



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

August 7, 2015

Ms. Ladonna Brown  
Tribal Historic Preservation Officer  
The Chickasaw Nation  
PO Box 1548  
Ada, OK 74821-1548

**SUBJECT: US NUCLEAR REGULATORY COMMISSION, CONTINUING  
PALEOLIQUEFACTION FIELD WORK ALONG SELECTED RIVER SEGMENTS  
IN ARAKNSAS AND MISSOURI**

Dear Ms. Brown:

The United States Nuclear Regulatory Commission (NRC) has performed the field work described in our National Historic Preservation Act (NHPA), Section 106 consultation letter sent to your office, dated February 15, 2013 (enclosed). The field work identified various paleoliquefaction features in Araknsas and Missouri for the purpose of assessing seismic hazards to commercial nuclear power plants. The NRC's contractor conducted this field work along various river segments in Araknsas and Missouri (please see Figure 1 below for the location of the work conducted previously) during September through December of 2013 and 2014.

The NRC plans to continue the field work described in its letter of February 15, 2013 in Araknsas and Missouri during the months of September through December 2015. Figures 2 and 3 show additional river segments in northern Araknsas and Missouri that may be the subject of the NRC's continuing field work. Due to the limited scope and minor disturbance of this field work, the NRC has determined that the expansion of the field work to these additional river segments will have no adverse effect on any historic properties or other cultural resources located along or in these river segments, assuming such properties or resources are present.

In the event that the NRC considers any particular site along any of the subject river segments to be a candidate site for a paleoliquefaction study, which may involve the excavation of a trench, the NRC will determine the area of potential effects and then initiate consultation with your office, the applicable State Historic Preservation Officer, and other interested consulting parties. The NRC considers such paleoliquefaction study, if pursued, to be a separate undertaking than the field work described in our letter of February 15, 2013.

L. Brown

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Please provide your comments on our determination of no adverse effect for the proposed field work at your earliest convenience. If you have any questions or require additional information, please contact Thomas Weaver by phone at (301) 415-2383 or by email at [Thomas.Weaver@nrc.gov](mailto:Thomas.Weaver@nrc.gov). All written correspondence should be sent to the NRC at the following address with attention to the Document Control Desk. We look forward to your feedback.

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Sincerely,

***/RA Kathryn M. Brock for/***

Brian E. Thomas, Director  
Division of Engineering  
Office of Nuclear Regulatory Research

Enclosure:

Letter from NRC to the Chickasaw Nation dated February 15, 2013

L. Brown

-2-

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Brian E. Thomas, Director  
Division of Engineering  
Office of Nuclear Regulatory Research

Enclosure:

Letter from NRC to the Chickasaw Nation dated February 15, 2013

cc: Dr. Martitia Tuttle  
M. Tuttle & Associates  
128 Tibbetts Lane  
Georgetown, ME 04548

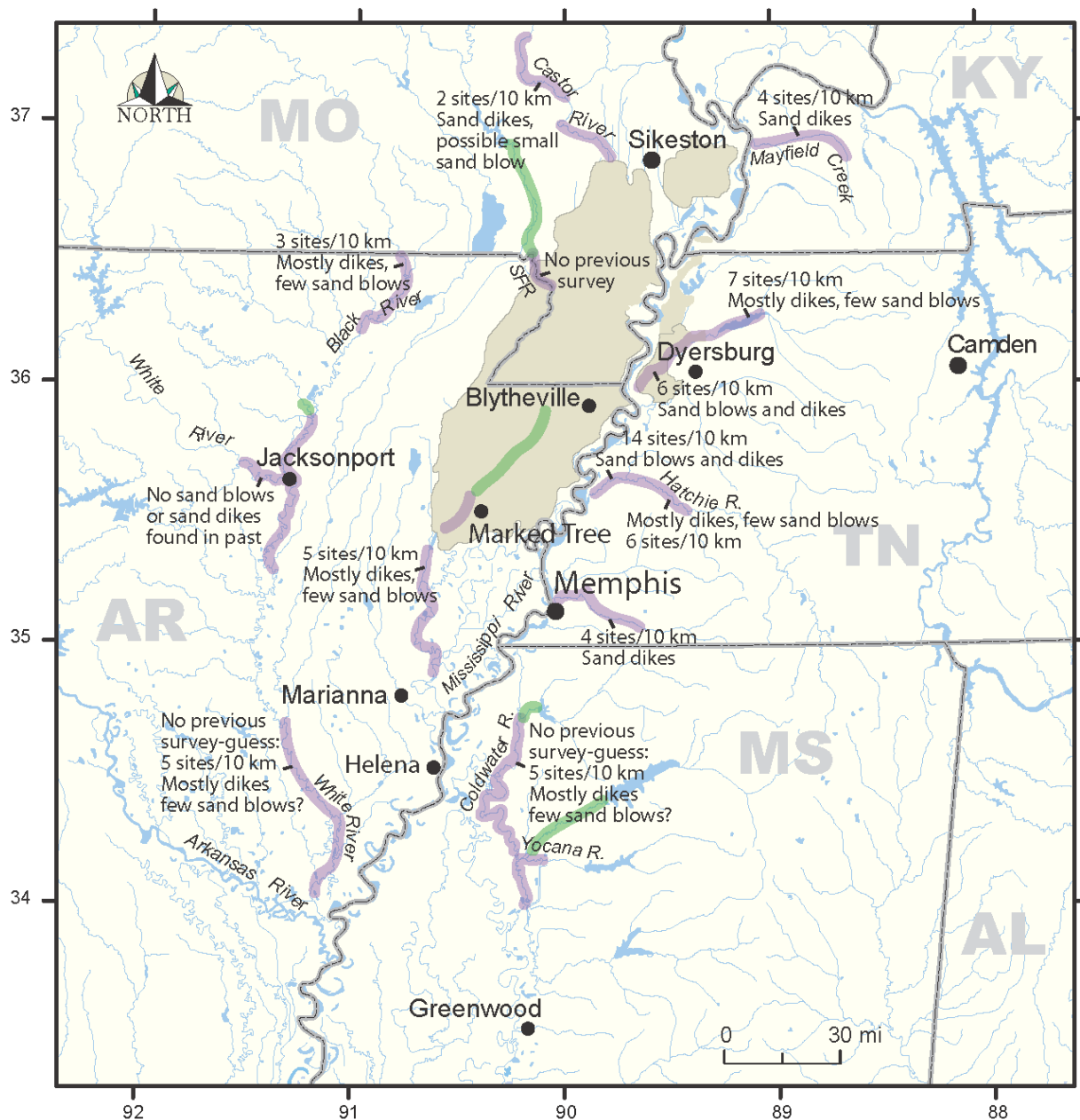
Dr. Thomas Weaver, P.E., NRC/RES/DE/SGSEB  
Mr. Andrew Pessin, Esq., NRC/OGC/GCLR/RMR  
Mr. Stuart Easson, NRC/NMSS/MSTR/FSTB

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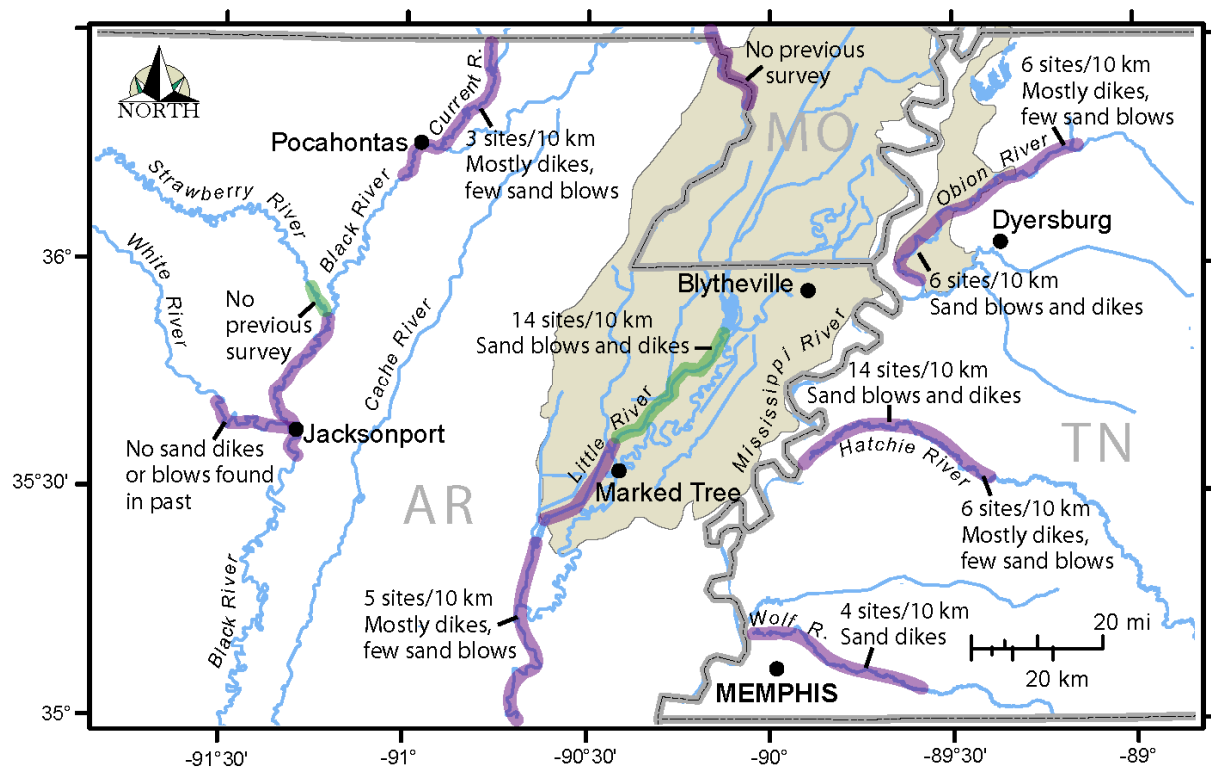
**RES No:**

OFFICE	RES/DE/SGSEB	RES/DE/SGSEB	OGC (via email)	D: RES/DE
NAME	JPB for T. Weaver	J. Burke	A. Pessin	K. Brock for B. Thomas
DATE	8/6/15	8/6/15	7/23/15	8/7/15

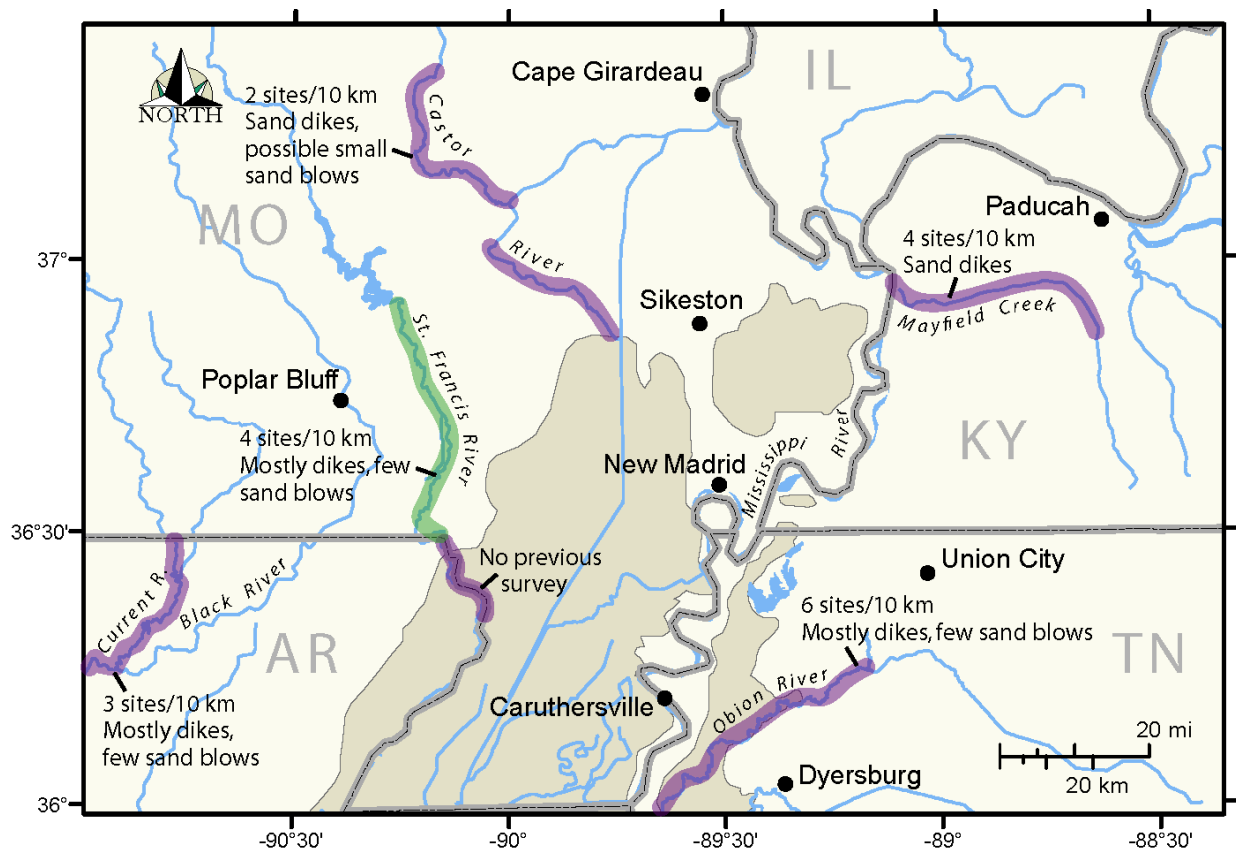
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**Figure 1 Map of paleoliquefaction study area in the Central U.S. River segments identified in the NRC's letter of February 15, 2013 are delineated in purple. The NRC has conducted, and may continue, field work in these purple delineated river segments. Additional river segments where the NRC proposes to expand its field work are delineated in green.**



**Figure 2 Map of paleoliquefaction study area in northern Arkansas. River segments identified in the NRC's letter of February 15, 2013 are delineated in purple. The NRC has conducted, and may continue, field work in these purple delineated river segments. Additional river segments where the NRC proposes to expand its field work are delineated in green.**



**Figure 3 Map of paleoliquefaction study area in Missouri. River segments identified in the NRC's letter of February 15, 2013 are delineated in purple. The NRC has conducted, and may continue, field work in these purple delineated river segments. Additional river segments where the NRC proposes to expand its field work are delineated in green.**