitol St. P.O. Box 1440 Many, LA 71449
Sabine Parish	Coroner	Mark Holder	318.461.8410	Christinearnold1908@outlook.com	P.O. Box 1567 Many, LA 71449

Arkansas

Affiliation	Role	Name	Phone Number	Email	Address
Department of Arkansas Heritage	SHPO	Jimmy Bryant	501.371.6100	Jimmy.Bryant@arkansas.gov	1100 North St. Little Rock, AR 72201
Benton County	Sheriff's Office	Shawn Holloway	479.271.1008	shawn.holloway@bentoncountyar.gov	1300 SW 14th St. Bentonville, AR, 72712
Benton County	Coroner	Daniel Oxford	479.621.0223	Daniel.Oxford@BentonCountyAR.gov	1275 Melissa Dr. Bentonville, AR, 72712
Polk County	Sheriff's Office	Scott Sawyer	479.394.2511	ssawyer@polkcountyar.org	507 Church Ave. Mena, AR, 71953
Polk County	Coroner	Brian Bowser	479.394.4477	brianbowser@bowserffh.com	PO Box 4 Mena, AR, 71953

Oklahoma

Affiliation	Role	Name	Phone Number	Email	Address
Oklahoma Historical Society	SHPO	Trait Thompson	405.522.5201	trait.thompson@history.ok.gov	800 Nazih Zuhdi Drive Oklahoma City, OK 73105-7917
Adair County	Sheriff's Office	Jason Ritchie	918.696.2106	Not available	600 Paul Meade Stilwell, OK 74960
Adair County	Coroner	Not available	918.582.0985	Not available	1115 West 17th Street Tulsa, OK 74107
Le Flore County	Sheriff's Office	Rodney Derryberry	918.647.3426	lcso400@hotmail.com	100 South Church St. P.O. Box 129 Poteau, OK 74953
Le Flore County	Coroner	Not available	918.582.0985	Not available	1115 West 17th Street Tulsa, OK 74107

Tribal Contacts

Affiliation	County	Role	Name	Phone Number	Email	Address
Alabama-Coushatta Tribe of Texas	Beauregard, De Soto, Sabine	Chairperson	Ricky Sylestine	936.563.1100	tcrsylestine@actribe.org	571 State Park Road 56 Livingston, TX 77351
Alabama-Coushatta Tribe of Texas	Beauregard, De Soto, Sabine	THPO	Bryant Celestine	936.563.4170	Celestine.Bryant@actribe.org	571 State Park Road 56 Livingston, TX 77351
Alabama-Quassarte Tribal Town	Beauregard, Adair	Chief	Wilson Yargee	405.452.3987	wilson.yargee@alabama-quassarte.org	PO Box 187 Wetumka, OK 74883
Alabama-Quassarte Tribal Town	Beauregard, Adair	THPO	Ben Yahola	405.452.3881	Ben.Yahola@alabama-quassarte.org	PO Box 187 Wetumka, OK 74883
Apache Tribe of Oklahoma	Adair, Beauregard, Benton, De Soto, Le Flore, Polk, Sabine	Chairman	Bobby Komardley	405.247.9493	bkomardley@outlook.com	PO Box 1330 Anadarko, OK 73005
Caddo Nation of Oklahoma	Adair, Beauregard, Benton, De Soto, Le Flore, Polk, Sabine	Chairperson	Tamara Francis	405.656.2344	tffourkiller.cn@gmail.com	PO Box 487 Binger, OK 73009
Caddo Nation of Oklahoma	Adair, Beauregard, Benton, De Soto, Le Flore, Polk, Sabine	THPO	Jonathan Rohrer	405.656.0970, ext. 2070	jrohrer@mycaddonation.com	PO Box 487 Binger, OK 73009
Cherokee Nation	Adair, Benton, Le Flore	Principal Chief	Chuck Hoskin	800.256.0671	Chuck-hoskin@cherokee.org	PO Box 948 Tahlequah, OK 74465
Cherokee Nation	Adair, Benton, Le Flore	THPO	Elizabeth Toombs	918.453.5389	elizabeth-toombs@cherokee.org	PO Box 948 Tahlequah, OK 74465
Cheyenne and Arapaho Tribes, Oklahoma	Adair, Le Flore	Governor	Reggie Wassana	405.422.8224	rwassana@c-a-tribes.org	P.O. Box 38 Concho, OK 73022

Monitoring and Discovery Plan for the Treatment of Cultural Resources Encountered During Construction for the
Canadian Pacific Acquisition of Kansas City Southern Project

Affiliation	County	Role	Name	Phone Number	Email	Address
Cheyenne and Arapaho Tribes, Oklahoma	Adair, Le Flore	THPO	Max Bear	405.422.7715	mbear@c-a-tribes.org	700 Black Kettle Blvd Concho, OK 73022
Choctaw Nation	Le Flore	Chief	Gary Batton	580.924.8280	gbatton@choctawnation.com	PO Drawer 1210 Durant, OK 74702
Choctaw Nation	Le Flore	THPO	Ian Thompson	800.522.6170 ext. 2216	ithompson@choctawnation.com	PO Box 1210 Durant, OK 74702-1210
Coushatta Tribe of Louisiana	Beauregard, De Soto	Chairman	Jonathan Cernek	337.584.1401	rrich@coushatta.org	PO Box 818 Elton, LA 70532
Coushatta Tribe of Louisiana	Beauregard, De Soto	THPO	Kristian Poncho	337.275.1350	kponcho@coushatta.org	PO Box 818 Elton, LA 70532
Jena Band of Choctaw Indians	Beauregard, De Soto, Sabine	Principal Chief	B. Cheryl Smith	318.992.2717	Chief@jenachoctaw.org	PO Box 14 Jena, LA 71342
Jena Band of Choctaw Indians	Beauregard, De Soto, Sabine	Acting THPO	Johnna Flynn	318.992.1205	jjflynn@jenachoctaw.org	PO Box 14 Jena, LA 71342-0014
Mississippi Band of Choctaw Indians	Beauregard, De Soto, Sabine	Chief	Cyrus Ben	601.656.5251	info@choctaw.org	PO Box 6010 Choctaw, MS 39350
Muscogee (Creek) Nation	Le Flore	Principal Chief	David Hill	800.482.1979	dhill@mcn-nsn.gov	PO Box 580 Okmulgee, OK 74447
Muscogee (Creek) Nation	Le Flore	THPO	Corain Lowe-Zepeda	918.758.0649	raebutler@mcn-nsn.gov	PO Box 580 Okmulgee, OK 74447
Osage Nation	Adair, Benton, De Soto, Le Flore, Polk, Sabine	Principal Chief	Geoffrey Standing Bear	918.287.5555	gstandingbear@osagenation-nsn.gov	PO Box 779 Pawhuska, OK 74056
Osage Nation	Adair, Benton, De Soto, Le Flore, Polk, Sabine	Director & THPO	Andrea A. Hunter	918.287.5328	ahunter@osagenation-nsn.gov	627 Grandview Avenue Pawhuska, OK 74056

Affiliation	County	Role	Name	Phone Number	Email	Address
Quapaw Tribe of Indians	Benton, De Soto, Le Flore, Polk	Chairperson	Joseph Byrd	918.542.1853	joseph.byrd@quapawnation.com	PO Box 765 Quapaw, OK 74363
Quapaw Tribe of Indians	Benton, De Soto, Le Flore, Polk	THPO	Everett Bandy	918.238.3100	ebandy@quapawnation.com	PO Box 765 Quapaw, OK 74363-0765
Wichita and Affiliated Tribes (Wichita, Keechi, Waco & Tawakonie), Oklahoma	Adair, Le Flore	President	Terri Parton	405.247.2425	Terri.Parton@wichitatribe.com	PO Box 729 Anadarko, OK 73005
Wichita and Affiliated Tribes (Wichita, Keechi, Waco & Tawakonie), Oklahoma	Adair, Le Flore	THPO	Gary McAdams	405.247.8695 ext. 200	gary.mcadams@wichitatribe.com	Wichita and Affiliated Tribes PO Box 729 Anadarko, OK 73005

Appendix B

Training Materials

Appendix C

Daily Report Template

Monitoring Plan

Monitoring and Discovery Plan for the Treatment of Cultural Resources Encountered During Construction for the Canadian Pacific Acquisition of Kansas City Southern Project

Minnesota, Iowa, Illinois, and Missouri

1 Introduction

This plan describes the protocols to be followed in the event that cultural resources, human remains and/or funerary objects, sacred objects, and objects of cultural patrimony are inadvertently exposed during construction activities performed in the Areas of Potential Effect (APEs) identified for the Capital Improvement Projects associated with the Canadian Pacific Acquisition of Kansas City Southern Project (Project).

1.1 Regulatory Framework

The Surface Transportation Board's (Board's) decision whether to grant authority for Canadian Pacific (CP) to acquire Kansas City Southern (KCS) is a federal action under the National Environmental Policy Act (NEPA) and is also a federal undertaking under Section 106 of the National Historic Preservation Act (NHPA) (54 United States Code [U.S.C.] § 306108). In this case, the Office of Environmental Analysis (OEA) is coordinating the environmental review process under NEPA with the Section 106 process.

If the Board authorizes the proposed Project, the Project Applicants (CP and KCS jointly) intend to build 25 capital improvements within the rail right-of-way. Those capital improvements would include adding 10 new passing sidings, extending 13 existing sidings, adding a section of facility working track, and adding a section of double track. These 25 planned capital improvements have the potential to alter historic properties, including previously unidentified archaeological sites. This monitoring plan references the portion of work to be performed within the states of Minnesota, Iowa, Illinois, and Missouri (**Figures 1 to 10**).

1.2 Purpose

The purpose of this monitoring and discovery plan is to prevent or address unintended adverse effects to historic properties that may occur during the construction of the Project. This plan was prepared in accordance with the mitigation requirements as outlined below in Section 4.10.2 of the Final Environmental Impact Statement (FEIS).

Prior to beginning any construction activities related to the 25 planned capital improvements, the Applicants shall prepare a construction monitoring plan that addresses the following:

- *Training procedures to familiarize construction personnel with the identification and appropriate treatment of historic properties;*

- *Monitoring of construction activities by a qualified professional archaeologist;*
- *Provisions for monitoring and coordination for work within tribal reservation boundaries;*
- *Provisions for the unanticipated discovery of archaeological sites or associated artifacts during construction activities, including procedures for notifying OEA and the appropriate State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO), pursuant to 36 Code of Federal Regulations (C.F.R.) § 800.13(b) in the event of an unanticipated discovery; and*
- *Provisions for complying with the Native American Graves Protection and Repatriation Act (25 U.S.C. § 3001-3013) and other applicable federal, state, and local laws and regulations in the event of inadvertent discoveries of an unanticipated discovery of unmarked human remains during construction activities.*

The Applicants shall provide the construction monitoring plan to OEA and appropriate THPOs for review no later than 30 days prior to the start of any construction activities related to the 25 planned capital improvements and shall abide by the provisions of the plan, including any revisions by OEA and appropriate THPOs, during construction activities (FEIS 2023: Section 4.10.2).

The ensuing archaeological monitoring will be conducted in compliance with the above referenced mitigation requirements.

Archaeological Monitoring is generally defined as the observation of ground-disturbing construction activities by a qualified archaeologist in order to identify, document, protect, and/or recover archaeological information or materials.

2 Training Procedures

An archaeological monitor will provide on-site archaeological orientation and training in advance of the start of construction to all construction workers, including managers and supervisors. Training will be provided as-needed for new workers and visitors as construction continues. The training, which will last no longer than 30 minutes, will outline the steps to be taken in the event of an unanticipated discovery. During the training the archaeological monitor will:

- Give information and examples of the types of cultural resources that may be encountered in the area, including how to identify stone tools, bone, and ceramics;
- Outline the laws that protect cultural resources;
- Outline applicable penalties for damaging sites; and
- Provide contact information for the archaeological monitor, the Principal Investigator (PI), and any backup.

All individuals attending a training session will sign a sheet indicating the date and time of their attendance, which will be maintained by the archaeological monitor. See **Appendix B** for applicable training materials.

All archaeological monitors must participate in safety training prior to entering construction areas. That training will be provided at regular intervals before and during construction and updated in daily safety meetings. The Construction Contractor will provide a list of personal protective equipment that will be required for all monitors.

3 Monitoring Procedures

The following procedures will be adhered to during archaeological monitoring of the ground-disturbing activities taking place during construction.

3.1 Monitoring by a Qualified Professional Archaeologist

Work under the terms of the monitoring plan is to be carried out under the supervision of a PI meeting at a minimum the *Secretary of the Interior's Professional Qualifications Standards for Archaeologists* (48 Federal Register 44738-44739). The archaeological monitor will possess at minimum a bachelor's degree in anthropology, archaeology, or a related field.

3.2 Responsibilities During Fieldwork

The archaeological monitor will be responsible for ensuring that the proper steps are followed to assess and protect cultural resources. It is the responsibility of the archaeological monitor to stop work on site if needed. The archaeological monitor has the authority and responsibility to stop work in a specific location if any previously unidentified cultural resources are encountered during ground-disturbing activities.

The archaeological monitor will be present where monitoring is required and will be responsible for the recordation of all unanticipated discoveries. The archaeological monitor will be equipped with:

- A digital camera;
- Global Positioning System (GPS) unit;
- Monitor's daily logs;
- Relevant Project contact information;
- Safety evacuation information.

Other equipment will be determined by the Project design and needs.

To minimize the natural hazards associated with construction, close coordination between the monitors and construction personnel will be emphasized at all times. During fieldwork, the archaeological monitor will be responsible for the following tasks:

- Be present during mechanical scraping, grading, excavating, and other ground-disturbing activities in all required monitoring areas in the Project APE.

- Inspect the newly exposed surface as sediment is moved by heavy equipment.
- Identify cultural materials and ascertain whether the material is archaeological.
- Determine the significance of unanticipated discoveries.
- Consult and coordinate with the PI, HDR, and OEA as appropriate in order to mitigate unanticipated discoveries.
- Coordinate with relevant construction personnel when unanticipated discoveries are made.

If cultural remains, or possible human remains are noted, construction activities will immediately be halted within a 300-foot-radius of the discovery. Construction may proceed in other areas of the Project APE.

Archaeological monitoring will not be required once all surface and subsurface ground disturbance in a construction area is completed or if equipment or vehicles are traveling over previously disturbed surfaces. Routine travel on existing or disturbed roads will not be monitored for cultural resources.

However, additional blading or excavating at a depth beyond the previously disturbed area will be monitored for cultural resources, even within previously graded or bladed areas, where the potential exists for impacting intact subsurface deposits.

3.3 Responsibilities for Reporting

Archaeological monitors will maintain all monitoring records, photographs, and digital data, and will maintain daily logs of Project-related construction monitoring activities comprising the following:

- Date, time of work, and amount of time spent at a construction monitoring location;
- Area of work;
- Type of work, equipment present, and name of construction contracting company and crew foreman being monitored;
- If archaeological deposits are encountered, documentation including a sketch map showing locations of all excavations, surface structures, topography, and identified archaeological deposits within the APE;
- Activities for which there are circumstances that limit or prevent visual examination of Project excavations (including delimiting those areas on a Project area map), cultural resource problems, non-compliances, or other concerns;
- Identification of an unanticipated discovery, steps taken to protect the discovery, and documentation of notifications (name, agency, time, and notes); and
- Color digital photographs taken (as appropriate) to document construction and monitoring activities and submitted as attachments to the daily log.

Archaeological monitors will prepare and provide their monitoring logs daily to the PI, who will prepare and provide monthly summary reports on the progress or status of cultural resources-related activities during active construction. See **Appendix C** for a daily report template.

- The monthly reports will summarize construction progress, monitoring (including monitor name, dates worked, finds, issues, etc.), and status of cultural resources-related issues.
- These reports will also include the appropriate state archaeological isolate or site forms for finds identified under the monitoring program.
- Site forms for any newly discovered properties will include recommendations for National Register of Historic Places (NRHP) eligibility and Project effect.

The archaeological monitor/consultant will submit monthly reports to HDR, who will be responsible for providing updates to CP.

3.4 Detailed Procedures

This section includes detailed information regarding the construction and post-construction tasks to be performed by the archaeological monitor and other parties, as well as the procedure for documenting and reporting inadvertent discoveries made during construction.

3.4.1 Construction Tasks

While construction activities are ongoing, the archaeological monitor will observe ground-disturbing activities. If an unanticipated discovery is made and that find is determined significant by the archaeological monitor, construction work within the site boundary will halt temporarily.

In the event of an unanticipated discovery, the Inadvertent Discovery Plan (**Section 3.5** below) will be followed. If the discovery is found to be eligible for the NRHP, the PI will notify HDR (Rachael Crandley and Zack Overfield), who will consult with the OAE and SHPO. No construction work can occur at the discovery location until agency concurrence is made and the relevant data recovery is completed.

3.4.2 Post-Construction Tasks

Once the archaeological monitor has reviewed the condition of the site and documented damage (if any), they will remove all site-defining flagging, fencing, or barricading.

3.5 Inadvertent Discovery Plans

Any personnel working on the Project can make an unanticipated discovery. An unanticipated discovery can consist of either human remains (i.e., unmarked burial) or other cultural material (such as a subsurface deposit of debitage, semi-subterranean house pits, etc.). A discovery plan for human remains has been prepared for the Project and is provided in **Section 3.5.2**.

3.5.1 Methods

If an isolated find (a single artifact or fewer than 5 artifacts within a 10 meter radius) is encountered the archaeological monitor will halt work in the area long enough to ensure no other archaeological deposits are located within the vicinity. If 5 or more artifacts are encountered within a 10 meter radius, or an archaeological feature is encountered during surface-disturbing activities, all construction activities within a minimum 300-foot buffer will be immediately stopped. The archaeological monitor will notify the PI, who is responsible for notifying HDR of the find. HDR will then contact CP and the OEA immediately, and no later than 24 hours (see **Appendix A** for list of contact information).

The discovery will be secured by the archaeological monitor using standard construction fencing until it can be evaluated by the OEA. After notification is acknowledged and the site is secured, construction activities may continue in other areas of the Project at a minimum of 100 feet from the discovery. The eligibility determination will be made within 48 hours of discovery. If personnel availability does not allow the determination to be made within that timeframe, the OEA will establish a deadline for making the determination no more than 1 week after discovery and the OEA will follow up the verbal notification with an email notification within 24 hours to the Construction Contractor and other appropriate parties.

The OEA/SHPO will consult with the appropriate Tribal authorities and consulting parties at this time. The discovery will be evaluated under all four eligibility criteria and all seven aspects of integrity. Evaluative testing may be necessary to determine the nature and extent of the cultural materials. The OEA will make the determination of eligibility and effect and will consult with the SHPO as specified below.

Discovered Property is not Eligible with a No Historic Properties Affected Determination

If the OEA determines that the discovery is not eligible for inclusion in the NRHP, a “No Historic Properties Affected” determination will be made. The archaeological monitor will prepare the documentation and submit it to HDR within 24 hours of the discovery. HDR will review and submit the documentation to the OEA, who will submit the documentation to the SHPO. The OEA will issue a written Notice to Proceed (NTP) to the Construction Contractor within 24 hours of the eligibility determination and construction will be allowed to resume in the area of discovery.

Discovered Property is Eligible with a No Adverse Effect Determination

If the OEA determines that the overall cultural resource is eligible for inclusion in the NRHP, but the discovery does not contribute to its eligibility or the continuation of Project activities will not cause adverse effects, a “No Adverse Effect” determination will be made. The archaeological monitor will prepare the documentation and submit it to HDR within 24 hours of the discovery. HDR will review and submit the documentation to the OEA, who will submit it to the SHPO within 24 hours of receipt. If the SHPO does not respond within 30 days, the OEA may assume concurrence with the determinations of eligibility and effect.

The OEA will issue a written NTP to the Construction Contractor within 24 hours of SHPO concurrence or the end of the 30-day consultation period and construction will be allowed to resume in the area of discovery.

Discovered Property is Eligible with an Adverse Effect Determination

If the OEA determines that the discovery is eligible for inclusion in the NRHP or that it contributes to the eligibility of a known historic property, and was adversely affected by the undertaking, or will be adversely affected by the continuation of Project construction, a determination of “Adverse Effect” will be made. The archaeological monitor will prepare the documentation and submit it to HDR within 24 hours of the discovery. HDR will review and submit the documentation to the OEA, who will submit it to the SHPO within 24 hours of receipt. If the SHPO does not respond within 30 calendar days, the OEA may assume concurrence with the determinations of eligibility and effect.

All discoveries will be protected and if necessary stabilized as soon as feasible after discovery according to standard industry practices. The PI will determine the appropriate measures to take in consultation with HDR and the OEA and these measures will be taken and remain in place until a Treatment Plan can be developed and implemented.

Upon receipt of SHPO concurrence with the Treatment Plan, the OEA will immediately notify CP and HDR that the plan is acceptable. The archaeological monitor and construction company will implement the terms of the Treatment Plan as soon as practical considering weather and access conditions and will notify HDR, who will notify the OEA immediately upon completion of the terms. The OEA will verify completion of the Treatment Plan terms within 24 hours of completion notification. Upon verification that the terms of the Treatment Plan have been completed by the archaeological monitor and Construction Contractor, the OEA will issue a written NTP to the Construction Contractor and construction will be allowed to resume in the area of the discovery within 24 hours of receipt. Additional construction activities may be subject to an archaeological monitor at the OEA's discretion.

3.5.2 Inadvertent Discovery of Human Remains

In the event human remains are encountered during archaeological monitoring the procedures outlined in the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 (25 U.S.C. 3001 et seq. and the implementing regulations, 43 CFR Part 10) for inadvertent discoveries will be followed. Work in the vicinity must stop immediately and the remains left in place and protected until the appropriate personnel can be reached. Any human remains encountered must be treated with the utmost dignity and respect. The remains will be treated as an archaeological discovery if no conclusive evidence of a crime scene is apparent, including modern clothing or items such as jewelry, dental fillings, etc.

Immediate notice of the discovery should be made to CP and HDR, the appropriate local law enforcement agency, the local coroner's office, the OEA, and the SHPO (see **Appendix A** for a list of contacts). Within 24 hours of the notification, the SHPO/OEA will notify any Tribal authority that has indicated interest in the area of the discovery. Local

law enforcement officials will assess the nature and age of the human remains. No remains will be removed until jurisdiction is established.

4 Responsibilities of all Parties

4.1 Monitor/PI

The monitor and PI are responsible for:

- Project training for construction workers and visitors for protection of cultural resources;
- Physical monitoring during ground-disturbing activities;
- Notification of discovery to HDR, immediately and no later than 24 hours;
- Establishing 300-foot discovery buffer;
- Recording discovery;
- Evaluative testing if allowed by permit;
- Submittal of initial documentation to HDR (e.g., site forms, description, photos, etc.) to facilitate eligibility consultation, NTPs, and monitor report requirements (within 24 hours of discovery);
- Protection and stabilization of eligible sites as necessary;
- Daily Monitoring Logs;
- Progress Reports;
- Summary Reports;
- Final Treatment/Monitoring Report;
- Completing required tasks and communications before and no later than applicable timeframes described.

4.2 Construction Contractor

The Construction Contractor is responsible for:

- Attending daily tailgate and plan of day meetings with archaeological monitor;
- Notification of unanticipated discoveries (without an archaeological monitor present) to the OEA (immediately and within 24 hours of discovery);
- Managing field communication between the archaeological monitor and CP via HDR;
- Completing required tasks and communications before but no later than applicable timeframes described.

4.3 OEA

The OEA is responsible for:

- Consultation with appropriate Tribal authorities and consulting parties in regard to discoveries during construction;
- Submitting documentation to SHPOs and issuing written NTP upon concurrence with not eligible and “No Historic Properties Affect” determination (within 24 hours);
- Consultation with SHPOs for “No Adverse Effect” determination (maximum 30 days);
- Issuing written NTPs upon concurrence with eligible and “No Adverse Effect” determination (within 24 hours);
- Consultation with SHPOs for “Adverse Effect” determination (maximum 30 days);
- Review of Treatment Plan;
- Consultation with Tribes and SHPOs on Treatment Plans;
- Issuing NTPs upon completion of terms of Treatment Plan (within 24 hours);
- Completing required tasks and required communications before but no later than applicable timeframes described.

4.4 SHPO

The SHPO is responsible for:

- Consultation with the OEA for eligible discoveries (maximum of 30 days);
- Consultation with the OEA for Treatment Plans.

5 Artifact Collection and Curation

If artifacts are collected, they will be prepared for curation at the state designated curatorial facility, or as otherwise directed by the OEA.

6 Reporting

6.1 Daily Monitoring Logs

All archaeological monitors will keep daily logs. These logs will capture the Project name and number, which GPS system unit was used, the camera used and associated photograph numbers, the monitor’s and any visiting personnel’s names, the company whose work is being monitored, the location of the area(s) monitored, the actions monitored (excavation, drilling, etc.), the number of sites (if any) that were monitored and their Smithsonian trinomial, any sites or cultural material discovered while monitoring that

day, any safety incidents, and a narrative for the daily activities. All in-field recordation will be made digitally for reporting purposes.

6.2 Progress Reports

The archaeological monitoring project manager will complete a monthly progress report, due at the time of invoice delivery and sent via email to HDR. This progress report will summarize the past month's daily logs and will give a brief outlook for the following month's archaeological monitoring activities. Unexpected discoveries should be noted in the progress report but should not be the primary form of communication to HDR and/or OEA for an unexpected discovery.

6.3 Summary Reports

When construction activities have concluded at each monitoring location, and the archaeological monitor has conducted the post-construction tasks, a summary of the activity affecting the cultural resources in that area will be produced by the project manager. The report will include a summary of the monitor's daily logs, progress reports, any data recovery that was conducted, and any necessary condition assessments for the relevant archaeological sites.

The summary reports will be submitted to HDR within two weeks of construction ceasing. Once approved, HDR will submit the summary report to OEA and the relevant SHPO if required. This report does not replace the technical report required once the construction project is completed but rather is meant as a management tool for HDR, OEA, and local SHPOs.

6.4 Technical Reports

When construction activities have ceased and there is no longer a need for archaeological monitoring, technical reports, grouped by state, will be prepared. These reports will synthesize all monitoring activities, including photographs of sites before, during, and after construction. For any unanticipated discoveries, the report will cover the treatment activity completed (including excavation summaries if applicable) and any necessary site updates or new site forms created due to ground-disturbing activities.

Technical reports will abide by relevant agency guidelines, and a draft will be submitted within 60 days of archaeological monitoring completion.

7 Archaeological and Historical Context

7.1 Northeastern Woodlands Region: Missouri, Iowa, Illinois, Minnesota

In compiling the archaeological and historical context below, a review of the following sources was conducted: Robert D. Bush's *The Louisiana Purchase: A global context*; Paul Nagel's *Missouri: A History* (1997); Michael S. Nassaney and Kenneth E. Sassman's *Native American Interactions: Multiscalar Analyses and Interpretations in the Eastern Woodlands* (1995); Sissel Schroeder's article on "Current research on late precontact societies of the midcontinental United States" (2004); Dorothy Schwieder's *History of Iowa* (2015); Theodore C. Van Alst Jr's *Precontact Indigenous North America* (2015); and David Wishart's *Encyclopedia of the Great Plains Indians* (2007).

Pre-Contact Period (11,500 BCE – 1500 CE)

The Northeast Woodlands region of the United States is an area of converging geographical and cultural areas with traditional tribal groups in the western portion including the Osage, Missouri, Iowa, and Illinois. The first inhabitants of this area were Paleoindians, the earliest ancestors of present-day indigenous peoples. Paleoindian people migrated from Asia to North America over emerging land masses and ice that formed on the Bering Strait as long as 20,000 to 35,000 years ago. The precolonial past of indigenous peoples is typically divided by archeologists as Paleoindian (11,500–8000 BCE), Archaic (8000–800 BCE), Woodland (800 BCE–1200 CE), and Mississippian (1200–1700 CE) (Van Alst Jr 2015).

The Paleoindian period began at the end of the last glacial period and, as the climate warmed, indigenous peoples adapted to changing natural and social landscapes. Sophisticated stone Clovis spear points were used for hunting large mammals, or megafauna, all of which are now extinct. Although previously thought to be primarily nomadic people following herds of megafauna, it now appears that Clovis people were more sedentary with very diverse diets (Van Alst Jr 2015).

The Archaic period was a time of dynamic environmental change as sea-levels rapidly rose, causing major shifts in wildlife and vegetation. Adaptation to these major environmental shifts can be seen in the archaeological record as projectile points became smaller and axes and grinding stones were more prominent to accommodate for the change in subsistence strategies. Sparse Late-Archaic burial mounds first appear in modern-day Missouri at this time (Missouri Archaeological Society 2023; (Van Alst Jr 2015).

During the Woodland Period, indigenous societies grew increasingly sedentary and adapted to a changing environment. This included new tools and foodways following domestication of select plant species. Earth works continued and burial practices changed to include the more frequent building of domed mounds to cover the dead. The number of villages occupied year-round increased, and intensive cultivation began at the end of the Woodland period, but many groups continued a semi-nomadic way of life (Schroeder 2004).

Agriculture continued into the Mississippian period with an onset of technological innovations including small projectile points for use with a bow, and new ceramic techniques. The most significant cultural center at this time was Cahokia, a large city near the confluences of the Mississippi, Missouri, and Illinois rivers built around 1050 CE. The city included massive intricately planned earth works, each taking a decade or more to build, and was the center for cultural exchange and long-distance trade until around 1400 CE. With an increase in food production, populations began to rise, and more multifaceted social, political, and economic structures developed. Peoples on the western fringes of the Northeast region relied heavily on bison as a source of food and hides. The typical housing type was the wickiup house which consisted of poles tied together to make a dome-shaped framework that was covered with bark, reeds, or woven mats. Wooden dugout canoes were essential for navigating the regions many rivers and lakes (Pauketat 2004; Schroeder 2004).

The APEs border and cross into the Plains cultural region in western Missouri. Before 1100 CE, the Plains were very sparsely populated by humans. Plains people were traditionally hunter-gatherers who migrated and foraged widely over the landscape. By 850 CE, many groups shifted to more permanent settlements, with the advent of agriculture leading to substantial villages along the major rivers. The bison was a crucial part of Plains people's lifeways as a source of food and shelter (Wishart 2007).

Contact Period (1500 CE – 1800 CE)

French exploration began in the northeast during the sixteenth and seventeenth centuries, with the first permanent settlements in the late seventeenth and early eighteenth centuries. This exploration and settlement began to disrupt traditional ways of life. During the seventeenth century, trade in furs and indigenous reliance on European firearms and goods greatly increased. Direct warfare and disease caused thousands of indigenous deaths, and the subsequent effects of these losses further devastated indigenous groups (Nassaney and Sassman 1995; Schroeder 2004).

Early American Settlement in the Northeastern Woodlands Region (1800 CE – 1900)

President Thomas Jefferson bought the Louisiana territory in the Louisiana Purchase of 1803, which included most of the territory from the Mississippi River to the Rocky Mountains. Illinois and Missouri served as areas of land passage for settlers, and by the mid-1800's, thousands of miles of railroad were built, pushing the frontier westward (Bush 2013; Nagel 1977; Schwieder 2015).

By the early nineteenth century, many indigenous groups merged with larger tribes as a way to survive after overwhelming losses and displacement as European and Euro-American populations in the region increased. Indigenous groups faced increasingly restrictive policies as settlers were drawn to desirable locations inhabited by indigenous peoples. These policies sparked a number of physical and legal battles, and ultimately led to the passing of the Indian Removal Act of 1830. Land was designated west of the Mississippi River for indigenous people in exchange for their land in the east, as well as funds for transportation. A lack of food, sanitation, shelter, and transport ultimately caused many indigenous deaths. The Removal Act was enforced throughout the

Southeast and by 1840 tens of thousands of indigenous people were forced from their homelands, with thousands of people dying along the way on what became known as the Trail of Tears (Nassaney and Sassman 1995).

The onset of the Civil War in 1861 was a tumultuous time as institutional slavery was threatened, causing violent outbreaks. Minnesota, Iowa, and Illinois remained with the Union as free states, and Missouri stayed with the union as a slave state. Iowa played an important role in the Underground Railroad and contributed more troops to Union armies than any other state. Following the Civil War, Missouri, Iowa, and Illinois remained largely rural and agricultural states, as railroad expansion and the removal of Native Americans opened the prairie to large waves of immigrants from eastern states and Europe (Nagel 1977; Schwieder 2015).

The introduction of the horse and European guns made many Plains groups a formidable force against smaller tribes and European settlers. However, in the 1880s, U.S. policy makers turned to the destruction of the Plains nations' food supply and, after the bison disappeared, Plains indigenous groups began to starve, forcing them to relocate to reservations (Wishart 2007).

Recent Cultural Developments in the Northeastern Woodlands Region (1900 CE – Present)

In 1906 tribal governments, schools, and other institutions formerly managed by the tribes fell to U.S. government control as a way to force assimilation on indigenous people. The events of the twentieth century, including the Great Depression and both World Wars, caused urbanization and the diversification of Missouri, Iowa, Illinois, and Minnesota economies to include more manufacturing and service components (Nagel 1977; Schwieder 2015).

Concurrently, racial tensions grew as segregation continued and discrimination against African Americans was commonplace. These tensions led to the development of widespread civil rights movements beginning in the 1930s and 1940s, reaching a nationwide scale in the 1950s and 1960s. These civil rights movements caused the strengthening of traditional indigenous cultures and pressure from indigenous groups to receive compensation for lost lands, and during the 1970s the federal government relinquished control of Tribal institutions and the right to appoint tribal governments (Nassaney and Sassman 1995).

Today Missouri, Iowa, Illinois, and Minnesota continue to be major hubs for manufacturing and agriculture. Though in many cases removed from their ancestral homelands, indigenous groups maintain a strong presence in Missouri, Iowa, Illinois, and Minnesota through contemporary Tribal Nation governments. These include: the Apache Tribe of Oklahoma, the Caddo Nation of Oklahoma, the Cheyenne and Arapaho Tribes in Oklahoma, the Citizen Potawatomi Nation in Oklahoma, the Forest County Potawatomi Community of Wisconsin, the Flandreau Santee Sioux Tribe of South Dakota, the Fort Belknap Indian Community of the Fort Belknap Reservation of Montana, Hannahville Indian Community in Michigan, the Ho-Chunk Nation of Wisconsin, the Iowa Tribe of Kansas and Nebraska, the Iowa Tribe of Oklahoma, the Kickapoo Tribe of Oklahoma, the Lower Sioux Indian Community in the State of Minnesota, the Menominee Indian

Tribe of Wisconsin, the Miami Tribe of Oklahoma, the Osage Nation, the Prairie Band Potawatomi Nation, the Prairie Island Indian Community in the State of Minnesota, the Sac & Fox Nation of Missouri in Kansas and Nebraska, The Sac & Fox Nation in Oklahoma, the Sac & Fox Tribe of the Mississippi in Iowa, the Santee Sioux Nation in Nebraska, the Seneca-Cayuga Nation, the Sisseton-Wahpeton Oyate of the Lake Traverse Reservation in South Dakota, the Spirit Lake Tribe in North Dakota, The Upper Sioux Community in Minnesota, and the Winnebago Tribe of Nebraska. All of the tribes listed here have traditional ties to the current study areas (Nagel 1977; Schwieder 2015; TDAT 2023).

8 References

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2023 *Canadian Pacific Acquisition of Kansas City Southern: Final Environmental Impact Statement*. Surface Transportation Board, Office of Environmental Analysis, Raleigh, NC 27606.

Missouri Archaeological Society

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Figure 1. General Location of the Project.

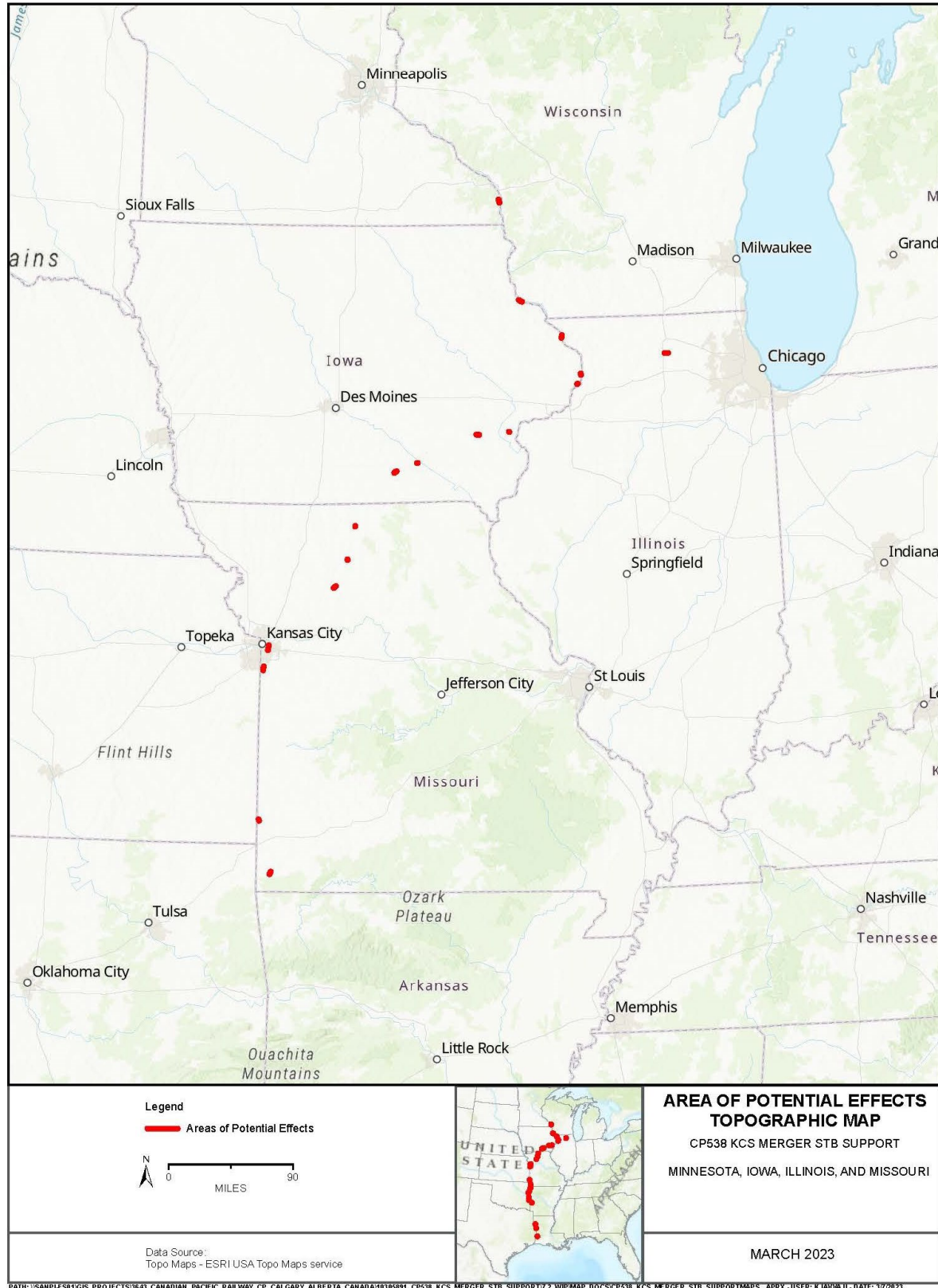


Figure 2. APE within Houston County, Minnesota

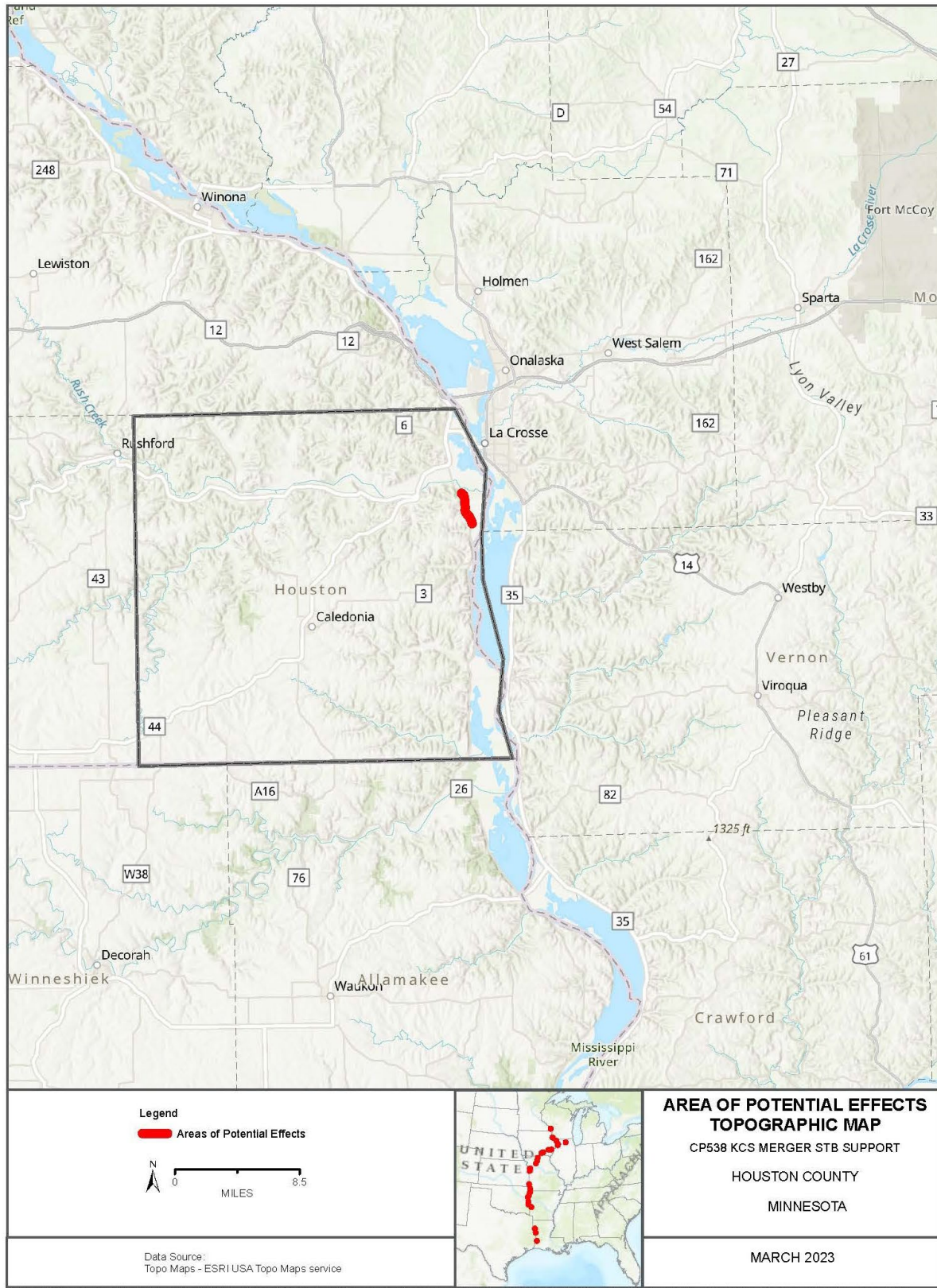


Figure 3. APE within Clayton County, Iowa

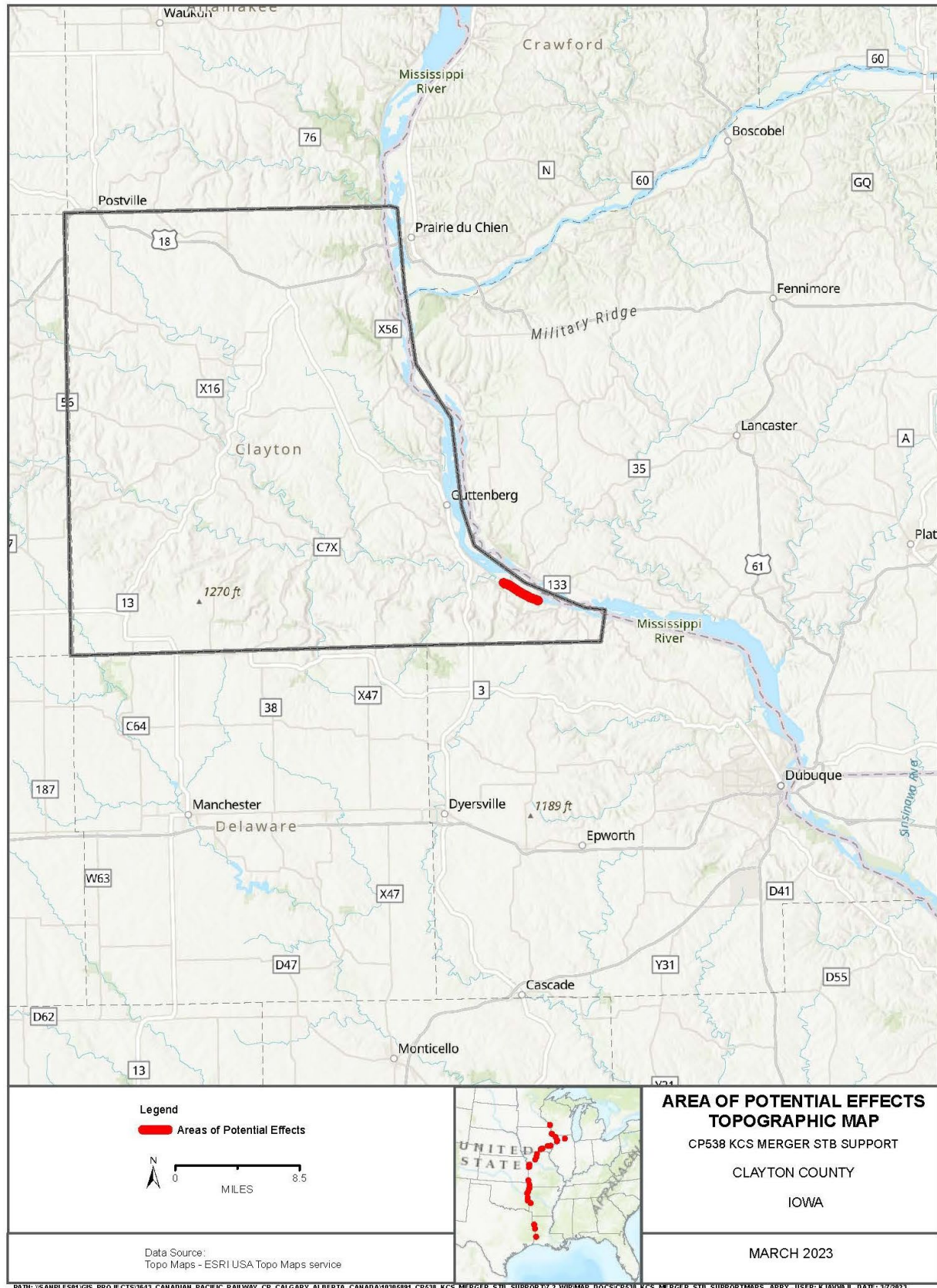


Figure 4. APEs within Jackson and Clinton Counties, Iowa

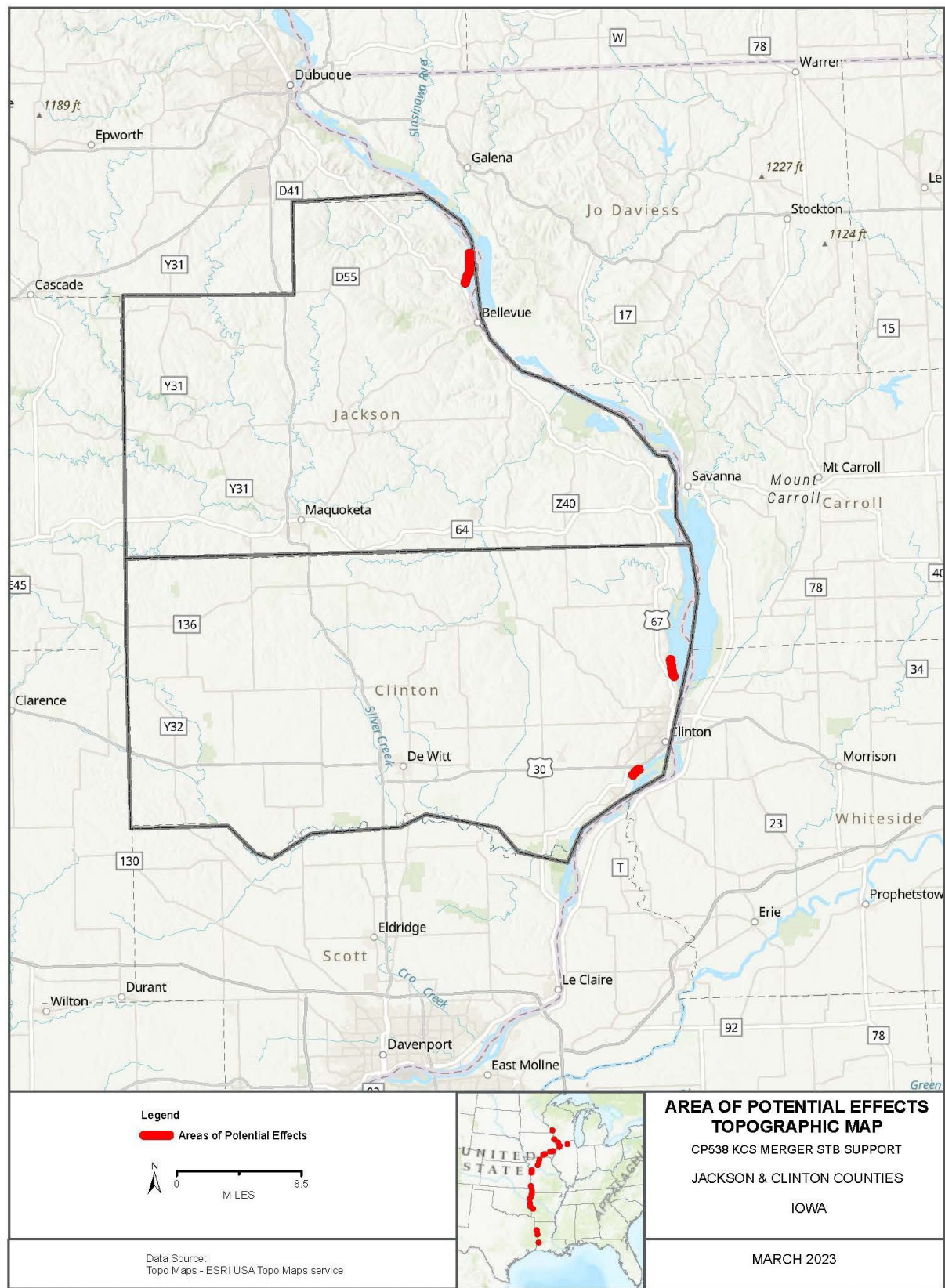


Figure 5. APE within Ogle and Dekalb Counties, Illinois

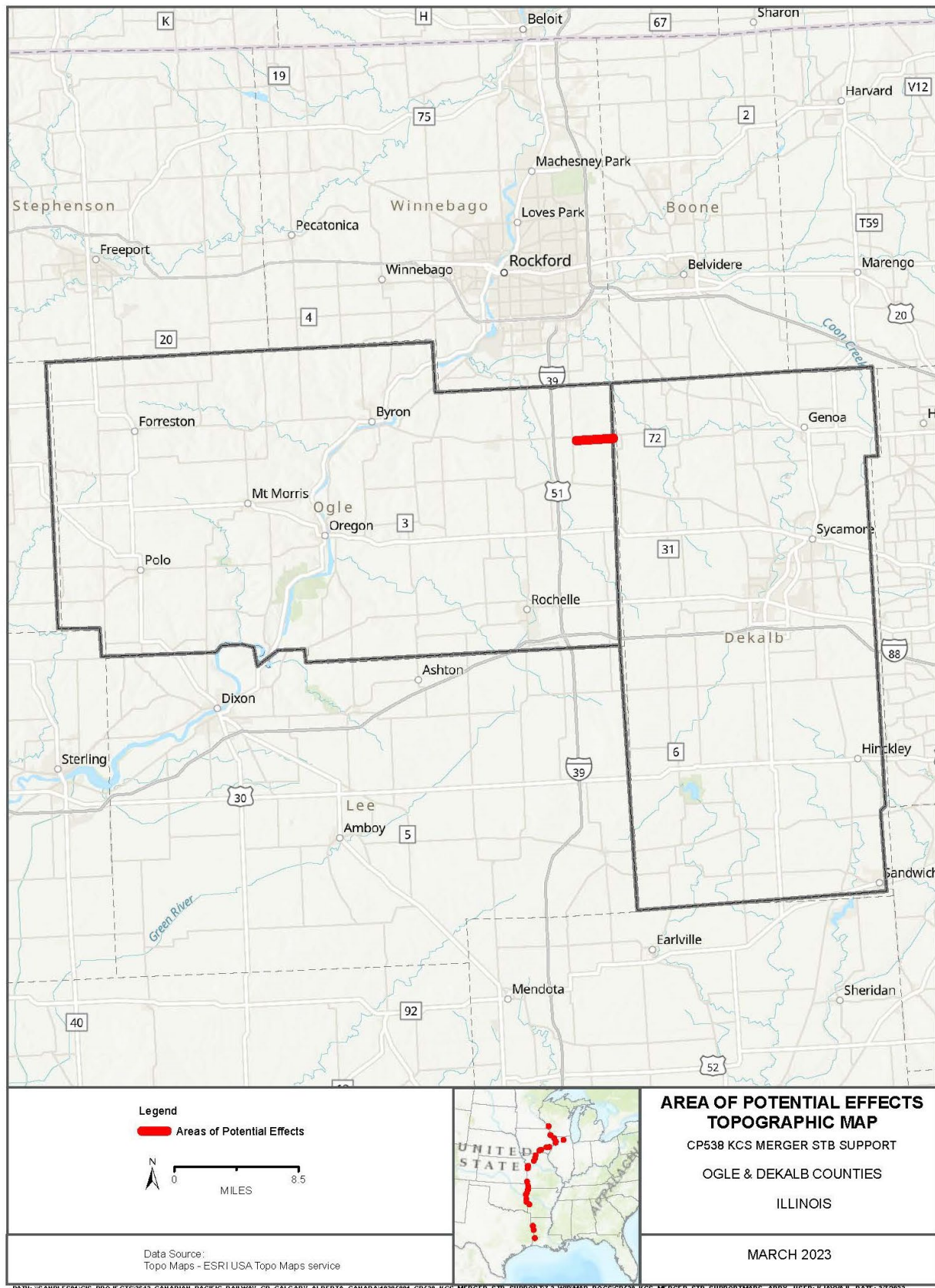


Figure 7. APE within Monroe and Wapello Counties, Iowa

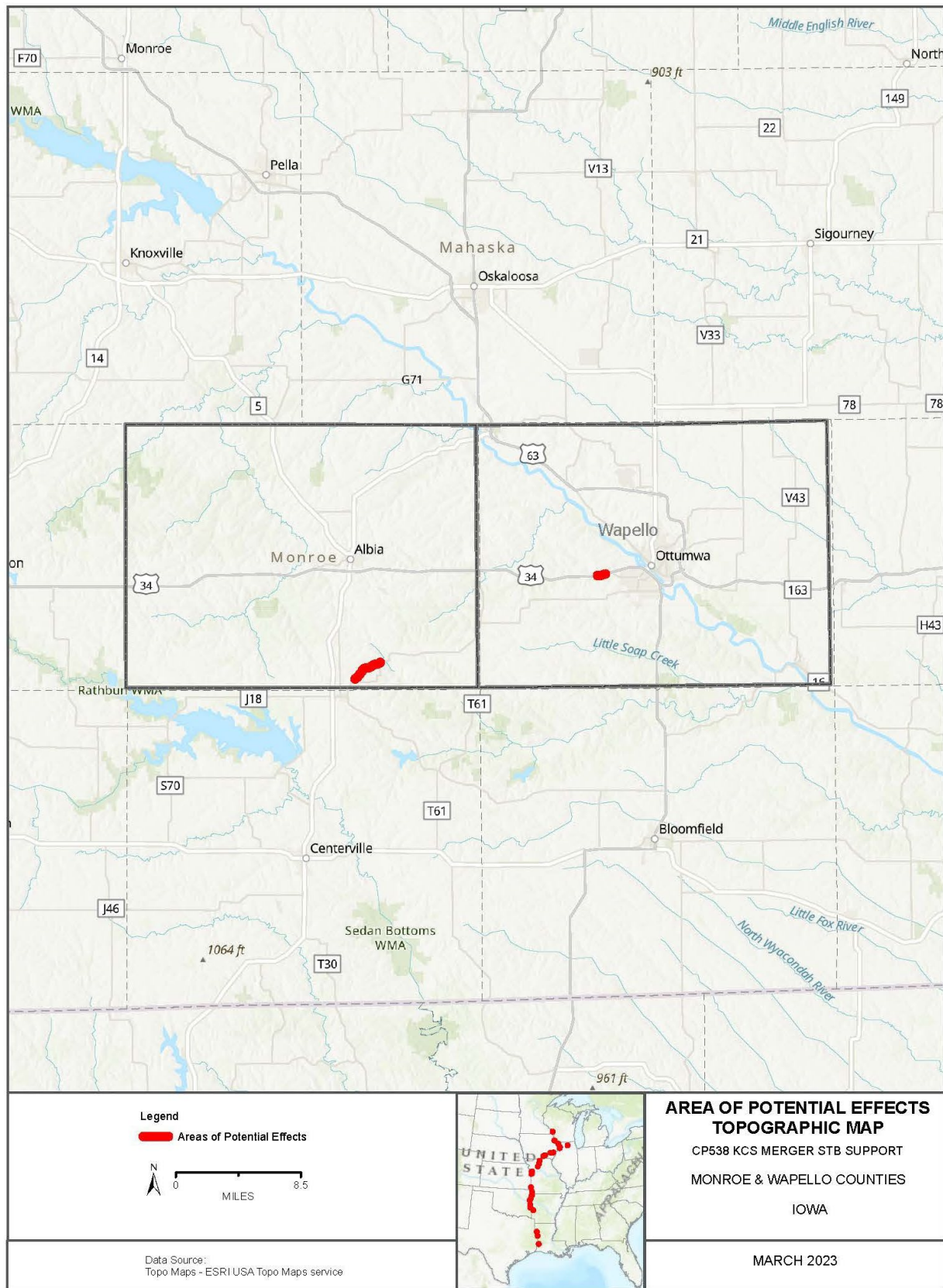


Figure 8. APEs within Grundy, Sullivan, and Livingston Counties, Missouri

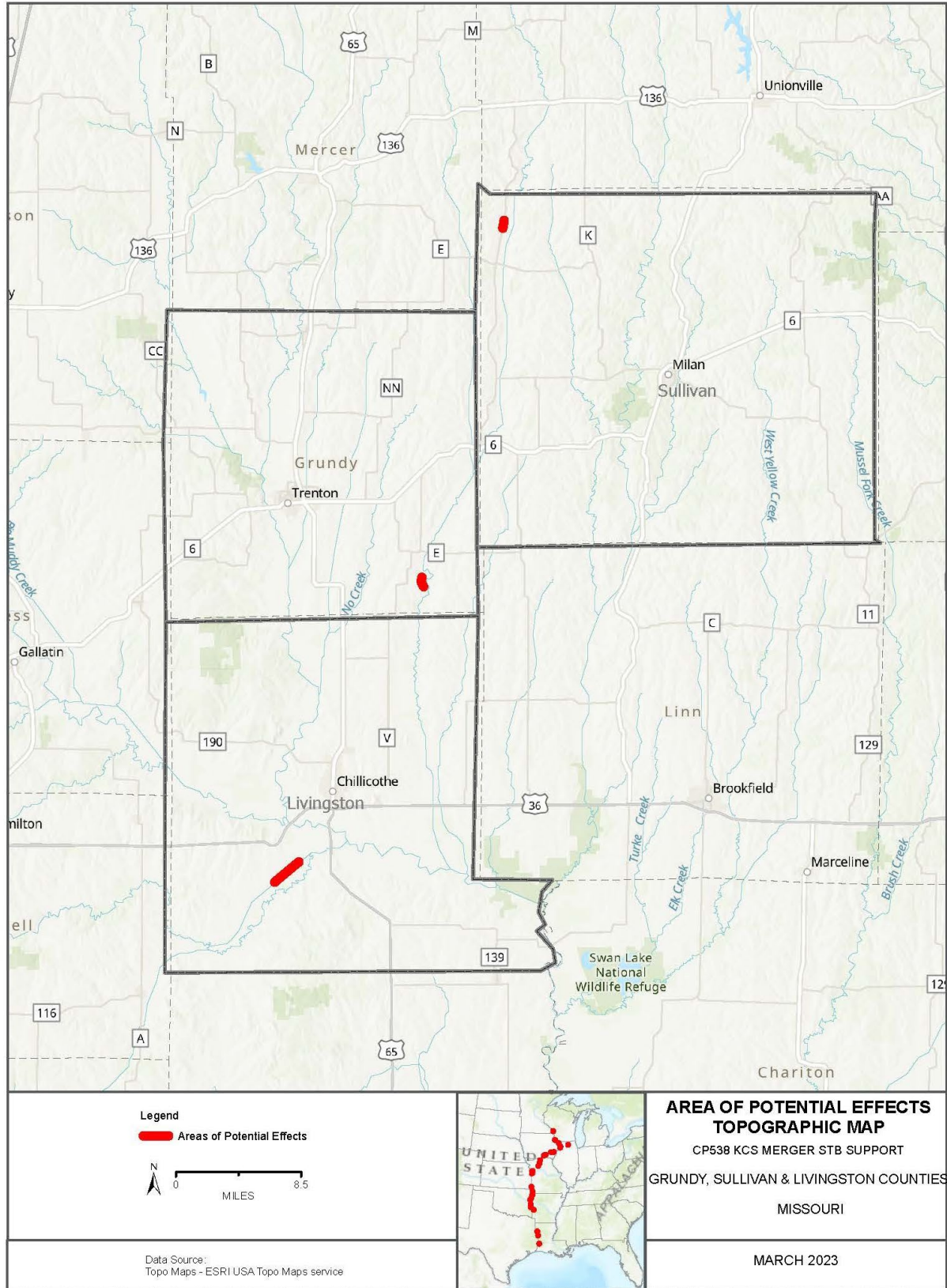


Figure 9. APEs within Jackson and Cass Counties, Missouri

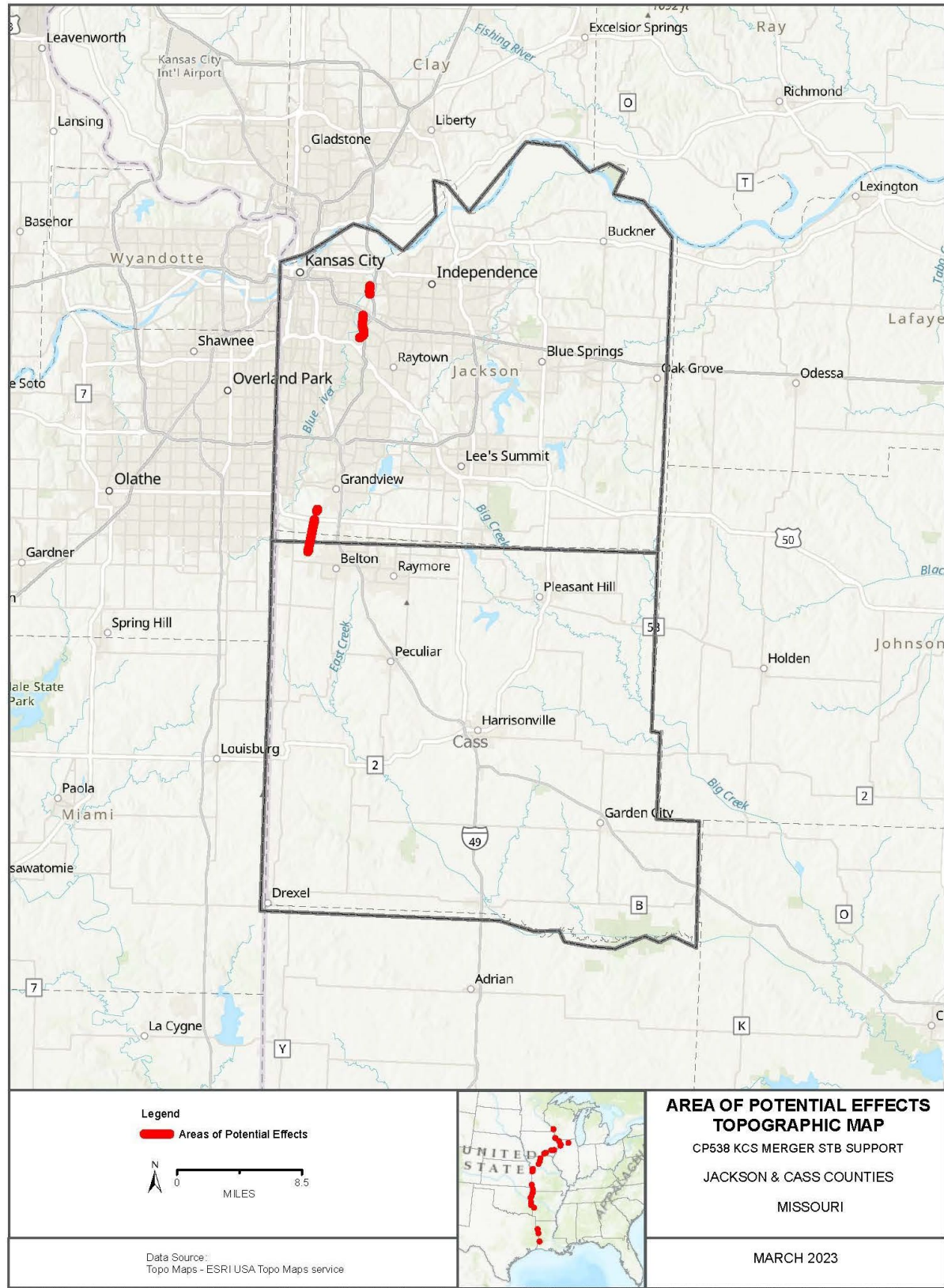
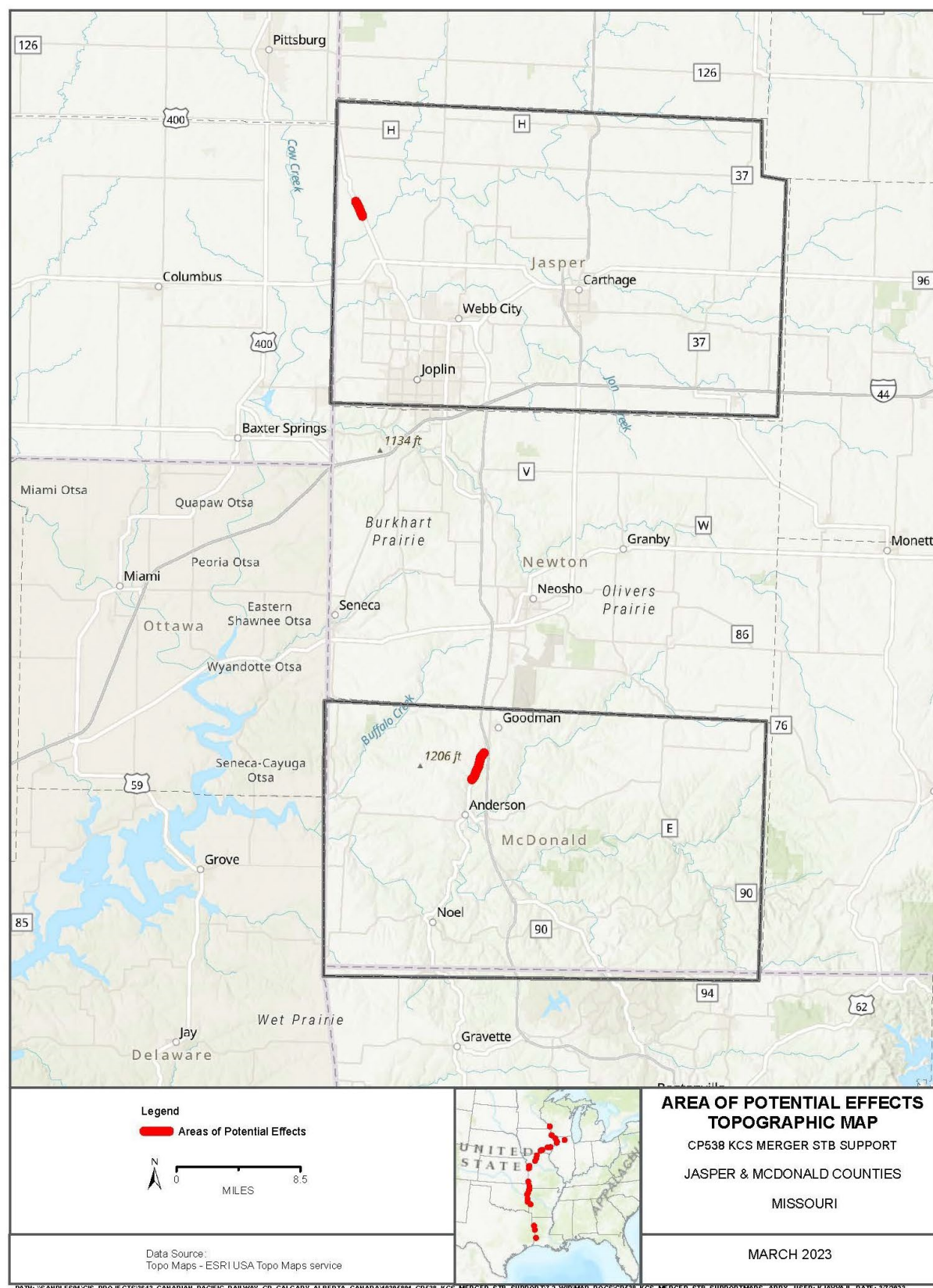


Figure 10. APEs within Jasper and McDonald Counties, Missouri



Appendix A

Contact Information

Monitoring and Discovery Plan for the Treatment of Cultural Resources Encountered During Construction
for the Canadian Pacific Acquisition of Kansas City Southern Project

Affiliation	Role	Name	Phone Number	Email	Address
Canadian Pacific	Director, Impact Assessment & Natural Environment	Joe Van Humbeck	403.809.2530	Joe_VanHumbeck@cpr.ca	Building 1, Ogden Dale Rd. SE, Calgary, Alberta T2C 4X9
HDR	Senior Project Manager, Railway Development	Rachael Crandley	215.870.8987	Rachael.Crandley@hdrinc.com	1515 Market St, Suite 2020 Philadelphia, PA 19102
HDR	Cultural Resources Practice Leader	Zachary Overfield	210.552.0314	Zachary.Overfield@hdrinc.com	17111 Preston Road, Dallas TX 75248-1229
SWCA	Principal Investigator				
OEA					
Construction Contractor					

Missouri

Affiliation	Role	Name	Phone Number	Email	Address
Missouri Historical Society	Acting SHPO	Dru Buntin	573.751.4732	toni.prawl@dnr.mo.gov (Deputy Toni Prawl email as Acting SHPO does not have email provided)	P.O. Box 176, Jefferson City, MO 65102
McDonald County	Sheriff's Office	Robert Evenson	417.223.4319	r.evenson@mcdonaldcountysheriff.com	300 E 7 th St, Pineville, MO 64856
McDonald County	Coroner	William B.J. Goodwin III	417.845.6027	Not available	100 Spring St., P.O Box 520, Anderson, MO 64831
Jasper County	Sheriff's Office	Randee Kaiser	417.358.8177	Not available	231 S Main St, Carthage, MO 64836
Jasper County	Coroner	Randy Nace	417.434.8988	Not available	P.O. Box 511, Webb, MO 64870
Cass County	Sheriff's Office	Jeff Weber	816.380.5200	sheriff.weber@cassmosheriff.org	2501 West Mechanic, Suite 100, Harrisonville, MO 64701

Cass County	Coroner	Not available	816.881.6600	Not available	660 East 24 th St, Kansas, MO, 64108
Jackson County	Sheriff's Office	Darryl Forte	816.541.8017	Not available	4001 NE Lakewood Court, Lee's Summit, MO 64064
Jackson County	Coroner	Marius Tarau	816.881.6600	Not available	950 E. 21st Street Kansas City, MO 64108
Livingston County	Sheriff's Office	Steve Cox	660.646.2121	scox@livcoso.org	919 Jackson Street, Chillicothe, MO 64601
Livingston County	Coroner	Scott Lindley	660.646.4857	lindleyfuneralhome@cmuonline.net	910 Washington Chillicothe, MO 64601
Grundy County	Sheriff's Office	Rodney Herring	660.359.2828	grucoso@grundycountymo.com	610 Main St Trenton, MO 64683
Grundy County	Coroner	Dewayne Slater	660.359.3954	dslater@cebridge.net	412 E. 9th Street Trenton, MO 64683
Sullivan County	Sheriff's Office	Roger Smiley	660.265.3313	Not available	109 North Main Street Milan, MO 63556
Sullivan County	Coroner	Not available	660.265.4646	Not available	120 West 4th Street Milan, MO, 63556

Iowa

Affiliation	Role	Name	Phone Number	Email	Address
Iowa Historical Society	SHPO	Susan Kloewer	515.281.8749	heather.gibb@iowa.gov (Deputy email as SHPO does not have one available)	600 East Locust Street Des Moines, IA 50319
Appanoose County	Sheriff's Office	Gary D. Anderson	641.437.7100	sheriff@appanoosecountysheriff.org	PO Box 474 22158 Dewey Rd. Centerville, IA 52544
Appanoose County	Coroner	Not available	641.856.8684	Not available	19876 Old Highway 5 Centerville, IA, 52544
Wapello County	Sheriff's Office	Don Phillips	641.684.4350	dphillips@wapellocounty.org	330 W 2nd St Ottumwa, IA 52501
Wapello County	Coroner	Mark Hagist	641.684.4621	hagistm@mchsi.com	1005 Pennsylvania Avenue Ottumwa, IA, 52501
Washington County	Sheriff's Office	Jared Schneider	319.653.2107	wpsweb@wps.co.washington.ia.us	2181 Lexington Boulevard PO Box 6 Washington, IA 52353

Monitoring and Discovery Plan for the Treatment of Cultural Resources Encountered During Construction
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Washington County	Coroner	Paul Towner	319.653.9355	Not available	444 East Polk Street Washington, IA, 52353
Louisa County	Sheriff's Office	Brad Turner	319.523.4371	Not available	12635 County Rd G-56 #102 Wapello, IA 52653
Louisa County	Coroner	Not available	319.470.3867	Not available	3012 Timberlane Drive Fort Madison, IA, 52627
Clinton County	Sheriff's Office	Bill Greenwalt	563.242.9211	ccso@gapa911.us	241 Seventh Avenue North Clinton, IA 52732
Clinton County	Coroner	Not available	563.652.5145	Not available	918 West Platt Street Maquoketa, IA, 52060
Jackson County	Sheriff's Office	Brent Kilburg	563.652.3312	bkilburg@jacksoncounty.iowa.gov	104 South Niagara Street Maquoketa IA 52060
Jackson County	Coroner	Not available	Not available	Not available	918 West Platt Street Maquoketa, IA, 52060
Howard County	Sheriff's Office	Tim Beckman	563.547.9296	tbeckman@howardcounty.iowa.gov	124 South Park Place Cresco IA 52136
Howard County	Coroner	Not available	563.547.2022	Not available	321 8th Avenue West Cresco, IA, 52136

Minnesota

Affiliation	Role	Name	Phone Number	Email	Address
Minnesota Historical Society	SHPO	Alice Roberts	651.201.2556	Alice.Roberts-Davis@state.mn.us	50 Sherburne Avenue, Suite 203 St. Paul, MN 55155
Houston County	Sheriff's Office	Brian Swedberg	507.725.3379	mark.inglett@co.houston.mn.us	306 S. Marshall St. Suite 1100 Caledonia, MN 55921
Houston County	Coroner	Not available	651-480-4253	Not available	1175 Nininger Road Hastings, MN, 55033

Illinois

Affiliation	Role	Name	Phone Number	Email	Address
Illinois Historical Society	SHPO	Colleen Callahan	217.785.0075	colleen.callahan@Illinois.gov	1 Natural Resources Way Springfield, IL 62702-1271
Ogle County	Sheriff's Office	Brian VanVickle	815.732.6666	bvanvickle@oglecounty.org	202 S. 1st, Oregon, IL 61061
Ogle County	Coroner	Louis G. Finch, IV	815.732.1199	lfinch@oglecountyil.gov	202 S. 1st, Oregon, IL 61061
DeKalb County	Sherriff's Office	Andrew Sullivan	815.895.7260	asullivan@dekalbcounty.org	150 N. Main, Sycamore, IL 60178
DeKalb County	Coroner	Dennis J. Miller	815.895.7206	dmiller@dekalbcounty.org	150 North Main Street Sycamore, IL 60178

Tribal Contacts

Affiliation	County	Role	Name	Phone Number	Email	Address
Apache Tribe of Oklahoma	Cass, Grundy, Jackson, Jasper, Livingston, McDonald, Sullivan	Chairman	Bobby Komardley	405.247.9493	bkomardley@outlook.com	PO Box 1330 Anadarko, OK 73005
Caddo Nation of Oklahoma	McDonald	Chairperson	Tamara Francis	405.656.2344	tffourkiller.cn@gmail.com	PO Box 487 Binger, OK 73009
Caddo Nation of Oklahoma	McDonald	THPO	Jonathan Rohrer	405.656.0970, ext. 2070	jrohrer@mycaddonation.com	PO Box 487 Binger, OK 73009
Cheyenne and Arapaho Tribes, Oklahoma	Houston	Governor	Reggie Wassana	800.22.8224	rwassana@c-a-tribes.org	P.O. Box 38 Concho, OK 73022
Cheyenne and Arapaho Tribes, Oklahoma	Houston	THPO	Max Bear	405.422.7416	mbear@c-a-tribes.org	700 Black Kettle Blvd Concho, OK 73022
Citizen Potawatomi Nation, Oklahoma	Ogle	THPO	Kelli Mosteller	405.878.5830	cpnthpo@potawatomi.org	1601 S. Gordon Cooper Drive Shawnee, OK 74801

Monitoring and Discovery Plan for the Treatment of Cultural Resources Encountered During Construction
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Affiliation	County	Role	Name	Phone Number	Email	Address
Citizen Potawatomi Nation, Oklahoma	Ogle	Chairman	John "Rocky" Barrett	405.275.3121	jbarrett@potawatomi.org	1602 S. Gordon Cooper Drive Shawnee, OK 74801
Flandreau Santee Sioux Tribe of South Dakota	Howard	THPO	Garrie Kills-A-Hundred	605.864.1236	garrie.killsahundred@FSST.org	PO Box 283 Flandreau, SD 57028
Flandreau Santee Sioux Tribe of South Dakota	Howard	Chairman	Anthony Reider	605.997.3891	president@fsst.org	PO Box 283 Flandreau, SD 57029
Forest County Potawatomi Community of Wisconsin	Ogle	Chairman	Ned Daniels, Jr.	715.478.7200	Ned.DanielsJr@fcpotawatomi-nsn.gov	P.O. Box 340 Crandon, WI 54520
Forest County Potawatomi Community of Wisconsin	Ogle	THPO	Ben Rhodd	715.478.7354	Benjamin.Rhodd@fcp-nsn.gov	P.O. Box 340 Crandon, WI 54521
Fort Belknap Indian Community of the Fort Belknap Reservation of Montana	Houston	THPO	Michael Blackwolf	406.353.2295	mblackwolf@ftbelknap.org	656 Agency Main Street Harlem, MT 59526-9455
Fort Belknap Indian Community of the Fort Belknap Reservation of Montana	Houston	President	Jeffery (Jeff) Stiffarm	406.353.2205	jeffery.stiffarm@ftbelknap.org	RR1, Box 66 Harlem, MT 59526-9455
Hannahville Indian	Ogle	Chairperson	Kenneth Meshigaud	906.466.2932	tyderyien@hannahville.org	N14911 Hannahville B1 Road Wilson, MI 49896

Affiliation	County	Role	Name	Phone Number	Email	Address
Community, Michigan						
Ho-Chunk Nation of Wisconsin	Ogle	THPO	William Quackenbush	715.284.7449	bill.quackenbush@ho-chunk.com	W 9814 Airport Road Black River Falls, WI 54615
Ho-Chunk Nation of Wisconsin	Ogle	President	Jon Greendeer	715.284.2632	Jon.Greendeer@Ho-Chunk.com	W 9814 Airport Road Black River Falls, WI 54616
Iowa Tribe of Kansas and Nebraska	Grundy	Chairperson	Tim Rhodd	785.595.3258	Trhodd@iowas.org	3345 B Thrasher Rd. White Cloud, KS 66094
Iowa Tribe of Kansas and Nebraska	Grundy	THPO	Lance Foster	785.595.3258	lfoster@iowas.org	3345 B Thrasher Rd. White Cloud, KS 66094
Iowa Tribe of Oklahoma	Grundy	Chairman	Edgar Kent	405.547.2402	ekent@iowanation.org	335588 E 750 Rd Perkins, OK 74059-3268
Iowa Tribe of Oklahoma	Grundy	THPO	Amy Scott	405.547.2402	ascott@iowanation.org	335588 E 750 Rd Perkins, OK 74059-3268
Kickapoo Tribe of Oklahoma	Ogle	Chairman	Darwin Kaskaske	405.964.7053	darwin.kaskaske@okkt.net	PO Box 70 McLoud, OK 74851
Kickapoo Tribe of Oklahoma	Ogle	NAGPRA	Kent Collier	405.964.4227	pamwesley@kickapootribeofoklahoma.com	PO Box 70 McLoud, OK 74852
Lower Sioux Indian Community in the State of Minnesota	Howard	President	Robert Larsen	507.697.6185	robert.larsen@lowersioux.com	PO Box 308 Morton, MN 56270
Lower Sioux Indian Community in the State of Minnesota	Howard	THPO	Cheyenne St. John	507.697.6321	cheyanne.stjohn@lowersioux.com	PO Box 308 Morton, MN 56270

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Affiliation	County	Role	Name	Phone Number	Email	Address
Menominee Indian Tribe of Wisconsin	Appanoose, Clinton, Howard, Louisa, Jackson, Wapello, Washington	THPO	David Grignon	715.799.5258	mitwadmin@mitw.org	PO Box 910 Keshena, WI 54135-0910
Menominee Indian Tribe of Wisconsin	Appanoose, Clinton, Howard, Louisa, Jackson, Wapello, Washington	Chairman	Ron Corn Sr.	715.799.5100	chairman@mitw.org	PO Box 910 Keshena, WI 54135-0911
Miami Tribe of Oklahoma	Jackson	Chief	Douglas Lankford	918.542.1445	dlankford@miamination.com	PO Box 1326 Miami, OK 74355
Miami Tribe of Oklahoma	Jackson	THPO	Diane Hunter	260.639.0600	dhunter@miamination.com	PO Box 1326 Miami, OK 74356
Osage Nation	Cass, Grundy, Jasper, Jackson, Livingston, McDonald, Sullivan	Director and THPO	Andrea A. Hunter	918.287.5328	ahunter@osagenation-nsn.gov	627 Grandview Avenue, Pawhuska, OK 74056
Osage Nation	Cass, Grundy, Jasper, Jackson, Livingston, McDonald, Sullivan	Principal Chief	Geoffrey Standing Bear	918.287.5555	gstandingbear@osagenation-nsn.gov	PO Box 779 Pawhuska, OK 74056
Prairie Band Potawatomi Nation	Ogle	Chairperson	Joseph Rupnick	785.966.4009	josephrupnick@pbpnation.org	16281 Q Road Mayetta, KS 66509
Prairie Band Potawatomi Nation	Ogle	THPO	Raphael Wahwassuck	785.966.4009	raphaelwahwassuck@pbpnation.org	16282 Q Road Mayetta, KS 66509
Prairie Island Indian Community in the State of Minnesota	Howard	President	Johnny Johnson	651.385.2554	Sbartell@piic.org	5636 Sturgeon Lake Road Welch, MN 55089
Prairie Island Indian Community in	Howard	THPO	Noah White	651.385.4175	noah.white@piic.org	5636 Sturgeon Lake Road Welch, MN 55089

Affiliation	County	Role	Name	Phone Number	Email	Address
the State of Minnesota						
Sac & Fox Nation of Missouri in Kansas and Nebraska	Appanoose, Clinton, Louisa, Jackson, Wappello, Washington	Chairperson	Tiauna Carnes	785.742.7471	tiauna.carnes@sacandfoxks.com	305 N. Main St. Reserve, KS 66434
Sac & Fox Nation, Oklahoma	Appanoose, Clinton, Louisa, Jackson, Wappello, Washington	Principal Chief	Justin Wood	918.968.3526	chief@sacandfoxnation-nsn.gov	920883 South Highway 99 Building A Stroud, OK 74079
Sac & Fox Nation, Oklahoma	Appanoose, Clinton, Louisa, Jackson, Wappello, Washington	THPO	Sandra Massey	918.968.3526	smassey@sacandfoxnation-nsn.gov	920883 South Highway 99 Building A Stroud, OK 74079
Sac & Fox Tribe of the Mississippi in Iowa	Appanoose, Clinton, Louisa, Jackson, Wappello, Washington	Chairwoman	Vern Jefferson	641.484.5424	adminast.council@meskwaki-nsn.gov	349 Meskwaki Rd. Tama, IA 52339
Santee Sioux Nation, Nebraska	Howard	Chairperson	Roger Trudell	402.857.2772	rtrudell@santeedakota.org	108 Spirit Lake Ave. W Niobrara, NE 68760
Santee Sioux Nation, Nebraska	Howard	THPO	Misty Frazier	402.857.3568	ssn.thpo@gmail.com	425 Frazier Ave. N. Suite 2 Niobrara, NE 68760
Seneca-Cayuga Nation	Jasper, McDonald	THPO	William Tarrant	918.787.5452 ext. 344	wtarrant@sctribe.com	PO Box 453220 Grove, OK 74345
Seneca-Cayuga Nation	Jasper, McDonald	Chief	William Fisher	918.787.5452	wfisher@sctribe.com	PO Box 453220 Grove, OK 74345-3220
Sisseton-Wahpeton Oyate of the Lake Traverse	Howard	Interim Chairperson	Verlyn Beaudreau	605.698.3911	chairman@swo-nsn.gov	PO Box 509 Agency Village, SD 57262-0509

Monitoring and Discovery Plan for the Treatment of Cultural Resources Encountered During Construction
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Affiliation	County	Role	Name	Phone Number	Email	Address
Reservation, South Dakota						
Sisseton- Wahpeton Oyate of the Lake Traverse Reservation, South Dakota	Howard	THPO	Dianne Desrosiers	605.698.3584	dianned@swo-nsn.gov	P.O. Box 907 Sisseton, SD 57262-0509
Spirit Lake Tribe, North Dakota	Howard	Chairwoman	Myra Pearson	701.766.4221	slt-adminsec@spiritlakenation.com	PO Box 359 Fort Totten, ND 58335-0359
Spirit Lake Tribe, North Dakota	Howard	Interim Director THPO	Susie Fox	701.766.4031	sfox@gondtc.com	PO Box 359 Fort Totten, ND 58335-0360
Upper Sioux Community, Minnesota	Howard	THPO	Samantha Odegard	320.564.6334	samanthao@uppersiouxcommunity- nsn.gov	PO Box 147 Granite Falls, MN 56241-0147
Upper Sioux Community, Minnesota	Howard	Chairman	Kevin Jensvold	320.564.6372	kevinj@uppersiouxcommunity- nsn.gov	PO Box 147 Granite Falls, MN 56241-0148
Winnebago Tribe of Nebraska	Ogle	Chairperson	Coly Brown	402.878.2272	coly.brown@winnebagoTribe.com	PO Box 687 Winnebago, NE 68071- 0687
Winnebago Tribe of Nebraska	Ogle	THPO	Sunshine Thomas-Bear	402.922.2631	sunshine.bear@winnebagoTribe.com	PO Box 687 Winnebago, NE 68071- 0688

Appendix B

Training Materials

Appendix C

Daily Report Template

Daily Monitoring Report
Canadian Pacific Acquisition of Kansas City Southern Project

Monitor Name: _____ Arrival Time: _____ Departure Time: _____

GPS/Tablet: _____ Camera: _____ Photograph #s: _____

Name of Construction Company: _____

Name of Construction Crew Foreman: _____

Monitoring Location(s): _____

Actions Monitored: _____

Visitor Name(s): _____

If an isolated find (single artifact or fewer than 5 artifacts within a 10-meter radius) is encountered the archaeological monitor will halt work in the area long enough to ensure no other archaeological deposits are located within the vicinity. If 5 or more artifacts are encountered within a 10 meter radius, or an archaeological feature is encountered construction activities within a minimum of 300-foot buffer will be immediately stopped. The archaeological monitor will notify the PI, who is responsible for notifying HDR of the find. HDR will then contact CP and the OEA will be notified immediately, and no later than 24 hours. The discovery will be secured by the archaeological monitor using standard construction fencing until it can be evaluated by the OEA. After notification is acknowledged and the site is secured, construction activities may continue in other areas of the Project at a minimum of 100 feet from the discovery. The eligibility determination will be made within 48 hours of discovery. If personnel availability does not allow the determination to be made within that timeframe, the OEA will establish a deadline for making the determination no more than 1 week after discovery and the OEA will follow up the verbal notification with an email notification within 24 hours to the Construction Contractor and other appropriate parties.

Cultural Resources Present: Yes / No.

If Yes, describe discovery, steps taken to protect discovery, and who was notified (name, agency, time, and notes): _____

Daily Narrative/Additional Notes (e.g., weather, setting, vegetation/bare ground visibility, sediment/deposition, existing impacts):

Safety or Noncompliance Issues: Yes / No. If Yes, describe: _____

Use continuation sheets as needed to capture additional notes and sketches.

Continuation Sheet

Monitor Name: _____

[illegible]



March 2023 Archaeology ► Orientation

Canadian Pacific Acquisition of Kansas City Southern
Project

Agenda

Laws and penalties

Examples of cultural
resources

Cultural Discoveries

Contact information



Cultural Monitoring Requirements

- Monitoring is being conducted in accordance with the mitigation requirements as outlined in Section 4.10.2 of the Final Environmental Impact Statement (FEIS).

Cultural Resource Laws (MN, IA, IL, MO)

Federal

- ▶ Antiquities Act of 1906
- ▶ National Historic Preservation Act of 1966
- ▶ Archaeological and Historic Preservation Act of 1974
- ▶ Archaeological Resources Protection Act of 1979, amended 1988
- ▶ Native American Graves Protection and Repatriation Act (NAGPRA) of 1990

State

- ▶ Minnesota Environmental Rights Act
- ▶ Minnesota Private Cemeteries Act
- ▶ Iowa Code, Chapter 716.5
- ▶ Iowa Cemetery Act
- ▶ The (Illinois) Archaeological and Paleontological Resources Protection Act
- ▶ Missouri Unmarked Human Burial Statute

Penalties

- ▶ Serious Misdemeanor, Potential Jail Time, Fines, Civil Penalties

Cultural Resource Laws (LA, AR, OK)

Federal

- ▶ Antiquities Act of 1906
- ▶ National Historic Preservation Act of 1966
- ▶ Archaeological and Historic Preservation Act of 1974
- ▶ Archaeological Resources Protection Act of 1979, amended 1988
- ▶ Native American Graves Protection and Repatriation Act (NAGPRA) of 1990

State

- ▶ Title 13, Chapter 6 of the Arkansas Code
- ▶ 53 OK Stat § 53-361 (2014)
- ▶ 21 OK Stat § 21-1168.4 (2019)
- ▶ Louisiana Unmarked Human Burial Sites Preservation Act

Penalties

- ▶ Serious Misdemeanor, Potential Jail Time, Fines, Civil Penalties

Cultural Resources - Features



Rock Alignment



Hearth Exposed in Cutbank



Stone Cairn

Features are parts of archaeological sites that can't be picked up and moved, like building foundations or fire pits

- ▶ Look for:
 - ▶ Rows or clusters of stones
 - ▶ Dark stains in the soil
 - ▶ Piles of rocks

Stone Artifacts



Source: NPS

Historic Artifacts



Bone Artifacts



Source: NPS

Ceramic Artifacts



Source: Herb Roe

Cultural Resource Types

Cultural Discoveries

Discovery by Construction Personnel

- ▶ “Any personnel working on the Project can make an unanticipated discovery. An unanticipated discovery can consist of either human remains (i.e., unmarked burial) or other cultural material (such as a subsurface deposit of debitage, semi-subterranean house pits, etc.).”
- ▶ All construction activities within 300 feet immediately stop.
- ▶ Notify Construction Contractor and Cultural Monitor.
- ▶ After Cultural Monitor secures area, work can continue within 100 feet.
- ▶ Construction Contractor/Cultural Monitor will contact HDR, who will contact OEA.



Cultural Discoveries

Discovery by Cultural Monitor:

- ▶ Halt/redirect construction around discovery.
- ▶ Record/Evaluate material and submit information to HDR who will coordinate with OEA.
- ▶ Construction Contractor/Cultural Monitor will contact HDR, who will contact OEA.
- ▶ Work may resume after excavation, evaluation, data collection, and notification with relevant agencies and OEA has given a Notice to Proceed.



Human Remains or burial-related items

In all cases (federal, state, private surface):

- ▶ Human remains and Native American Graves Protection and Repatriation Act (NAGPRA)/burial-related items are not to be disturbed upon exposure
- ▶ Construction will stop within 300 feet of known or suspected human remains or NAGPRA/burial-related items
- ▶ Notify Construction Contractor and Cultural Monitor immediately.
- ▶ Any human remains will be treated with dignity and respect.

Human Remains or burial-related Items

Cultural Monitor determines if human remains are present and notifies Construction Contractor

- ▶ For human remains:
 - ▶ Construction Contractor/Cultural Monitor immediately notifies CP, HDR, appropriate law enforcement agency, local coroner's office, OEA, and SHPO
 - ▶ For NAGPRA/burial-related items with no human remains- OEA will determine further treatment as appropriate
- ▶ Treatment plan developed through consultation with OEA, SHPO, tribes.
- ▶ Following treatment, OEA authorizes construction to resume.

General Communication

- ▶ Construction Contractor is main point of contact for Cultural Monitor.
- ▶ Construction Contractor notifies Cultural Monitor of construction locations.
- ▶ Cultural Monitor may stop work to evaluate discoveries in the discovery area.
- ▶ Cultural Monitor will notify Construction Contractor and Principal Investigator of general discoveries.
- ▶ Principal Investigator/Construction Contractor will coordinate with HDR, who will contact OEA.
- ▶ In case of burials, Cultural Monitor will evaluate, Construction Contractor/Cultural Monitor will notify HDR, who will notify CP, OEA, and local authorities.

Contact info

- ▶ Principal Investigator(s)

- ▶ Name - Phone Number
- ▶ Name - Phone Number
- ▶ Name - Phone Number
- ▶ Name - Phone Number

- ▶ Cultural Monitors

- ▶ Name - Phone Number
- ▶ Name - Phone Number
- ▶ Name - Phone Number
- ▶ Name - Phone Number

QUESTIONS???

Thank You for your commitment to cultural
resources compliance!