Handshake Partnership Program Report - FY 2014 Recipients

1. Name of Corps Project/Lake: Kaw Lake

2. District / Division of Corps Project/Lake: <u>Tulsa District</u>, Southwestern Division

3. Handshake Project Name: Deer Creek NHL Site Archaeological Testing

4. What has been accomplished? <u>Please provide photographs; before, during, and after!:</u> <u>PLEASE SEE ATTACHED SUMMARY REPORTS FOR DETAILS AND PHOTOS</u>

	Total				
Handshake Program Funding Amount	\$25,000				
Local Corps Office Funds (total expended on labor, materials, contracts, etc.)?	\$57,760.00				
Partner's Contributions (total value of funds, goods, services, volunteer hours, etc.)					
Partners Name	Total Value of Contributions				
1 University of Oklahoma/Oklahoma Archeological Survey	\$141,655.70				
2 Oklahoma Anthropological Society	\$45,796.60				
3 Oklahoma State University	\$30,863.0				
4 Wichita and Affiliated Tribes of Oklahoma	\$6,258.44				
5	\$				
6	\$				

5. Handshake Program Recipient Feedback

Please take this opportunity to provide feedback on all aspects of the Handshake Program and the Challenge Partnership Agreement authority. Your productive comments are important to the ongoing improvement of the program. Make sure to let us know how the Handshake funds have benefited your efforts to initiate and/or strengthen your partnerships.

A. Comments About Handshake Program: The Tulsa District was grateful to be selected under the Handshake program. Although several delays have caused the project to be extended into multiple years, we believe that the benefits to the government have far exceeded the cost. Not only has this program allowed significant archaeological work to be accomplished at a National Historic Landmark - work that will add to the Nation's understanding of this site as well as its ongoing management and protection - it has renewed and energized partnerships between not only the Tulsa District and the Universities and Archaeological society in the State, but also between the District and the Wichita and Affiliated Tribes of Oklahoma. Furthermore and of special significance, the Wichita Tribe was able to bring several of their youth to the archaeological excavations, allowing them to participate in the fieldwork and become involved in the preservation and interpretation of their own histories.

B. Comments About Challenge Partnership Agreement: <u>The benefits to the governmnet</u> through the contributions of the partners under this agreement were significant. Agreements such as this should continue to be executed between USACE Districts and partners that have the interest and volunteer abilities to undertake the research and preservation activities that may not be able to be accomplished or initiated by a District alone.

C. Recommendations: <u>We recommend the Program continue to award funding to Cultural</u> <u>Resources project in order to further support USACE stewardship of these resources as well</u> <u>as the building of partnerships throughout the Nation.</u>

6. Handshake Summary:

Please also include a separate one-page newspaper type article describing the project and the benefit to the Corps of Engineers and to the public as a result of this partnership project. Examples can be found on the gateway under <u>Handshake Success Stories</u>.

	Local Corps Office	Handshake Funds	OAS/OU	Wichita Tribe	OK Anth Soc	OSU
Salaries	\$51,760.00	\$0.00	\$56 <i>,</i> 488.00	\$0.00	\$0.00	\$18,000.00
Travel	\$1,000.00	\$0.00	\$8,000.00	\$320.00	\$0.00	\$2,000.00
Materials and Supplies	\$0.00	\$25,000.00	\$2,000.00	\$0.00	\$0.00	\$0.00
Equipment Use	\$0.00	\$0.00	\$13,500.00	\$0.00	\$5,000.00	\$0.00
Funds Contributed	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Personal Property	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Volunteer	\$0.00	\$0.00	\$61,677.70	\$5,938.44	\$40,796.60	\$10,863.00
In-Kind Services	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Other (explain below)	\$5,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total	\$57,760.00	\$25 <i>,</i> 000.00	\$141,665.70	\$6,258.44	\$45,796.60	\$30,863.00
Share of Total Cost	18.79%	8.13%	46.09%	2.04%	14.90%	10.04%

\$307,343.74 100.00%

BEFORE AND AFTER PHOTOS – DEER CREEK SITE

Winter View of Deer Creek Site Before Clearing





Clearing of Deer Creek Site Using a Tree-Mulching Attachment on a Rubber-Tread Skid Steer, Monitored by an Archaeologist





Spring View of Deer Creek Site After Clearing

Later Summer View of Deer Creek Site After Clearing and Before Mowing (Waiting on Large Mulch to Decompose



View of Deer Creek Site During Fieldwork



Handshake Partnership Program Project: Archaeological Investigations at the Deer Creek National Historic Landmark, Tulsa District, U.S. Army Corps of Engineers

In 2014, The Tulsa District was awarded funding under the Handshake Partnership Program in support of archaeological investigations at the Deer Creek National Historic Landmark located on Tulsa District Land at Kaw Lake in Kay County, Oklahoma. The Deer Creek Site, which is also listed on the National Register of Historic Places, is one of the most significant archeological sites in Oklahoma. It has long been recognized as one of only a few known Wichita fortified villages occupied by the

Wichita in the first half of the 18th century. The village was visited by French traders who



had extended their activities up the Arkansas River into Oklahoma. The Wichita obtained significant amounts of European trade goods including guns and ammunition, metal tools such as axes, hoes and knives, decorative items such as glass beads and colorful fabrics, and many other items due to these interactions. Despite this being one of the earliest known villages mentioned in historic records for Oklahoma, much remains unknown about Wichita lifeways during this time of extensive culture contact.

One of the initial goals of the project was to evaluate the current state of preservation and the of cultural context features and deposits at the Deer Creek site, especially to determine if the tree growth on the site was impacting site deposits. In order to accomplish the work, Tulsa District partnered with the Oklahoma



Excavating at the Deer Creek Site

Archaeological Survey at the University of Oklahoma, the Oklahoma Anthropological Society, Oklahoma State University, and the Wichita and Affiliated Tribes of Oklahoma who all provided extensive time and resources to undertake the work. The project was designed as a multi-phased effort to identify subsurface features at the site and then to assess the degree to which the site may have been impacted by natural processes and land management activities.

Thanks to the impetus of the Handshake Program, work on this project began in 2014 with the careful removal of trees from a portion of the site and nearsurface geophysical survey (gradiometer and electrical resistivity) of cleared areas to look for potential site features that could be the focus of excavation. Work continued in 2016 with the evaluation of the geophysical survey findings and test excavations, and then in 2017, an archaeological field school was held at the site to continue excavations. Some of the more fascinating discoveries found so far include a probable subterranean room within the fortification ditch, storage and trash pits, Wichita-made ceramics, clay pipe fragments, and stone projectile points, metal knife blades and other Europeanmanufactured items, the articulated lower front limb of a horse, and paleofeces likely of human or dog origin. The articulated horse bone represents some (if not the)

earliest direct evidence that Wichita villagers kept horses, and the paleofeces are undergoing DNA and other analyses to determine it is human or dog, what the sex of



Articulated Horse Bone in situ

the individual was, something on their diet, and possibly even what diseases or parasites they carried.

Two seasons of excavation at the Deer Creek site have barely scratched the surface of what this site can tell us about Wichita tribal history. Analysis and reporting of results will continue and plans to do more work at the site are in progress. In addition, Tulsa District management and preservation of the site is now better informed by the results of the excavations, which did show impacts to site integrity from the tree growth on the site. Based on these results, the Tulsa District is evaluating the management practices at the site and will continue to make changes beneficial to the site's long term preservation and protection. Ultimately, participation in the Handshake Program not only allowed significant archaeological work to be accomplished at a National Historic Landmark work that will add to the Nation's understanding of this site as well as its ongoing management and protection - it has renewed and energized partnerships between the Tulsa District, the archaeological community in Oklahoma, and the Wichita and Affiliated Tribes of Oklahoma.

Deer Creek Challenge Partnership Project – Tulsa District, USACE

2017 Work Summary Provided by Dr. Sarah Trabert, University of Oklahoma



Overview of Deer Creek Site during 2017 Field Season

Work continued at 34KA3 in June 2017. The University of Oklahoma and Oklahoma State University held an Archaeological Field School at the site to complete work outlined in the current MOA. Dr. Sarah Trabert and Dr. Stephen Perkins led the project assisted by two OU graduate student assistants (Paige Ford, MA and Tuner Hunt). There were 14 undergraduate students working at the site (9 from OU and 5 from OSU). We reopened four units that were not finished in 2016 and opened 10 new units at the site to explore additional

subsurface features identified during previous geophysical surveys. Students spent four weeks excavating the site and another four weeks in July processing the artifacts at the Great Plains Archaeology lab on OU's campus. Work continues on the collections and they have not been fully cataloged or analyzed. We anticipate the analysis continuing until at least 2019.

Some highlights of the 2017 work include discovering a bell-shaped storage/trash pit that was approximately 1.75 meters deep and probably 2 meters wide (portions of the pit remain unexcavated), a second trash pit under one of the midden mounds, and a series of shallow burned pits that likely represent a processing/activity area. In these units we recovered a complete metal knife blade (likely of French manufacture), an incomplete French folding knife blade, glass beads, two lead musket balls, a large quantity of bison, deer, and turtle bones, Wichita-made ceramics, clay pipe fragments, stone projectile points, and a large quantity of stone flakes.



Volunteers from OU, OSU, and OAS Working at Deer Creek

Two particularly important finds were the articulated lower front limb of a horse, and paleofeces likely of human or dog origin. The articulated horse bone represents some (if not the) earliest direct evidence that Wichita villagers kept horses. Tools made from horse bones have been found at Deer Creek and other contemporary Wichita villages but it is possible these bones were traded from elsewhere. An articulated horse leg indicates at least one horse was present at Deer Creek. It is not currently known if the paleofeces is of human or dog origin. However, Trabert is working with the Laboratories of Molecular Anthropology and Microbiome Research at OU to draft a proposal for further analysis. There

is a high probability of recovering DNA from the feces and which would tell us if it is human or dog, what the sex of the individual was, something on their diet, and possibly even what diseases or parasites they carried.

Two seasons of excavation at Deer Creek have barely scratched the surface of what this site can tell us about Wichita tribal history, their connection with French traders, and how Native peoples were adapting to changing social, economic, political, and demographic changes following European contact. Work will continue with the 2017 Deer Creek materials and a final report of all activities and analyses will be provided to the Tulsa District office.





Paleofeces Recovered in 2017



GTA Paige Ford excavating burned bison bone