



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

August 7, 2015

Dr. Andrea Hunter
Tribal Historic Preservation Office
The Osage Nation
100 West Main Street, Suite 211
Pawhuska, OK 74056

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

Dear Dr. Hunter:

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 August 23, 2012 (enclosed). The field work identified various paleoliquefaction features in Arkansas, Mississippi 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 Arkansas 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 August 23, 2012 in Arkansas and Missouri during the months of September through December 2015. Figures 2 and 3 show additional river segments in northern Arkansas 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 tribal 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 appropriate State Historic Preservation Officer(s), 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 August 23, 2012 letter. The NRC is currently planning on conducting a paleoliquefaction study at two sites in Arkansas. This study will involve the excavation of both Arkansas sites. This proposed excavation work was described in NRC's July 29, 2014 letter to your office. A site evaluation report for this excavation work was enclosed with the July 29, 2014 letter. We believe this site evaluation report is responsive to your office's

February 21, 2012 request for a Phase I cultural resources survey on this excavation work. By letter dated September 3, 2014, the Arkansas SHPO stated its support for this excavation work (the Arkansas SHPO letter indicates that Ms. Rebecca Brave of the Osage Nation received a copy of that letter).

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 on either the proposed field work described in this letter or the NRC's proposed excavation work at the two Arkansas sites (as described in our letter of July 29, 2014 and its enclosed site evaluation report), or require additional information, please contact Thomas Weaver by phone at (301) 415-2383 or by email at 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 Osage Nation dated August 23, 2012

A. Hunter

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cc: Mr. Eric Gillilad
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Mr. Andrew Pessin, Esq., NRC/OGC/GCLR/RMR
Mr. Stuart Easson, NRC/NMSS/MSTR/FSTB

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RES No:

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NAME	JPB for T. Weaver	J. Burke	A. Pessin	KMB for B. Thomas
DATE	08/06/15	08/06/15	7/23/15	08/07/15

OFFICIAL RECORD COPY

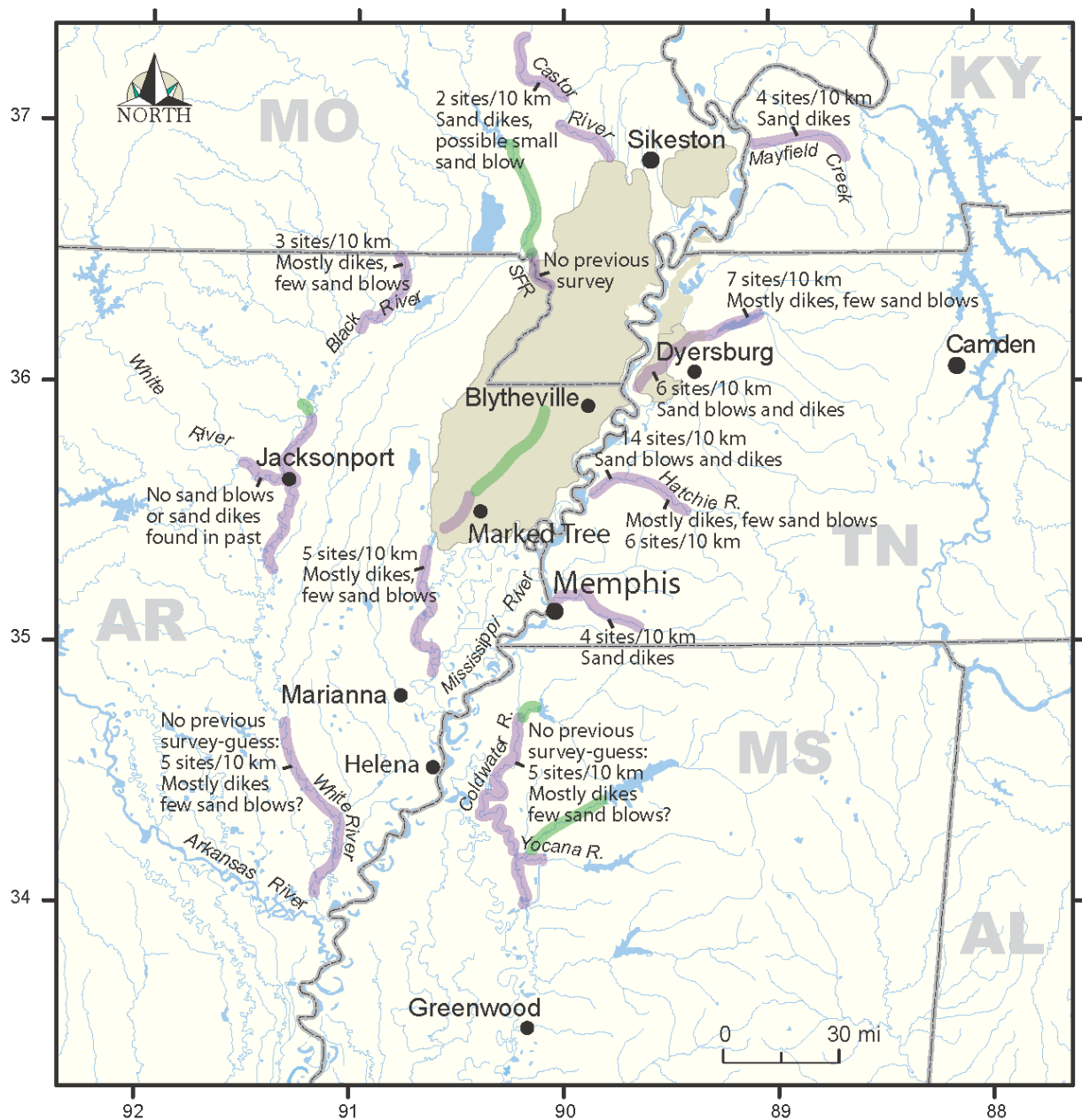


Figure 1 Map of paleoliquefaction study area in the Central U.S. River segments identified in the NRC's letter of [date] are delineated in purple. The NRC has conducted, and may continue, field work in these purple delineated river segments. Additional river segments where the NRC proposes to expand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

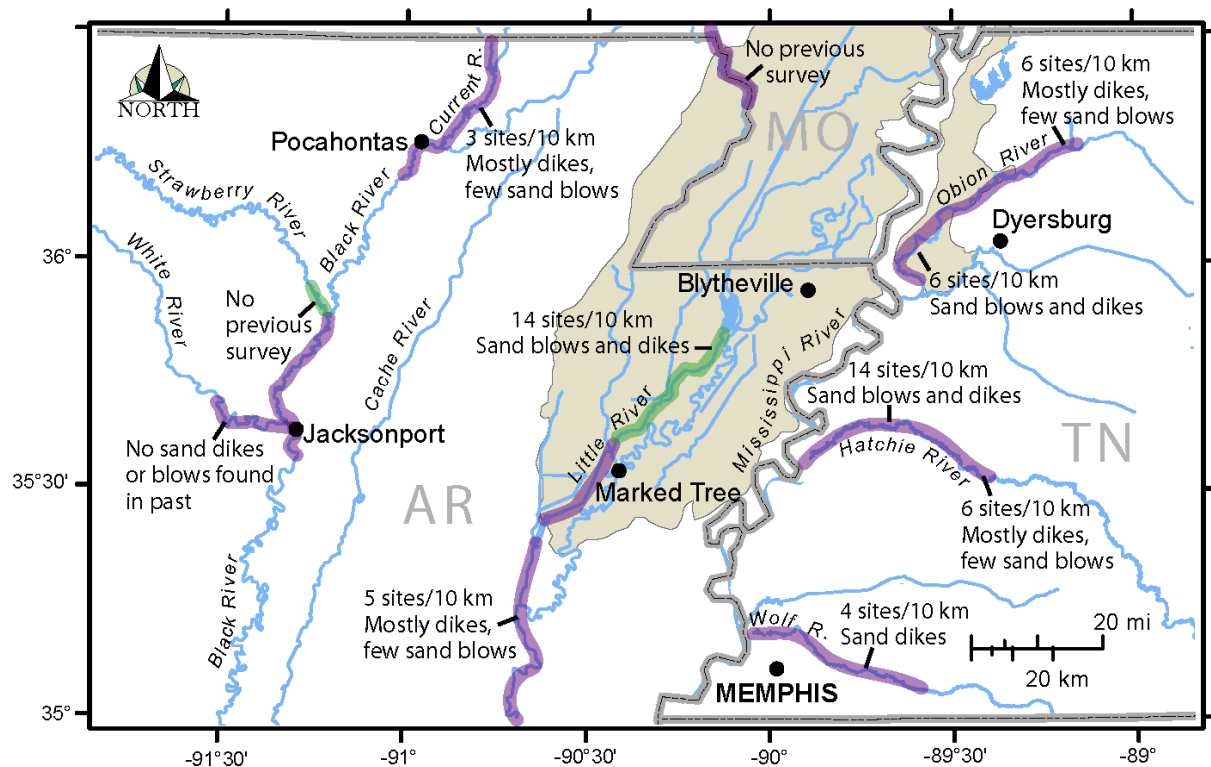


Figure 2 Map of paleoliquefaction study area in Northern Arkansas. River segments identified in the NRC's letter of August 23, 2012 are delineated in purple. The NRC has conducted, and may continue, field work in these purple delineated river segments. Additional river segments where the NRC proposes 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 August 23, 2012 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.