Appendix H-5

Public, Agency, and Tribal Coordination
Keystone Dam Safety Modification Study

March 2024

1 Introduction

In accordance with 40 CFR 1501.7, 1503, and 1506.6, the USACE initiated public involvement and agency scoping activities to solicit input on the Keystone Dam Safety Modification Study, identify appropriate measures, and identify significant issues related to the project. The USACE began its public involvement process with a public scoping meeting to provide an avenue for public and agency stakeholders to ask questions and provide comments. This public scoping meeting was held on February 12, 2020 at the Case Community Center, 1050 W Wekiwa Road, Sand Springs, Oklahoma 74063. The USACE, Tulsa District, placed advertisements on the USACE webpage and social media prior to the public scoping meeting. A summary of categorized public comments and USACE responses can be found in Table 1.

Table 1. Comments Received during the First Public Comment Period and the USACE Response

Number of Related Comments	Comment Description	USACE Response
Individual Public Comments		
Two (2)	Interested in helping and attending any future meetings.	Noted. USACE appreciates public involvement and recommends the attendance of future meetings.
One (1)	Are there digital files in any format of the presentation charts, maps, or posters available for public use for those unable to attend the public meeting?	Noted. When documents become available for public review, they are posted online at the Tulsa District webpage.
One (1)	The presentation graphics show that the COE has completed a study(s) which identifies probable risks/impacts from overtopping and abutment failure, however there are no risks identified upstream or downstream of Keystone Dam.	Noted. The Dam Safety Modification Study (DSMS) has focused on identified risks and evaluated solutions to Keystone Dam and surrounding area.
One (1)	The presentation graphics seem to rank overtopping as more important than abutment failure (i.e. primary-secondary) without explanation.	Noted. Based on a USACE risk evaluation (Issue Evaluation Study) the overtopping is considered to have more risk than the abutment failure. Additional detail provided in Section 1 of the Draft Environmental Assessment.
One (1)	The presentation graphics don't define overtopping, and in the context that the discharge of record has been only one-third the maximum design discharge capacity (i.e. overtopping event means a	Noted. A more detailed description of overtopping can be found in Section 1 of the Draft Environmental Assessment.

Number of Related Comments	Comment Description	USACE Response
	catastrophic embankment destruction and downstream flow greater than or equal to 939,000 cfs – over three times that of 1986).	
One (1)	The presentation graphics hint at but do not define the probability of an overtopping event nor provide estimated parameters needed to effect overtopping.	Noted. A more detailed description of overtopping can be found in Section 1 of the Draft Environmental Assessment.
One (1)	The use of “3.72 inches of runoff” to characterize the 1986 releases to downstream areas in the Tulsa Metro Area is a huge understatement. Recommend using layman terms rather than “Flood Release of Record.”	Concur. The use of inches of runoff within the Keystone Dam basin may not be the most appropriate description of downstream releases. The USACE will update any future public presentations to better describe project discharge in common terms.
One (1)	Recommend including instructions as to what public comments should address as the vague information in the presentation precludes informed comments from laymen readers.	Concur. The USACE will update any future public presentations to better describe public comment requests in common terms.
One (1)	Recommend giving the abutment flow problems highest funding priority as it is a longstanding issue and should be corrected as soon as possible. Higher pool levels would create proportional pressure increases and greater risk of	Noted. The USACE must evaluate a wide range of flood risk conditions and alternatives. All alternatives will be evaluated based on their Effectiveness, Constructability, Cost Efficiency, Risk Transfer, Non-Breach Consequences, Social Effects, and Environmental Impacts. The risk associated with left abutment seepage risk was reduced by USACE in Fiscal Year 2021 through the implementation of a filter berm.

Number of Related Comments	Comment Description	USACE Response
	embankment failure at abutments, etc.	
One (1)	Warning systems and procedures should be improved as technology allows but is not an inherent remedy to any problems addressed in this study.	Concur. A wide array of measures and alternatives were evaluated during the DSMS; it is assumed downstream communities would utilize advanced technology, warning systems, and features during flood events.
One (1)	Requests mountain biking trails established at Keystone Wildlife Management Areas like those in Northwest Arkansas to improve health and tourism, as opposed to the current use as a hunting area. Hunters have previously shot adjacent landowners' pets and signs posted on private fence.	Noted. The USACE understands the importance of recreation facilities at Keystone Lake; however, this is a DSMS and recreation measures will not be considered at this time.
One (1)	Recommend an intake and discharge tunnel be designed into one of the monoliths of the spillway expansion so that a hydroelectric generator can be installed asynchronous to the primary service station to power the dam and powerhouse during times when the station is not generating enough through the main power units. Installation of low flow turbines would also improve water quality downstream without changing the present operational charter for the	Noted. The intent of the DSMS is to evaluate the best methods of risk reduction for Keystone Dam.

Number of Related Comments	Comment Description	USACE Response
	lake which does not include water quality	
One (1)	Recommend not only preserving more water volume but also increasing flow capacity as inflows will increase with climate change.	Noted. Raising Keystone Dam as well as constructing an additional spillway were considered.
Non-profit, Local, State, and Federal Agency/Organization Comments		
City of Sand Spring, Oklahoma	Raising the dam and extending the abutments sounds like a plausible idea for future planning of the structure – as abutments are changed is it possible that the eddies would change as well causing erosion or safety issues?	Noted. During the Design Phase, USACE will incorporate features into the design that will protect against potential adverse impacts.
	Would not support releases that would cause damage to the levees in Sand Springs or flooding in Sand Springs.	Noted. A constraint considered during the Keystone DSMS is to avoid transfer or creation of risk which does harm to the public; and avoid, minimize, and/or mitigate impacts to the human environment. Releases from Keystone Dam are dependent upon inflow into the reservoir and river conditions downstream of the reservoir.
	This project is the worst expenditure of public money that could be imagined. There are far more deserving things to spend resources on at this time. We are waiting on funds to put a low water dam in now that will far exceed anything this project will contribute. This project	Non-concur. The purpose of the DSMS is to identify whether there are unacceptable life safety risks associated with overtopping, instability of stilling basin slabs, and erosion downstream of the stilling basin of Keystone Dam.

Number of Related Comments	Comment Description	USACE Response
	could be kicked on down the road for a long time and use resources to answer needs of the present and future money would be better spent building on Arkansas than this concept.	
Southwestern Power Administration	Primarily concerned with the application of Section 1203 under Title XII of WRDA (1986), also known as the Dam Safety Act. Desires assurance that the join-use cost allocation assigned to the hydropower purpose, and thereby recovered by Southwest in its power rates to customers, will not be based on the total cost of the study. Section 1203 of the Dam Safety Act provides a reduced cost impact to the authorized project purposes when dam safety related work is necessary for public safety. Because the DSMS is the result of an updated Probable Maximum Flood, it is Southwestern's position that Section 1203 of the Dam Safety Act should be applied in this case.	Noted. The USACE will continue coordination with Southwestern Power Administration (SWPA) for the purposes of the cost share in relation to Section 1139 of PL 114-322 (WIIN Act), its associated 17 April 2019 Implementation Guidance (IG), and Section 1203(a) of the Water Resources Development Act of 1986 (WRDA1986) (33 U.S.C. §467n(a)).
Town of Mannford, Oklahoma	Adamantly opposed to any safety improvements to Keystone Dam that could potentially raise the level of the water that is retained by the dam. Aware that the reasoning used consider raising the level of the dam is supposed to only be used to	Noted. The USACE must evaluate a wide range of flood risk conditions and alternatives. All alternatives are evaluated based on their Effectiveness, Constructability, Cost Efficiency, Risk Transfer, Non-Breach Consequences, Social Effects, and Environmental Impacts. The dam raise and new spillway were considered.

Number of Related Comments	Comment Description	USACE Response
	protect the dam in the event of a mega-flood. Believe that adding additional discharge capacity would be the preferred method of preparing for such a mega-flood.	
	Current policies result in loss of recreational areas at times and can become costly to the Mannford community. Is aware that these risks in the development of recreational areas in flood prone areas are not the priority of USACE. However, past flood retention levels have required sand-bagging some of our community's school buildings.	Noted. The alternatives considered do not change the operation of the project and the flooding experienced to date. The intent of the DSMS is to address extreme floods that may overtop Keystone Dam.
	Increasing the level of Keystone Lake's flood control pool could cause future officials to change current policies resulting in millions of dollars in damages and the complete loss of all Mannford school facilities.	Noted. There will be no change to the conservation or top of flood pool in the alternatives considered.
	Raising the lake level could cause the potential flooding of the Town's sewage treatment facilities which are on the shores of Keystone Lake. This could result in undesirable consequences for anyone on Keystone Lake and downstream on the Arkansas River.	Noted. There will be no change to the conservation or top of flood pool in the alternatives considered.

ATTACHMENTS

- 2019 (2)
- 2018 (7)
- 2017 (6)
- 2016 (12)
- 2015 (47)
- 2014 (33)
- 2013 (24)
- 2012 (37)
- 2011 (93)

Dam Safety Modification Study

Published Feb. 12, 2019

PHOTO DETAILS / DOWNLOAD HI-

The Tulsa District, U.S. Army Corps of Engineers is hosting a public workshop for the Keystone Dam Safety Modificati look at options for protecting the structure in a statistically remote flood event.

PRINT | E-MAIL

TULSA, Oklal. --TULSA – The U.S. Army Corps of Engineers, Tulsa District, invites the public to an informational workshop related to the Keystone Dam Safety Modification Study at the Case Community Center in Sand Springs, Oklahoma, Feb. 12 from 5 – 8 p.m.

The Case Community Center is located at:

1050 W Wekiwa Road,

Sand Springs, OK 74063-6163

Although no formal presentation will take place representatives will be available to answer general questions about the study.

The DSMS will develop and analyze alternatives, including the 'No Action Alternative', to reduce the risk associated with overtopping and internal erosion of the embankment in the event of a statistically remote flood event.

The public may submit written comments or questions related to various issues via an available comment box, electronic mail or U.S. Mail.

Submit comments to Keystone-DSMS@usace.army.mil or via U.S. Mail at:

Brandon Wadlington, Biologist

U.S. Army Corps of Engineers

P.O. Box 17300

Fort Worth, TX 76102-0300

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

December 19, 2018

SUBJECT: Keystone Dam Safety Modification Study Initiation
Location: Sections 4 and 9 in T19N R10E Tulsa County, Oklahoma.

Bill John Baker
Principal Chief
Cherokee Nation of Oklahoma
PO Box 948
Tahlequah, Oklahoma 74465

Dear Chief Baker:

The Tulsa District, U.S. Army Corps of Engineers, has initiated the Keystone Dam Safety Modification Study (DSMS) located in Tulsa County, Oklahoma. The DSMS will develop alternatives to reduce the incremental dam safety risk associated with overtopping of the embankment to below Tolerable Risk Guidelines (TRG). Additionally, the DSMS aims to reduce the dam safety risk associated with internal erosion of embankment material further below TRG if deemed practicable and efficient, and reduce incremental life safety risk to below TRG.

The Keystone Dam in Tulsa County, Oklahoma was authorized by the Flood Control Act of 1950 and constructed by the U.S. Army Corps of Engineers in 1957. The structure stretches approximately one mile across the Arkansas River and is separated in six primary sections; left and right embankments, left and right non-overflow sections, two-unit power plant, and the gated spillway. Current authorized purposes for Keystone Dam include flood control, water supply, hydroelectric power, navigation, and fish and wildlife enhancement (see enclosure). In 2011, Keystone Dam was determined eligible for listing in the National Register of Historic Places (NRHP).

In 2015 and 2018, *Phase One and Phase Two Issue Evaluation Study* assessments by the U.S. Army Corps of Engineers determined there are intolerable risks associated with overtopping of Keystone Dam during extreme flood events which could lead to dam failure and life safety risk downstream. There are also dam safety risks associated with internal erosion of embankment material in the left and right abutments that could lead to failure of the dam and life safety risk downstream.

The Keystone Dam reduces flood risk for thousands of people, and thousands of residential, commercial, industrial, and public structures. If catastrophic failure occurs, there is potential for life loss, significant economic consequences due to property damage and disruption of residential, commercial and industrial activities. Under these conditions, serious environmental consequences could occur due to the potential

release of hazardous materials, which could cause adverse effects to many historic properties.

Pursuant to Section 102 of the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act, an Environmental Assessment will be prepared to describe risk reduction alternatives and the affected environment, as well as analyze potential impacts to the NRHP-eligible Keystone Dam and other cultural resources.

Our office would like to solicit any input you may have with respect to the Keystone Dam DSMS area in accordance with the National Historic Preservation Act and applicable laws and regulations to assist us as we progress through the NEPA process. We look forward to receiving your comments. Please contact Brandon Wadlington, Biologist, Environmental Compliance Branch, Regional Planning and Environmental Center, by mail at U.S. Army Corps of Engineers, 819 Taylor Street, PO Box 17300, Room 3A12, Fort Worth, TX 76102-0300, by telephone at (817) 886-1720, or email at Brandon.Wadlington@usace.army.mil with comments, questions, or the need for further information.

Sincerely,

Arnold (Rob) Newman
Director, Regional Planning and Environmental Center

Enclosure

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

December 19, 2018

SUBJECT: Keystone Dam Safety Modification Study Initiation
Location: Sections 4 and 9 in T19N R10E Tulsa County, Oklahoma.

Scott Thompson
Executive Director
Oklahoma Department of Environmental Quality
707 N Robinson
Oklahoma City, Oklahoma 73102

Dear Mr. Thompson:

The Tulsa District, U.S. Army Corps of Engineers, has initiated the Keystone Dam Safety Modification Study (DSMS) located in Tulsa County, Oklahoma. The DSMS will develop alternatives to reduce the incremental dam safety risk associated with overtopping of the embankment to below Tolerable Risk Guidelines (TRG). Additionally, the DSMS aims to reduce the dam safety risk associated with internal erosion of embankment material further below TRG if deemed practicable and efficient, and reduce incremental life safety risk to below TRG.

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Pursuant to Section 102 of the National Environmental Policy Act (NEPA) as implemented by the regulations promulgated by the Council on Environmental Quality (40 Code of Federal Regulations Parts 1500-1508 and USACE Engineering Regulation 200-2-2), an Environmental Assessment will be prepared to describe risk reduction alternatives and the affected environment, as well as analyze the potential direct, indirect, and cumulative environmental effects.

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2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

December 19, 2018

SUBJECT: Keystone Dam Safety Modification Study Initiation
Location: Sections 4 and 9 in T19N R10E Tulsa County, Oklahoma.

Gary O'Neill
State Conservationist
USDA - NRCS
100 USDA Suite 206
Stillwater, Oklahoma 74074-2655

Dear Mr. O'Neill:

The Tulsa District, U.S. Army Corps of Engineers, has initiated the Keystone Dam Safety Modification Study (DSMS) located in Tulsa County, Oklahoma. The DSMS will develop alternatives to reduce the incremental dam safety risk associated with overtopping of the embankment to below Tolerable Risk Guidelines (TRG). Additionally, the DSMS aims to reduce the dam safety risk associated with internal erosion of embankment material further below TRG if deemed practicable and efficient, and reduce incremental life safety risk to below TRG.

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2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

December 19, 2018

SUBJECT: Keystone Dam Safety Modification Study Initiation
Location: Sections 4 and 9 in T19N R10E Tulsa County, Oklahoma.

Dr. Kary L. Stackelbeck
State Archaeologist
Oklahoma Archeological Survey
University of Oklahoma
111 E. Chesapeake Street
Norman, Oklahoma 73019-5111

Dear Dr. Stackelbeck:

The Tulsa District, U.S. Army Corps of Engineers, has initiated the Keystone Dam Safety Modification Study (DSMS) located in Tulsa County, Oklahoma. The DSMS will develop alternatives to reduce the incremental dam safety risk associated with overtopping of the embankment to below Tolerable Risk Guidelines (TRG). Additionally, the DSMS aims to reduce the dam safety risk associated with internal erosion of embankment material further below TRG if deemed practicable and efficient, and reduce incremental life safety risk to below TRG.

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CORPS OF ENGINEERS, TULSA DISTRICT
2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

December 19, 2018

SUBJECT: Keystone Dam Safety Modification Study Initiation
Location: Sections 4 and 9 in T19N R10E Tulsa County, Oklahoma.

Corain Lowe-Zepeda
Tribal Historic Preservation Officer
Muscogee (Creek) Nation
PO Box 580
Okmulgee, Oklahoma 74447

Dear Ms. Lowe-Zepeda:

The Tulsa District, U.S. Army Corps of Engineers, has initiated the Keystone Dam Safety Modification Study (DSMS) located in Tulsa County, Oklahoma. The DSMS will develop alternatives to reduce the incremental dam safety risk associated with overtopping of the embankment to below Tolerable Risk Guidelines (TRG). Additionally, the DSMS aims to reduce the dam safety risk associated with internal erosion of embankment material further below TRG if deemed practicable and efficient, and reduce incremental life safety risk to below TRG.

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2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

December 19, 2018

SUBJECT: Keystone Dam Safety Modification Study Initiation
Location: Sections 4 and 9 in T19N R10E Tulsa County, Oklahoma.

Cheryl Seager
Director
Compliance Assurance and Enforcement Division
U.S. EPA Region 6
Fountain Place 12th Floor, Suite 1200
1445 Ross Avenue
Dallas, Texas 75202-2733

Dear Ms. Seager:

The Tulsa District, U.S. Army Corps of Engineers, has initiated the Keystone Dam Safety Modification Study (DSMS) located in Tulsa County, Oklahoma. The DSMS will develop alternatives to reduce the incremental dam safety risk associated with overtopping of the embankment to below Tolerable Risk Guidelines (TRG). Additionally, the DSMS aims to reduce the dam safety risk associated with internal erosion of embankment material further below TRG if deemed practicable and efficient, and reduce incremental life safety risk to below TRG.

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Arnold (Rob) Newman
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CORPS OF ENGINEERS, TULSA DISTRICT
2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

December 19, 2018

SUBJECT: Keystone Dam Safety Modification Study Initiation
Location: Sections 4 and 9 in T19N R10E Tulsa County, Oklahoma.

Geoffrey Standing Bear
Principal Chief
The Osage Nation
627 Grandview Avenue
Pawhuska, Oklahoma 74355

Dear Chief Standing Bear:

The Tulsa District, U.S. Army Corps of Engineers, has initiated the Keystone Dam Safety Modification Study (DSMS) located in Tulsa County, Oklahoma. The DSMS will develop alternatives to reduce the incremental dam safety risk associated with overtopping of the embankment to below Tolerable Risk Guidelines (TRG). Additionally, the DSMS aims to reduce the dam safety risk associated with internal erosion of embankment material further below TRG if deemed practicable and efficient, and reduce incremental life safety risk to below TRG.

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release of hazardous materials, which could cause adverse effects to many historic properties.

Pursuant to Section 102 of the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act, an Environmental Assessment will be prepared to describe risk reduction alternatives and the affected environment, as well as analyze potential impacts to the NRHP-eligible Keystone Dam and other cultural resources.

Our office would like to solicit any input you may have with respect to the Keystone Dam DSMS area in accordance with the National Historic Preservation Act and applicable laws and regulations to assist us as we progress through the NEPA process. We look forward to receiving your comments. Please contact Brandon Wadlington, Biologist, Environmental Compliance Branch, Regional Planning and Environmental Center, by mail at U.S. Army Corps of Engineers, 819 Taylor Street, PO Box 17300, Room 3A12, Fort Worth, TX 76102-0300, by telephone at (817) 886-1720, or email at Brandon.Wadlington@usace.army.mil with comments, questions, or the need for further information.

Sincerely,

Arnold (Rob) Newman
Director, Regional Planning and Environmental Center

Enclosure

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

December 19, 2018

SUBJECT: Keystone Dam Safety Modification Study Initiation
Location: Sections 4 and 9 in T19N R10E Tulsa County, Oklahoma.

Jonna Polk
Project Leader
Oklahoma Ecological Services Field Office
9014 East 21st Street
Tulsa, Oklahoma 74129-1428

Dear Ms. Polk:

The Tulsa District, U.S. Army Corps of Engineers, has initiated the Keystone Dam Safety Modification Study (DSMS) located in Tulsa County, Oklahoma. The DSMS will develop alternatives to reduce the incremental dam safety risk associated with overtopping of the embankment to below Tolerable Risk Guidelines (TRG). Additionally, the DSMS aims to reduce the dam safety risk associated with internal erosion of embankment material further below TRG if deemed practicable and efficient, and reduce incremental life safety risk to below TRG.

The Keystone Dam in Tulsa County, Oklahoma was authorized by the Flood Control Act of 1950 and constructed by the U.S. Army Corps of Engineers in 1957. The structure stretches approximately one mile across the Arkansas River and is separated in six primary sections; left and right embankments, left and right non-overflow sections, two-unit power plant, and the gated spillway. Current authorized purposes for Keystone Dam include flood control, water supply, hydroelectric power, navigation, and fish and wildlife enhancement (see enclosure).

In 2015 and 2018, *Phase One and Phase Two Issue Evaluation Study* assessments by the U.S. Army Corps of Engineers determined there are intolerable risks associated with overtopping of Keystone Dam during extreme flood events which could lead to dam failure and life safety risk downstream. There are also dam safety risks associated with internal erosion of embankment material in the left and right abutments that could lead to failure of the dam and life safety risk downstream.

The Keystone Dam reduces flood risk for thousands of people, and thousands of residential, commercial, industrial, and public structures. If catastrophic failure occurs, there is potential for life loss, significant economic consequences due to property damage and disruption of residential, commercial and industrial activities. Under these conditions, serious environmental consequences could occur due to the potential release of hazardous materials.

Pursuant to Section 102 of the National Environmental Policy Act (NEPA) as implemented by the regulations promulgated by the Council on Environmental Quality (40 Code of Federal Regulations Parts 1500-1508 and USACE Engineering Regulation 200-2-2), an Environmental Assessment will be prepared to describe risk reduction alternatives and the affected environment, as well as analyze the potential direct, indirect, and cumulative environmental effects.

Our office would like to solicit any input you may have with respect to the Keystone Dam DSMS area in accordance with the Fish and Wildlife Coordination Act and other applicable laws and regulations to assist us as we progress through the NEPA process. We look forward to receiving your comments. Please contact Brandon Wadlington, Biologist, Environmental Compliance Branch, Regional Planning and Environmental Center, by mail at U.S. Army Corps of Engineers, 819 Taylor Street, PO Box 17300, Room 3A12, Fort Worth, TX 76102-0300, by telephone at (817) 886-1720, or email at Brandon.Wadlington@usace.army.mil with comments, questions, or the need for further information.

Sincerely,

Arnold (Rob) Newman
Director, Regional Planning and Environmental Center

Enclosure

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

December 19, 2018

SUBJECT: Keystone Dam Safety Modification Study Initiation
Location: Sections 4 and 9 in T19N R10E Tulsa County, Oklahoma.

J.D. Strong
Director
Oklahoma Department of Wildlife Conservation
1801 N. Lincoln
Oklahoma City, Oklahoma 73105

Dear Mr. Strong:

The Tulsa District, U.S. Army Corps of Engineers, has initiated the Keystone Dam Safety Modification Study (DSMS) located in Tulsa County, Oklahoma. The DSMS will develop alternatives to reduce the incremental dam safety risk associated with overtopping of the embankment to below Tolerable Risk Guidelines (TRG). Additionally, the DSMS aims to reduce the dam safety risk associated with internal erosion of embankment material further below TRG if deemed practicable and efficient, and reduce incremental life safety risk to below TRG.

The Keystone Dam in Tulsa County, Oklahoma was authorized by the Flood Control Act of 1950 and constructed by the U.S. Army Corps of Engineers in 1957. The structure stretches approximately one mile across the Arkansas River and is separated in six primary sections; left and right embankments, left and right non-overflow sections, two-unit power plant, and the gated spillway. Current authorized purposes for Keystone Dam include flood control, water supply, hydroelectric power, navigation, and fish and wildlife enhancement (see enclosure).

In 2015 and 2018, *Phase One and Phase Two Issue Evaluation Study* assessments by the U.S. Army Corps of Engineers determined there are intolerable risks associated with overtopping of Keystone Dam during extreme flood events which could lead to dam failure and life safety risk downstream. There are also dam safety risks associated with internal erosion of embankment material in the left and right abutments that could lead to failure of the dam and life safety risk downstream.

The Keystone Dam reduces flood risk for thousands of people, and thousands of residential, commercial, industrial, and public structures. If catastrophic failure occurs, there is potential for life loss, significant economic consequences due to property damage and disruption of residential, commercial and industrial activities. Under these conditions, serious environmental consequences could occur due to the potential release of hazardous materials.

Pursuant to Section 102 of the National Environmental Policy Act (NEPA) as implemented by the regulations promulgated by the Council on Environmental Quality (40 Code of Federal Regulations Parts 1500-1508 and USACE Engineering Regulation 200-2-2), an Environmental Assessment will be prepared to describe risk reduction alternatives and the affected environment, as well as analyze the potential direct, indirect, and cumulative environmental effects.

Our office would like to solicit any input you may have with respect to the Keystone Dam DSMS area in accordance with the Fish and Wildlife Coordination Act and other applicable laws and regulations to assist us as we progress through the NEPA process. We look forward to receiving your comments. Please contact Brandon Wadlington, Biologist, Environmental Compliance Branch, Regional Planning and Environmental Center, by mail at U.S. Army Corps of Engineers, 819 Taylor Street, PO Box 17300, Room 3A12, Fort Worth, TX 76102-0300, by telephone at (817) 886-1720, or email at Brandon.Wadlington@usace.army.mil with comments, questions, or the need for further information.

Sincerely,

Arnold (Rob) Newman
Director, Regional Planning and Environmental
Center

Enclosure

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

December 19, 2018

SUBJECT: Keystone Dam Safety Modification Study Initiation
Location: Sections 4 and 9 in T19N R10E Tulsa County, Oklahoma.

Dr. Bob L. Blackburn
State Historic Preservation Officer
Oklahoma Historical Society
Oklahoma History Center
800 Nazih Zundi Drive
Oklahoma City, Oklahoma 73105-7917

Dear Dr. Blackburn:

The Tulsa District, U.S. Army Corps of Engineers, has initiated the Keystone Dam Safety Modification Study (DSMS) located in Tulsa County, Oklahoma. The DSMS will develop alternatives to reduce the incremental dam safety risk associated with overtopping of the embankment to below Tolerable Risk Guidelines (TRG). Additionally, the DSMS aims to reduce the dam safety risk associated with internal erosion of embankment material further below TRG if deemed practicable and efficient, and reduce incremental life safety risk to below TRG.

The Keystone Dam in Tulsa County, Oklahoma was authorized by the Flood Control Act of 1950 and constructed by the U.S. Army Corps of Engineers in 1957. The structure stretches approximately one mile across the Arkansas River and is separated in six primary sections; left and right embankments, left and right non-overflow sections, two-unit power plant, and the gated spillway. Current authorized purposes for Keystone Dam include flood control, water supply, hydroelectric power, navigation, and fish and wildlife enhancement (see enclosure). In 2011, Keystone Dam was determined eligible for listing in the National Register of Historic Places (NRHP).

In 2015 and 2018, *Phase One and Phase Two Issue Evaluation Study* assessments by the U.S. Army Corps of Engineers determined there are intolerable risks associated with overtopping of Keystone Dam during extreme flood events which could lead to dam failure and life safety risk downstream. There are also dam safety risks associated with internal erosion of embankment material in the left and right abutments that could lead to failure of the dam and life safety risk downstream.

The Keystone Dam reduces flood risk for thousands of people, and thousands of residential, commercial, industrial, and public structures. If catastrophic failure occurs, there is potential for life loss, significant economic consequences due to property damage and disruption of residential, commercial and industrial activities. Under these

conditions, serious environmental consequences could occur due to the potential release of hazardous materials, which could cause adverse effects to many historic properties.

Pursuant to Section 102 of the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act, an Environmental Assessment will be prepared to describe risk reduction alternatives and the affected environment, as well as analyze potential impacts to the NRHP-eligible Keystone Dam and other cultural resources.

Our office would like to solicit any input you may have with respect to the Keystone Dam DSMS area in accordance with the National Historic Preservation Act and applicable laws and regulations to assist us as we progress through the NEPA process. We look forward to receiving your comments. Please contact Brandon Wadlington, Biologist, Environmental Compliance Branch, Regional Planning and Environmental Center, by mail at U.S. Army Corps of Engineers, 819 Taylor Street, PO Box 17300, Room 3A12, Fort Worth, TX 76102-0300, by telephone at (817) 886-1720, or email at Brandon.Wadlington@usace.army.mil with comments, questions, or the need for further information.

Sincerely,

Arnold (Rob) Newman
Director, Regional Planning and Environmental Center

Enclosure

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

December 19, 2018

Public Notice

Keystone Dam Safety Modification Study Initiation

The Tulsa District, U.S. Army Corps of Engineers, has initiated the Keystone Dam Safety Modification Study (DSMS) located in Tulsa County, Oklahoma. The DSMS will develop alternatives to reduce the incremental dam safety risk associated with overtopping of the embankment to below Tolerable Risk Guidelines (TRG). Additionally, the DSMS aims to reduce the dam safety risk associated with internal erosion of embankment material further below TRG if deemed practicable and efficient, and reduce incremental life safety risk to below TRG.

The Keystone Dam in Tulsa County, Oklahoma was authorized by the Flood Control Act of 1950 and constructed by the U.S. Army Corps of Engineers in 1957. The structure stretches approximately one mile across the Arkansas River and is separated in six primary sections; left and right embankments, left and right non-overflow sections, two-unit power plant, and the gated spillway. Current authorized purposes for Keystone Dam include flood control, water supply, hydroelectric power, navigation, and fish and wildlife enhancement (see enclosure).

In 2015 and 2018, *Phase One and Phase Two Issue Evaluation Study* assessments by the U.S. Army Corps of Engineers determined there are intolerable risks associated with overtopping of Keystone Dam during extreme flood events which could lead to dam failure and life safety risk downstream. There are also dam safety risks associated with internal erosion of embankment material in the left and right abutments that could lead to failure of the dam and life safety risk downstream.

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Pursuant to Section 102 of the National Environmental Policy Act (NEPA) as implemented by the regulations promulgated by the Council on Environmental Quality (40 Code of Federal Regulations Parts 1500-1508 and USACE Engineering Regulation 200-2-2), an Environmental Assessment will be prepared to describe risk reduction alternatives and the affected environment, as well as analyze the potential direct, indirect, and cumulative environmental effects.

Our office would like to solicit any input you may have with respect to the Keystone DSMS area to assist us as we progress through the NEPA process. We look forward to receiving your comments. Please contact Brandon Wadlington, Biologist, Environmental Compliance Branch, Regional Planning and Environmental Center, by mail at U.S. Army Corps of Engineers, 819 Taylor Street, PO Box 17300, Room 3A12, Fort Worth, Texas 76102-0300 or email at Brandon.Wadlington@usace.army.mil, or telephone at (817) 886-1720 with comments, questions, or the need for further information.

Sincerely,

Arnold (Rob) Newman
Director, Regional Planning and Environmental Center

Enclosure

Oklahoma Archeological Survey

THE UNIVERSITY OF OKLAHOMA

January 7, 2019

U.S. Corps of Engineers
ATTN: Brandon Wadlington, Biologist
Environmental Compliance Branch, Regional Planning and Environmental Center
819 Taylor Street, PO Box 17300, Room 3A12
Fort Worth, TX 76102-0300

Re: USACE – Keystone Dam Safety Modification Study (DSMS)
Legal Description: Sections 4 and 9, T19N, R10E, Tulsa County, Oklahoma.

Dear Mr. Wadlington:

The Community Assistance Program staff of the Oklahoma Archeological Survey has reviewed the Keystone Dam Safety Modification Study (DSMS) project. From the information provided, we understand that the proposed DSMS will include evaluating potential impacts to the National Register of Historic Places (NRHP)-eligible Keystone Dam and other cultural resources. Based on the topographic and hydrologic setting of your project, archaeological resources are likely to be encountered. Therefore, we recommend that the DSMS also include a detailed assessment of potential impacts to as-yet unidentified cultural resources. Our office looks forward to further consultation under Section 106 of the National Historic Preservation Act (NHPA) as this project moves forward. This review has been conducted in cooperation with the Oklahoma State Historic Preservation Office. You must also have a letter from that office to document your consultation pursuant to Section 106 of the National Historic Preservation Act.

Sincerely,

Debra K. Green, Ph.D.
Assistant State Archaeologist

Kary L. Stackelbeck, Ph.D.
State Archaeologist

cc: SHPO

GWYᏰ DᏃᏢ
CHEROKEE NATION®
P.O. Box 948 • Tahlequah, OK 74465-0948 • 918-453-5000 • cherokee.org

Office of the Chief

Bill John Baker
Principal Chief
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S. Joe Crittenden
Deputy Principal Chief
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January 14, 2019

Brandon Wadlington
United States Army Corps of Engineers
Environmental Compliance Branch
Regional Planning and Environmental Center
819 Taylor Street
P.O. Box 17300, Room 3A12
Fort Worth, TX 76102-0300

Re: Keystone Dam Safety Modification Study Initiation

Mr. Brandon Wadlington:

The Cherokee Nation (Nation) is in receipt of your correspondence about **Keystone Dam Safety Modification Study Initiation**, and appreciates the opportunity to provide comment upon this project.

The Nation maintains databases and records of cultural, historic, and pre-historic resources in this area. Our Historic Preservation Office reviewed this project, cross referenced the project's legal description against our information, and found no instances where this project intersects or adjoins such resources. Thus, the Nation does not foresee this project imparting impacts to Cherokee cultural resources at this time.

However, the Nation requests that the United States Army Corps of Engineers (USACE) halt all project activities immediately and re-contact our Offices for further consultation if items of cultural significance are discovered during the course of this project.

Additionally, the Nation requests that USACE conduct appropriate inquiries with other pertinent Historic Preservation Offices regarding historic and prehistoric resources not included in the Nation's databases or records.

If you require additional information or have any questions, please contact me at your convenience. Thank you for your time and attention to this matter.

Wado,

Elizabeth Toombs, Tribal Historic Preservation Officer
Cherokee Nation Tribal Historic Preservation Office
elizabeth-toombs@cherokee.org
918.453.5389

Oklahoma Historical Society *Founded May 27, 1893*
State Historic Preservation Office
Oklahoma History Center • 800 Nazih Zuhdi Drive • Oklahoma City, OK 73105-7917
(405) 521-6249 • Fax (405) 522-0816 • www.okhistory.org/shpo/shpom.htm

January 15, 2019

Mr. Brandon Wadlington,
Environmental Compliance Branch
U.S. Army Corps of Engineers
P.O. Box 17300
Fort Worth, TX 76102

RE: File #0608-19; U.S. Army Corps of Engineers Proposed Keystone Dam Safety Modification Study, Tulsa County, Oklahoma

Dear Mr. Wadlington:

We have received your letter initiating consultation regarding the above-mentioned project for the Keystone Dam, a property eligible for listing on the National Register of Historic Places (NRHP).

In your December 19, 2018 letter, which we received December 27, 2018, you indicate that, pursuant to Section 102 of the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act, an Environmental Assessment will be prepared to describe risk reduction alternatives and the affected environment, as well as analyze the potential impacts of the NRHP-eligible Keystone Dam and other cultural resources.

In order to provide the Department of the Army, Corps of Engineers (Corps) with an informed assessment of the project and its affect to historic resources, we ask that the Environmental Assessment include a detailed description of the proposed project. (Please refer to the *Review and Compliance Manual*, Pages 37-38, or our website at www.okhistory.org/shpo/section106.htm.). Also, if it is available, include any relevant documentation including proposed construction documents at 65% completion.

Thank you for the opportunity to review this project. Future correspondence pertaining to this project must reference the above underlined file number.

If you have any questions, please do not hesitate to call Ms. Catharine M. Wood, Historical Archaeologist, at (405) 521-6381 or Ms. Jennifer Bailey, Historic Preservation Specialist, at (405) 522-4479. Thank you.

Sincerely,

Lynda Ozan
Deputy State Historic
Preservation Officer

LO:pm

cc: Mr. Arnold Newman, Director, Regional Planning & Environmental, Tulsa Dist. Corps of Engineers

From: LeeAnne Wendt
To: Crippen, Leslie A CIV USARMY CESWF (US)
Cc: Wadlington, Brandon E CIV USARMY CESWF (US)
Subject: [Non-DoD Source] RE: Keystone Dam Safety Modification Study, Tulsa County, Oklahoma
Date: Wednesday, January 23, 2019 10:48:04 AM

Ms. Crippen,

Thank you for answering my questions pertaining to the Keystone Dam Safety Modification Study in Tulsa County, Oklahoma. Since this project is located within our area of interest, the Muscogee (Creek) Nation asks to be a consulting party. When the type of analysis has been selected and the APE has been established for the project, please keep us apprised of the developments. We look forward to working with you further on this project.

Regards,

LeeAnne Wendt

LeeAnne Wendt, M.A., RPA

Historic and Cultural Preservation Department, Tribal Archaeologist

Muscogee (Creek) Nation

P.O. Box 580 / Okmulgee, OK 74447

T 918.732.7852

F 918.758.0649

lwendt@MCN-nsn.gov <mailto:lwendt@MCN-nsn.gov>

Blockedhttp://www.muscogeenation-nsn.gov/ <Blockedhttp://www.muscogeenation-nsn.gov/>

From: Crippen, Leslie A CIV USARMY CESWF (US) [mailto:Leslie.A.Crippen@usace.army.mil]
Sent: Tuesday, January 22, 2019 4:18 PM
To: LeeAnne Wendt
Cc: Wadlington, Brandon E CIV USARMY CESWF (US)
Subject: Keystone Dam Safety Modification Study, Tulsa County, Oklahoma

Dear Ms. Wendt,

Thank you for your response to our recent request for Section 106 consultation on the Keystone Dam Safety Modification Study. Responses to the four questions you asked are provided below.

1) Will all work be on the dam itself or will areas around the dam have any type of ground disturbance?

Several potential risk reduction measures are still under consideration, including a raise in the height of the dam, changes to the existing spillway and gates, and the potential addition of an uncontrolled spillway. Economic analyses and consideration of potential environmental/cultural impacts will help to guide the alternatives analysis. If the spillway measure is selected as a result of the feasibility study and NEPA analysis, USACE will conduct Phase I survey to identify historic properties that could be impacted.

2) If there is ground disturbance, have you discussed conducting a Phase I archaeological survey of the area?

Yes. If a spillway or any other ground disturbing activities are proposed as a result of the study, USACE will conduct Phase I survey to identify historic properties.

3) Were there any previous surveys on the area?

The Keystone Dam was determined eligible for listing in the NRHP in 2011. There have been previous utility surveys in the vicinity of the study area, but no comprehensive cultural resources surveys have occurred. Once the APE is thoroughly defined through consultation, USACE will work with OAS and SHPO to see where previous surveys overlap the APE and whether/where additional survey is needed.

4) Has the OKSHPO and OAS been contacted about this project?

Yes, USACE has contacted both OK SHPO and OAS. Consultation is ongoing.

I am the cultural resources lead for this project but our environmental team works very closely so please don't hesitate to contact me or Mr. Wadlington with any further questions.

Sincerely,

Leslie Crippen | Archaeologist
U.S. Army Corps of Engineers
Regional Planning & Environmental Center
Direct: (817) 886-1470

Osage Nation Historic Preservation Office

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Date: **July 3, 2019** **File: 1819-2577OK-12**

RE: **USACE, Tulsa District Keystone Dam Safety Modification Study (DSMS), Tulsa County, Oklahoma**

Regional Planning and Env Center, USACE
Brandon Wadlington
819 Taylor Street, PO Box 17300. Room 3A12
Fort Worth, TX 76102-0300

Dear Mr. Wadlington,

The Osage Nation Historic Preservation Office has received notification of the proposed project USACE, Tulsa District Keystone Dam Safety Modification Study (DSMS), Tulsa County, Oklahoma. There are several Osage trails and places of significance in the immediate vicinity of, and downstream from, the dam. **The Osage Nation requests the current status of, and additional information regarding, the proposed USACE, Tulsa District Keystone Dam Safety Modification Study (DSMS), Tulsa County, Oklahoma**.

In accordance with the National Historic Preservation Act, (NHPA) [16 U.S.C. 470 §§ 470-470w-6] 1966, undertakings subject to the review process are referred to in S101 (d) (6) (A), which clarifies that historic properties may have religious and cultural significance to Indian tribes. Additionally, Section 106 of NHPA requires Federal agencies to consider the effects of their actions on historic properties (36 CFR Part 800) as does the National Environmental Policy Act (43 U.S.C. 4321 and 4331-35 and 40 CFR 1501.7(a) of 1969).

The Osage Nation has a vital interest in protecting its historic and ancestral cultural resources, which are protected under the NHPA, NEPA, the Native American Graves Protection and Repatriation Act, and Osage law, and appreciates your consideration of the provided information in the planning process.

Should you have any questions or need any additional information, please feel free to contact me at the number listed below. Thank you for consulting with the Osage Nation on this matter.

Sincerely,

James Munkres
Archaeologist

627 Grandview Ave. * Pawhuska, OK 74056 Telephone 918-287-5328 * Fax 918-287-5376
HistoricPreservation@osagenation-nsn.gov

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

September 3, 2019

James Munkres, Archaeologist
Osage Nation Historic Preservation Office
627 Grandview Ave.
Pawhauska, OK 74056

Re: Keystone Dam Safety Modification Study, Tulsa County, Oklahoma

Dear Mr. Munkres,

We have received your July 3, 2019 letter regarding the status of the Keystone Dam Safety Modification Study. The U.S. Army Corps of Engineers, Tulsa District (USACE) appreciates the opportunity to consult with the Osage Nation on the proposed undertaking.

Since initiating tribal and agency consultation in December 2018, the project delivery team has been developing and analyzing alternatives to address the risk of the dam overtopping, as well as ongoing seepage in the dam abutments. Several alternatives under consideration include raising Keystone Dam. Currently, the geotechnical team is working to determine the constructability of various dam raise scenarios and are expected to complete their analyses in early 2020.

Because the exact area of potential effects and impacts to historic properties cannot be determined at this time, the USACE is developing a programmatic agreement (PA) in accordance with 36 CFR 800.14 in order to identify and evaluate impacts to historic properties during the design phase of the project. The USACE hereby invites the Osage Nation to participate as a concurring party to the PA.

In addition to the Oklahoma State Historic Preservation Officer and the Oklahoma Archaeological Survey, the USACE has invited the Cherokee Nation and the Muscogee (Creek) Nation to consult on the Keystone Dam Safety Modification Study. The Muscogee (Creek) Nation have accepted the invitation, while the Cherokee Nation have declined to participate in consultation for this undertaking at this time.

Please reply to Leslie Crippen, Archaeologist, Environmental Branch to accept or decline the invitation to participate in the PA, or with any additional information needs by mail (819 Taylor Street, Room 3A12, Fort Worth, Texas 76102), email (Leslie.Crippen@usace.army.mil), or telephone (817-886-1470).

Sincerely,

Angela Lane

Angela M. Lane
Acting Chief, Environmental Branch
Regional Planning and Environmental Center

From: James W. Munkres
To: Crippen, Leslie A CIV USARMY CESWF (USA)
Cc: Andrea Hunter
Subject: [Non-DoD Source] Keystone Dam Safety Modification Study, Tulsa County, OK Programmatic Agreement (1920-599OK-10)
Date: Friday, October 25, 2019 9:19:38 AM

Date: October 25, 2019 File: 1920-599OK-10

Re: USACE, Tulsa District Keystone Dam Safety Modification Study (DSMS), Tulsa County, Oklahoma

USACE, Regional Planning and Environmental Center

Leslie Crippen, Archaeologist, Environmental Branch

Good morning,

The Osage Nation Historic Preservation Office has received additional information regarding the Project referenced as USACE Keystone Dam Safety Modification Study, Tulsa County, Oklahoma. The proposed project will serve to address the risk of the dam overtopping and seepage issues. The notification states that "the [USACE] geotechnical team is working to determine the constructability of various dam raise scenarios" and that this analysis will likely be completed in early 2020. As the APE has yet to be determined and impacts to historic properties cannot be determined at this time, the USACE has proposed the development of a Programmatic Agreement. The Osage Nation restates its previous request to consult on the Project and now requests Invited Signatory status for the proposed Programmatic Agreement.

Please provide an update on the timeline of the development of the proposed Programmatic Agreement.

Thank you for consulting with the Osage Nation on this matter.

Sincerely,

James Munkres

Osage Nation Historic Preservation Office

James Munkres, Archaeologist

627 Grandview Avenue

Pawhuska, OK 74056

Office #: (918) 287-5328

Email: jwmunkres@osagenation-nsn.gov <mailto:jwmunkres@osagenation-nsn.gov>

ONHPO Website: Blockedhttps://www.osagenation-nsn.gov/who-we-are/historic-preservation

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

October 2, 2020

Dr. Andrea A. Hunter
Osage Nation Historic Preservation Office
627 Grandview Ave.
Pawhauska, OK 74056

Dear Dr. Hunter,

The U.S. Army Corps of Engineers, Tulsa District (USACE) is continuing to conduct the Keystone Dam Safety Modification Study in Tulsa County, Oklahoma, which is a federal undertaking under Section 106 of the National Historic Preservation Act. Additional geotechnical analyses described in our September 3, 2019 letter are nearing completion and the USACE wishes to continue consultation in accordance with 36 CFR § 800.2(a)(4).

Based on the expressed interest of the Osage Nation in the project area, the USACE hereby invites the Osage Nation to be an Invited Signatory to the programmatic agreement for the purpose of identifying and evaluating potential effects on historic properties associated with the undertaking.

We look forward to receiving your comments on the enclosed revised draft and respectfully request that a response to this invitation and any comments be provided by October 30, 2020. Please contact Leslie Crippen, Archaeologist, Environmental Branch by email (Leslie.Crippen@usace.army.mil), or by telephone (817-886-1470) with comments and any additional information needs.

Sincerely,

Amanda McGuire
Chief, Environmental Branch
Regional Planning and Environmental Center

Enclosure

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

November 5, 2020

Corain Lowe-Zepeda
Tribal Historic Preservation Officer
Muscogee (Creek) Nation
Highway 75 & Loop 56
Okmulgee, OK 74447

Dear Ms. Lowe-Zepeda,

The U.S. Army Corps of Engineers, Tulsa District (USACE) is continuing to conduct the Keystone Dam Safety Modification Study in Tulsa County, Oklahoma, which is a federal undertaking under Section 106 of the National Historic Preservation Act. Additional geotechnical analyses described in our September 3, 2019 letter are nearing completion and the USACE wishes to continue consultation in accordance with 36 CFR § 800.2(a)(4).

As discussed in previous consultation meetings and correspondence, the USACE is developing a programmatic agreement for the purpose of identifying and evaluating potential effects on historic properties associated with the undertaking. We hereby invite the Muscogee (Creek) Nation to be an Invited Signatory to the programmatic agreement and wish to solicit your comments on the enclosed draft.

We respectfully request that a response to this invitation and any comments be provided via letter or email by December 7, 2020. Please contact Leslie Crippen, Archaeologist, Environmental Branch by email (Leslie.Crippen@usace.army.mil), or by telephone (817-886-1470) with comments and any additional information needs.

Sincerely,

MCGUIRE.AMANDA.M.1399923332

Digitally signed by MCGUIRE.AMANDA.M.1399923332
Date: 2020.11.05 14:35:53 -06'00'

Amanda McGuire
Chief, Environmental Branch
Regional Planning and Environmental Center

Enclosure

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

November 5, 2020

Kary Stackelbeck
Oklahoma State Archaeologist
111 East Chesapeake
Norman, OK 73019

Dear Dr. Stackelbeck,

The U.S. Army Corps of Engineers, Tulsa District (USACE) is continuing to conduct the Keystone Dam Safety Modification Study in Tulsa County, Oklahoma, which is a federal undertaking under Section 106 of the National Historic Preservation Act. Because effects on historic properties cannot be fully determined prior to approval of the undertaking, we are developing a programmatic agreement (PA), pursuant to 36 CFR 800.14, for the purpose of identifying and evaluating potential effects on historic properties. The USACE wishes to invite the Oklahoma Archeological Survey to be an invited signatory to the PA and is submitting the enclosed draft for your review and comment.

In accordance with 36 CFR § 800.6, the USACE is continuing consultation with the Oklahoma State Historic Preservation Officer, the Muscogee (Creek) Nation, and the Osage Nation. We have invited their participation and feedback on the enclosed draft and have notified the Advisory Council on Historic Preservation of our intent to develop a PA, so that we may determine their participation.

We look forward to working with you and your staff on the development of this PA and throughout the Section 106 process. Please contact Leslie Crippen, Archaeologist, Environmental Branch by email (Leslie.Crippen@usace.army.mil), or by telephone (817-886-1470) with comments and any additional information needs.

Sincerely,

MCGUIRE.AMANDA.M.1399923332

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Date: 2020.11.05 14:37:19 -06'00'

Amanda McGuire
Chief, Environmental Branch
Regional Planning and Environmental Center

Enclosure

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
2488 EAST 81ST STREET
TULSA, OKLAHOMA 74137-4290

November 5, 2020

Bob Blackburn
Oklahoma State Historic Preservation Officer
800 Nazih Zuhdi Drive
Oklahoma City, OK 73105

Dear Mr. Blackburn,

The U.S. Army Corps of Engineers, Tulsa District (USACE) is continuing to conduct the Keystone Dam Safety Modification Study in Tulsa County, Oklahoma, which is a federal undertaking under Section 106 of the National Historic Preservation Act. Because effects on historic properties cannot be fully determined prior to approval of the undertaking, we are developing a programmatic agreement (PA), pursuant to 36 CFR 800.14, for the purpose of identifying and evaluating potential effects on historic properties. The USACE wishes to invite the Oklahoma State Historic Preservation Officer to be a signatory to the PA and is submitting the enclosed draft for your review and comment.

In accordance with 36 CFR § 800.6, the USACE is continuing consultation with the Muscogee (Creek) Nation, the Osage Nation, and the Oklahoma Archeological Survey. We have invited these parties to participate in the PA as invited signatories and have notified the Advisory Council on Historic Preservation of our intent to develop a PA.

We look forward to working with you and your staff on the development of this PA and throughout the Section 106 process. Please contact Leslie Crippen, Archaeologist, Environmental Branch by email (Leslie.Crippen@usace.army.mil), or by telephone (817-886-1470) with comments and any additional information needs.

Sincerely,

MCGUIRE.AMANDA.M.1399923332

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Amanda McGuire
Chief, Environmental Branch
Regional Planning and Environmental Center

Enclosure

December 10, 2020

Leslie Crippen
Archaeologist
U.S. Army Corps of Engineers
819 Taylor Street
Fort Worth, TX 76102

Ref: *Keystone Dam Safety Modification Study*
Sand Springs, Tulsa County, Oklahoma

Dear Ms Crippen:

The Advisory Council on Historic Preservation (ACHP) has received your notification of adverse effect for the referenced undertaking that was submitted in accordance with Section 800.6(a)(1) of our regulations, "Protection of Historic Properties" (36 CFR Part 800). The background documentation included with your submission does not meet the specifications in Section 800.11(e) of the ACHP's regulations. We, therefore, are unable to determine whether Appendix A of the regulations, *Criteria for Council Involvement in Reviewing Individual Section 106* Cases, applies to this undertaking. Accordingly, we request that you submit the following additional information so that we can determine whether our participation in the consultation to resolve adverse effects is warranted.

- Copies or summaries of any views provided by consulting parties, the public, and the Oklahoma State Historic Preservation Officer.
- Copies or summaries of any views or comments provided by any affected Indian tribe.

Upon receipt of the additional information, we will notify you within 15 days of our decision.

If you have any questions, please contact Christopher Daniel at 202-517-0223 or via e-mail at kkerr@achp.gov.

Sincerely,

Artisha Thompson
Historic Preservation Technician
Office of Federal Agency Programs