

~~131554 76A~~  
~~C-1~~

<sup>3</sup>  
A CULTURAL RESOURCES MANAGEMENT PROGRAM FOR  
TUTTLE CREEK LAKE FOR THE YEARS 1978-1983<sub>3</sub>

by

4 HOLDERS

<sup>5</sup>  
Robert J. Ziegler<sub>5</sub>  
Museum of Anthropology  
University of Kansas<sup>2</sup><sub>2</sub>

Submitted to:  
The Department of the Army  
Kansas City District  
Corps of Engineers

In Accordance With:  
Purchase Order DACW41-76-M-0957

<sup>4</sup>October 1976<sub>4</sub>

TC  
423  
.K35  
Z544  
1979

**LIBRARY**

**DEC 20 1982**

**Bureau of Reclamation  
Denver, Colorado**

131554



## ABSTRACT

This report presents a program for the management of cultural resources at Tuttle Creek Lake, Kansas, based on an intensive laboratory study of archaeological site survey forms, maps, records, and field notes. Tuttle Creek contains 132 archaeological sites; 101 are located on government-owned lands while the remainder are on flowage easement properties. Many of these sites currently are threatened by adverse effects created by the lake. Each site on government land is evaluated and a recommendation for future work is made. A procedure which considers each site's elevation, proximity to project features, and cultural significance, is devised to rank into priorities the work recommended. Further field work, to evaluate adverse effects and cultural significance, is recommended for 84 sites. Additional recommendations are made for flowage easement sites, archaeological survey work, and historical and historic architectural studies.

LIBRARY

MAY 28 2010

Bureau of Reclamation  
Denver, Colorado

TC423K35-25441979

## CONTENTS

List of Tables . . . . .	iii
List of Figures. . . . .	iv
Acknowledgements . . . . .	v
Introduction . . . . .	1
Method of Investigation. . . . .	2
Environmental Setting. . . . .	3
Previous Archaeological Investigations . . . . .	5
Tuttle Creek Lake. . . . .	9
Land Acquisition. . . . .	9
Adverse Effects on Archaeological Sites . . . . .	10
General Site Information. . . . .	14
Site Ranking. . . . .	18
Management Program . . . . .	23
Recommended Archaeological Work . . . . .	23
National Register of Historic Places. . . . .	26
Historic Study. . . . .	27
Historic Architecture . . . . .	27
Concluding Remarks. . . . .	27
References Cited . . . . .	28
Appendix . . . . .	30
Specific Information for Archaeological Sites on Government Lands. . . . .	30
Maps Showing Archaeological Sites in Tuttle Creek . . . . .	55
Map 1. . . . .	55
Map 2. . . . .	56
Map 3. . . . .	57
Map 4. . . . .	58
Map 5. . . . .	59



## LIST OF TABLES

Table	Page
1. Solecki's Recommendations and Actual Work Subsequently Conducted in Tuttle Creek. . . .	5
2. Work Recommended and Sites Tested by the 1970 Kansas University Survey Crew. . . . .	8
3. Summary Table of Sites Discussed in This Report . . . . .	9
4. Sites Inundated by the Multi-Purpose Pool . .	12
5. Public Use Areas Attendance Record for 1975 .	13
6. Archaeological Sites on Flowage Easement Properties . . . . .	14
7. Data Used and Totals Obtained in the Ranking Procedure . . . . .	20
8. Priority of Sites for Years 1978-1983 . . . .	23
9. Potential National Register Sites . . . . .	26

## LIST OF FIGURES

Figure	Page
1. Projectile Points from Tuttle Creek. . . . .	16
2. Projectile Points from Tuttle Creek. . . . .	17

## ACKNOWLEDGEMENTS

I would like to thank Dr. Alfred E. Johnson of the Museum of Anthropology, University of Kansas, for aiding in the identification of projectile points and ceramics, and for editorial assistance in preparing this report. Thanks are also due to Jean Colglazier for preparing the artifact illustrations included in this report.

## INTRODUCTION

Tuttle Creek Lake is a multi-purpose project of the Corps of Engineers, located on the Big Blue River near Manhattan, Kansas. The lake, completed and placed in operation during the summer of 1962, is formed by an earthfill dam 7500 feet long, 157 feet high, and 1050 feet wide at the base. The dam is situated six miles north of Manhattan and 12.3 miles from the confluence of the Big Blue and Kansas Rivers. The multi-purpose pool extends upstream nearly 30 miles. The shoreline at multi-purpose pool level is 112 miles. The drainage area controlled by the project is 9556 square miles. Portions of Pottawatomie, Marshall, and Riley Counties are inundated by the lake.

Several archaeological investigations have been conducted in Tuttle Creek Lake since 1952. This report summarizes the environmental setting, previous archaeological investigations, and certain characteristics of the lake that have an impact on cultural resources. Site locations and descriptive data are given for archaeological sites located within the boundaries of the project.

Included in this report is a program for the management of cultural resources at Tuttle Creek Lake for Fiscal Years 78-83. Specific recommendations are made for known archaeological sites situated on government-owned land. Additional recommendations are made for future archaeological, historical, and historic architectural investigations.

## METHOD OF INVESTIGATION

This study consisted entirely of library and laboratory research at the Museum of Anthropology, University of Kansas. No field work was conducted. Information on previously-recorded archaeological sites was obtained from an intensive study of site survey forms, maps, records, and field notes in the Museum of Anthropology. Published sources concerning Tuttle Creek Lake, as well as those regarding cultural resource management, were reviewed. The Corps of Engineers, Kansas City District, provided topographic maps, project maps, and other pertinent information regarding Tuttle Creek Lake.

A total of 308 site survey forms were reviewed. These represented the known archaeological sites in Marshall, Riley, and Pottawatomie Counties, recorded by individuals from the Smithsonian Institution, Kansas State Historical Society, and the University of Kansas. By plotting these sites on topographic maps, it was determined that 132 sites are located within the limits of Tuttle Creek Lake project. Another 42 sites are situated on the periphery of the project, while the remainder are in other portions of the three counties.

Cultural materials collected during the 1952 survey were borrowed from the Smithsonian Institution. These materials and collections housed in the Museum of Anthropology, University of Kansas, were examined so that cultural affiliations could be determined for the archaeological sites at Tuttle Creek Lake.

## ENVIRONMENTAL SETTING

Tuttle Creek Lake is located in the Central Lowland Province of the major physiographic division, the Interior Plains. More specifically, Tuttle Creek falls within two minor physiographic divisions, the Flint Hills Upland and the Attenuated Drift Border (Schoewe 1949:277). Generally, the lower third of the reservoir area falls within the Flint Hills division, while the upper two-thirds is located in the Attenuated Drift Border. These two physiographic units consist of a series of northeast-southwest trending scarps and valleys, a result of the differential erosion of alternating hard and soft Permian limestones and shales. The surface of the Flint Hills is gently rolling and characterized by the large amount of flint or chert present. The Attenuated Drift Border is similar to the Flint Hills Upland and differs basically in that it has been glaciated. Evidence of glaciation occurs in the form of isolated patches of till, outwash, scattered erratics or boulders, cobbles, and pebbles of ice-transported material (Schoewe 1949:280-291). Some of these materials were used by the prehistoric inhabitants for the manufacture of axes, hammers, and other implements.

The major stream in this area is the Big Blue River, which flows southward from its headwaters in south-central Nebraska until it joins the Kansas River near Manhattan. The Big Blue has a deep, narrow, flat-floored valley. Topographic relief is on the order of 250-350 feet, as measured from the floodplain to the tops of adjacent bluffs and hills.

The Little Blue River, the major tributary of the Big Blue, begins in south-central Nebraska and enters the Big Blue near Blue Rapids, Kansas. Another large tributary, the Black Vermillion River, joins the Big Blue a few miles southeast of Blue Rapids. Both the Black Vermillion and the Little Blue flow a greater distance and are considerably larger than the other tributaries of the Big Blue.

Numerous breaks occur along the course of the Big Blue River from which flow smaller spring fed tributary streams. These streams are generally short, with their headwaters occurring in the nearby hills.

This portion of Kansas has a variable climate of moderate winters and summers. The average annual temperature is 55.3 degrees. The extremes in temperature occur in January and July (Flora 1948:195). The average annual precipitation is 28.30 inches. Precipitation ranges from .60 inches in January to 4.44 inches in June (Flora 1948:61). The growing season ranges from 137-197 days. The first killing frost occurs in the Fall around October 11, while the last killing frost in the Spring occurs around April 24 (Flora 1948:223-229).

Prior to extensive white settlement in the region, the stream banks, adjacent valley floors, and ravines were well timbered with elm, oak, burr oak, hickory, cottonwood, walnut, hackberry, sycamore, redbud, willow, hazel, box elder, ash, cedar, linden, dogwood, plum, and prickly ash (Barker 1969:533). Resources undoubtedly utilized by prehistoric peoples of the area include persimmon, papaw, elderberry, serviceberry, chokeberry, and wild grape (Wedel 1959:14).

The forested areas provided food and shelter for animals such as deer, bear, squirrel, beaver, and cottontail rabbit. Bison, antelope, coyote, and jackrabbit inhabited the upland prairie adjacent to the Big Blue River Valley. Wild turkey undoubtedly was an important food source to the prehistoric occupants; of lesser importance were quail, ruffed grouse, and prairie chicken (Wedel 1959:14). The Big Blue River itself was a probable source of various fish and turtles. Several varieties of fresh water mussels were present in local streams.

Much of the bottomland of this area has been altered by Euro-American settlers. Bottomlands were cleared of timber to build houses and to prepare fields for farming. The bottomlands were settled first and later some of the upland prairies were broken by the plow. Following the severe drought of 1872-1875, many upland farms were abandoned and reverted back to native grass. Presently, the uplands are used for grazing and the bottomlands for farming (Barker 1969:533-534).



## PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

Archaeological investigations in the Tuttle Creek area began in 1952, when Ralph S. Solecki and J. M. Shippee conducted a survey for the Smithsonian Institution, River Basin Surveys, to locate archaeological remains likely to be damaged or destroyed by construction of the lake (Solecki 1953). They located and recorded a total of 119 sites in and around the lake area, including sites of Paleo-Indian, Archaic, Woodland, and Central Plains cultural affiliations (Solecki 1953:20). Solecki felt that the lake area was archaeologically important and recommended that eight sites be totally excavated, six sites intensively tested, and 26 sites explored with tests (Solecki 1953:20). Solecki's recommendations and subsequent work conducted on these sites are presented in Table 1.

Table 1. Solecki's Recommendations and Actual Work Subsequently Conducted in Tuttle Creek.

Site	Recommendation	Actual Work Conducted	Reference
14MH1	Excavation	Test Excavation Excavation	Johnson 1973
14MH2*	Excavation		Kelley 1966
14MH3*	Exploratory Tests		
14MH6*	Exploratory Tests		
14MH8	Exploratory Tests		
14MH9	Excavation		
14MH10	Excavation		
14MH14	Exploratory Tests		
14MH18*	Exploratory Tests		
14MH28	Exploratory Tests		
14MH29	Exploratory Tests		
14MH39	Exploratory Tests		
14MH40	Exploratory Tests		
14MH41*	Exploratory Tests		
14MH42	Excavation	Test Excavation Test Excavation	Johnson 1973
14MH44	Intensive Tests		Johnson 1973
14MH47*	Intensive Tests		
14MH50	Excavation		
14MH56*	Exploratory Tests		
14MH60	Exploratory Tests		
14MH61	Exploratory Tests		
14MH64*	Exploratory Tests		
14MH70*	Excavation	Test Excavation	Kelley 1966

Table 1 (Continued)

Site	Recommendation	Actual Work Conducted	Reference
14P01	Intensive Tests	Excavation	O'Brien <u>et al.</u> 1973
		Excavation	Schmits 1976
14P03	Intensive Tests		
14P04	Intensive Tests	Excavation	Johnson 1973
14P06	Exploratory Tests		
14P09*	Exploratory Tests		
14P012**		Test Excavation	Cumming 1958
14P013**		Test Excavation	Cumming 1958
14P014	Exploratory Tests	Excavation	Cumming 1958
14P016*	Exploratory Tests		
14P018	Exploratory Tests		
14P020	Exploratory Tests		
14P021	Intensive Tests	Excavation	Kelley 1966
14RY5	Exploratory Tests		
14RY6	Exploratory Tests		
14RY8	Excavation		
14RY10	Exploratory Tests	Excavation	Cumming 1958
14RY13	Exploratory Tests		
14RY17	Exploratory Tests		
14RY18	Exploratory Tests		

\*These sites are not within the boundaries of the Tuttle Creek Lake project.

\*\*These sites were not recommended for further work, but were subsequently tested due to their proximity to dam construction.

Subsequent salvage work by the River Basin Surveys was conducted in 1953 by a crew under the direction of Robert B. Cumming and J. M. Shippee (Cumming 1958). During the 1953 field season, this party completely excavated one site and conducted sampling tests in three others, all of which were situated in the immediate construction area of the dam (Cumming 1958:45-78).

The 1953 crew excavated Sweat Bee Mound (14P014), a small burial mound consisting of irregularly-placed limestone slabs and containing seven individuals, one of which appears to be intrusive. Artifacts recovered suggest that this site belongs to the Woodland period (Cumming 1958:56).

Sites tested during the 1953 field season include: the Spillway site (14P012), an occupational area possibly related to the Glen Elder Focus; the Reany site (14P013),

a habitation site containing native artifacts and some European trade goods, suggesting a proto-historic or early-historic Kansa campsite; (14RY10), a village site possibly of the Nebraska aspect. Cumming (1958:62) felt that 14P012, 13, and 14 could yield little additional information and required no further work, but recommended that 14RY10 be investigated further.

Additional work at 14RY10 was accomplished during July of 1953 by a volunteer crew organized by Dr. Linwood L. Hodgdon of Kansas State University and consisting of individuals from Kansas State, the University of Nebraska, and the River Basin Surveys (Cumming 1958:46). Later that year, the volunteer crew took to the field again to continue excavation of a dwelling structure that had been discovered earlier. Kelley (1966) prepared a report on this additional work. On the basis of the dwelling and the associated artifacts, Kelley (1966:100) assigns 14RY10 to the Central Plains tradition.

In 1956, Dr. Hodgdon returned to Tuttle Creek Lake to excavate at 14P021. Kelley (1966:101-4) summarized the findings at this site and suggests that it was an earthlodge village belonging to the Central Plains tradition.

Salvage excavations in the northern part of Tuttle Creek Lake were conducted in 1957 by a field party from the University of Kansas under the direction of Dr. Carlyle S. Smith. Five sites were excavated or tested by this group. The results of the major excavation are described in a report prepared by Johnson (1973). The Budenbender site (14P04), was a small village consisting of two or three earthlodges situated on the north side of Spring Creek, a small tributary of the Big Blue River. One earthlodge was completely excavated. A radiocarbon determination on charcoal from a support post of this earthlodge provided a radiocarbon date of A.D. 1190 (Johnson 1973:291). This date, and comparisons of artifacts and features with those of previously excavated materials in Kansas and Nebraska, indicate a Central Plains tradition occupation (Johnson 1973:291).

Sites tested by the 1957 field party were: the Bean Hollow site (14MH1), a site consisting of Archaic, Woodland and Central Plains occupations; the Walls site (14MH42), where one Central Plains tradition earthlodge was encountered during testing; 14P01, a site that produced a Folsom point and contains Archaic and Woodland occupations; 14MH44, an Archaic site (Johnson 1973:273).

Carl Miller directed archaeological salvage work for the River Basin Surveys in 1962. The major excavation that season was the Pishny site (14MH2), a small earthlodge village tentatively assigned to the Central Plains

LIBRARY

MAY 28 2010

tradition (Kelley 1966:90). Miller also tested another site in 1962, the Hamilton-Russell site (14MH70). On the basis of the pottery and chipped stone artifacts recovered, Kelley (1966:106) places this site in the Central Plains tradition.

In 1970, a field crew from the Museum of Anthropology, University of Kansas, conducted a shoreline survey of Tuttle Creek Lake. They located 54 new sites including many which were in the process of being eroded away by wave action from the lake, and others which appeared to be "wash-up" from inundated sites just off shore. In addition to the survey, the 1970 crew conducted minor test excavations on three of the newly discovered sites. Recommendations made and sites tested by the 1970 crew are presented in Table 2; none of these sites have been excavated or tested since that time.

Table 2. Work Recommended and Sites Tested by the 1970 Kansas University Survey Crew.

Site	Recommendation	Site	Recommendation
14P065*	Further Observation	14RY338	Test Excavation
14P0358	Test Excavation	14RY339*	Further Observation
14P0365	Excavation	14RY340	Test Excavation
14P0366	Excavation	14RY347	Test Excavation
14P0370	Further Observation	14RY355	Test Excavation
14P0371*	No Further Work	14RY356	Test Excavation
14RY334	Further Observation	14RY357	Test Excavation
		14RY366	Further Observation

\*Sites tested by the 1970 crew.

Excavation of the Coffey site (14P01), was conducted by Dr. Patricia J. O'Brien and students from Kansas State University on weekends during the fall of 1971 and spring of 1972 (O'Brien *et al.* 1973). Further excavations at the Coffey site were conducted during the 1972 through 1975 field seasons by crews from the Museum of Anthropology, University of Kansas. Excavations have revealed several cultural deposits of Middle Archaic affiliation. Large quantities of artifacts, cultural debris, and numerous features were excavated. In addition, efforts were made to recover floral and faunal remains. The results of the 1972 and 1973 excavations are described in a report prepared by Schmits (1976).

## TUTTLE CREEK LAKE

Land Acquisition

Tuttle Creek Lake is a multi-purpose project, providing both flood control and multi-purpose storage. The flood control pool, elevation 1075 to 1136 feet, m.s.l., is used for the storage of flood waters. The multi-purpose pool, up to elevation 1075, provides storage for recreation, navigation, water quality, and fish and wildlife conservation (Corps of Engineers 1968:1-28).

The majority of land for Tuttle Creek Lake was procured in accordance with the 1953 land acquisition policy:

... lands were purchased in fee to the five-year flood pool frequency contour elevation 1101 feet, m.s.l., blocked out along real estate subdivision lines. Flowage easement rights were procured in lieu of fee simple title above the five-year frequency contour to the 1140-foot contour... The lands acquired in fee are described as those reservoir lands so frequently inundated as to destroy their usefulness or economic value, which is considered to be land flooded on the average more frequently than once in five years. In all a total of 33,634 acres were obtained in fee simple title and flowage easement was acquired on a total of 26,309 acres (Corps of Engineers 1968:13).

A total of 132 archaeological sites are located in the Tuttle Creek Lake project. Using Corps of Engineers land-tract maps, it was determined that 101 of these sites are located on government-owned lands, while 31 are on flowage easement properties. The locations of these sites are shown in Maps 1-5 in the appendix of this report. A tabulation of sites discussed in this report is presented in Table 3.

Table 3. Summary Table of Sites Discussed in This Report.

Survey	Location			Total
	Government Land	Flowage Easement	Outside of Project	
1952				
Smithsonian	47	30	42	119
1970 K.U.	54			54
Other*		1		1
TOTAL	101	31	42	174

\*Site 14MHI45 recorded by Larry Schmits.

### Adverse Effects on Archaeological Sites

This section will focus on the possible adverse effects that the lake may have on archaeological sites. A discussion of the regulation of the lake and the possible impact this might have on these sites follows.

The multi-purpose pool is maintained, if possible, at elevations between 1078 and 1080. However, during extremely dry years the drawdown may fall below 1073 and in exceedingly wet years the multi-purpose pool will rise above elevation 1080 (Corps of Engineers 1968:10). Stage frequency curves, formulated by the Corps of Engineers, can be used to predict these fluctuations. For example, the lake will fill to elevation 1090, on the average of once in five years (Corps of Engineers 1968:11).

The regulation of the lake is particularly important when one looks at the elevations of the archaeological sites within Tuttle Creek Lake. The elevations of the sites on government-owned lands range from 1070 to 1120 feet m.s.l. (estimated from topographic maps). Thirty-nine sites, at elevations 1070-1080, are situated along the shoreline of the lake. The remainder of the sites on government-owned land, with the exception of five, are at elevations below the five-year flooding frequency of 1101 feet. These figures suggest that: (1) a large number of sites are subjected to shoreline processes; (2) virtually all of the sites on government property are subjected to relatively frequent inundation.

The effects of inundation on archaeological sites are not well understood. However, Garrison (1975) has formulated a qualitative model to be used as a basis for future research. Drawing upon the fields of geology, hydrology, and open water chemistry, Garrison suggests several processes that would adversely affect shoreline and near shoreline sites. Several of these processes are discussed below.

According to Garrison, wave action damage is the most destructive of all the dynamic processes affecting shoreline archaeological sites. The most damage from wave action will occur during large surface level fluctuations due to flood inflow and subsequent drawdown. Wave action during these times, "will be more extensive as the effect will move up and down the slope gradient" (Garrison 1975:284). Sites subjected to such processes, "will undergo a cycle of Exposure-Inundation-Exposure-ad infinitum until the sites are destroyed or until context is so altered as to be of limited use to the archaeologist" (Garrison 1975:284).

Wave action is not the only destructive process affecting archaeological sites. Shoreline sites located near stream inflow will be subjected to the alternate silting and cutting action of currents (Garrison 1975:284-285). Additional currents may be generated by recreational activity, primarily boats and outboard motors (Garrison 1975:285).

Chemical processes will have a direct impact on inundated sites. "Leaching and weathering processes will occur in shallow sites removing discolorations and site features" (Garrison 1975:285). Chemical processes may also cause the mixing of sediments, resulting in contextual disturbance as well as obscuring natural strata that may exist (Garrison 1975:286).

The preceeding discussion indicates ways in which the regulation of the Tuttle Creek multi-purpose and floodpool could damage or destroy archaeological sites. The destructive action caused by leaching, oxidation, and other chemical effects cannot easily be measured. On the other hand, adverse effects resulting from wave and current action are very apparent.

The actual physical destruction of archaeological sites in Tuttle Creek Lake was noted by the 1970 Kansas University shoreline survey crew. Several sites were described as having cultural material eroding out of a slumping shoreline. Another 25-30 sites were described as "beach" sites, generally consisting of a scatter of cultural material on a "mud flat" or beach area. This type of situation suggests the removal of cultural material from its original context by wave and current processes; after it is removed, the material then would be redeposited on the "mud flat" or beach area.

In most cases, the survey crew suggested that a scatter of cultural material on a beach represented the remains of an inundated site washing ashore. However, two other explanations for this phenomenon are proposed: (1) material was washed out of a shoreline site; (2) material was washed down onto the beach from a site above the shoreline.

It is unlikely that chert artifacts, for example, would wash up from an inundated site. Simple experiments conducted on beach sites in South Dakota demonstrated that material would wash into the lake rather than up onto the beach. Of the materials that were moved outward by wind and wave action, flat and light forms moved most while heavy and globular forms moved the least (Leaf 1976: 37).

Explanations one or two are favored. Material found on a beach is probably the result of wave and current action eroding into a site. Explanation one suggests that the site was being eroded into when the survey was conducted. It is probable that part of the site was under water. Explanation two suggests that the site was situated above the shoreline when surveyed. The site was eroded into during a high water period, and cultural material was deposited on the beach below.

Probable damage has occurred to 12 sites in Tuttle Creek Lake that are entirely inundated by the multi-purpose



pool (Table 4). Although it is assumed that these sites are damaged or destroyed, the present condition is not known. Studies have shown that sites in shallow waters are rapidly destroyed (Thomas Witty, Kansas State Archaeologist, personal communication), but those in deeper waters may not be subject to such erosive processes, and indeed might survive. Thus, the possibility that these inundated sites in Tuttle Creek do still contain valuable scientific data is not ruled out.

Table 4. Sites Inundated by the Multi-Purpose Pool\*

Site	Elevation	Cultural Affiliation
14P017	1045	Unknown
14P018	1050	Unknown
14P019	1060	Unknown
14P021	1040	Middle Ceramic
14P023	1040	Unknown
14RY2	1050	Unknown
14RY11	1060	Unknown
14RY12	1030	Unknown
14RY13	1040	Middle Ceramic
14RY14	1050	Unknown
14RY19	1040	Middle Ceramic
14RY20	1050	Unknown

\*Multi-purpose pool elevation at normal level is 1075.

Land modification and construction activities associated with the lake are another threat to archaeological sites. The actual construction of the dam and operations facilities has destroyed four sites. Three sites, 14P012, 14P013, and 14P014, were totally destroyed during land modification and construction of the spillway; 14RY10 was destroyed by land modification in the operations area. Fortunately, these sites were scientifically tested or excavated before they were destroyed, thus important cultural information was not lost. Other land modifications in Tuttle Creek took place during the construction of 12 public use areas. These areas were developed for recreational purposes such as camping, picnicking, boating, swimming, fishing, and sightseeing (Corps of Engineers 1968:3-6). The development of public use areas resulted in the construction of park facilities: roads, parking areas, boat ramps, group shelters, picnic areas, change houses, and comfort stations (Corps of Engineers 1968:22-8).

Eighteen archaeological sites are located within the public use areas. At least two sites, 14RY17 and 14RY18, are known to have been adversely affected by land alteration, and several others are in the immediate vicinity

of boat docks, roads, or other heavily used facilities.

The number of people attending the 12 public use areas totaled 1,202,241 in 1975. Visitor distribution figures are presented in Table 5.

Table 5. Public Use Areas Attendance Record for 1975.

Public Use Area	Attendance
River Pond*	410,802
Spillway Park*	135,420
Fancy Creek*	121,090
Overlook	65,956
Tuttle Creek Cove	194,565
Outlet	100,877
Randolph*	67,467
Stockdale	52,720
Carnahan Creek	25,867
Baldwin Creek	15,719
Garrison	11,748
Swede Creek	0
TOTAL	1,202,241

\*Licensed to Kansas State Park and Resources Authority. Attendance figures provided by the Corps of Engineers, Kansas City District.

The large numbers of people visiting these public use areas are still another threat to archaeological sites. The damage inflicted on archaeological sites may range from pot-hunting, or digging for artifacts, to simple collecting of artifacts from the surface of the sites. The resultant loss of information from indiscriminate digging has been a serious concern of archaeologists in recent years (see Clewlow, Hallihan, and Ambro 1971; Davis 1972). Surface collecting seems innocuous, but results in the loss of valuable information. Projectile points, used by archaeologists as primary chronological indicators, are often removed from the surface of sites by collectors. Both pot-hunting and surface collecting in public use areas are in violation of Title 36, Rules and Regulations Governing Public Use of Water Resource Development Projects Administered by the Corps of Engineers. By enforcing these rules, pot-hunting can be kept to a minimum. Surface collecting is a more subtle activity, and most likely will continue despite efforts to discourage it.

### General Site Information

Any program for the management of the prehistoric cultural resources of Tuttle Creek Lake should begin with the evaluation of known sites. Sites on government-owned lands were evaluated after site survey forms, field notes, maps, published data, and collections were studied in the laboratory. Specific information presented in the appendix of this report includes the location, previous investigations, site description, cultural affiliation, and a recommendation for future investigation. The locations of these sites are shown on Maps 1-4.

Although specific recommendations are not given for sites on flowage easement lands, a general recommendation for this group of sites is included in the management plan. Cultural affiliations and the elevations of flowage easement sites are presented in Table 6; locations are shown on the maps in an appendix to this report.

Table 6. Archaeological Sites on Flowage Easement Properties.

Site	Map	Elevation	Cultural Affiliation
14P04	3	1130	Middle Ceramic
14P016	1	1130	Archaic
			Middle Ceramic
14MH8	5	1130	Archaic
14MH9	5	1120	Middle Ceramic
14MH10	5	1130	Middle Ceramic
14MH14	3	1120	Middle Ceramic
14MH19	5	1120	Unknown
14MH22	5	1140	Unknown
14MH23	4	1130	Early Ceramic
			Middle Ceramic
14MH24	4	1120	Unknown
14MH27	4	1120	Archaic
14MH33	3	1130	Archaic
			Middle Ceramic
14MH35	5	1130	Unknown
14MH36	5	1110	Middle Ceramic
14MH37	4	1130	Unknown
14MH39	4	1120	Archaic
14MH40	4	1130	Early Ceramic
			Middle Ceramic
14MH42	4	1130	Middle Ceramic
14MH44	4	1120	Archaic
14MH45	3	1120	Archaic
14MH49	5	1110	Unknown
14MH50	5	1120	Early Ceramic
			Middle Ceramic

Table 6. (Continued)

Site	Map	Elevation	Cultural Affiliation
14MH51	5	1110	Unknown
14MH52	5	1110	Unknown
14MH58	5	1130	Archaic
14MH61	4	1110	Unknown
14MH63	4	1130	Early Ceramic Middle Ceramic
14MH67	4	1140	Unknown
14MH68	5	1120	Archaic
14MH69	5	1130	Archaic
14MH145	4	1120	Archaic

Cultural affiliations were determined by examining the material collected from each site. Five culture-historical periods were identified in Tuttle Creek, based on the presence of artifacts with known culture-historical distributions. The five culture-historical periods assigned to sites and the artifacts used to identify their presence in Tuttle Creek are:

1. Paleo-Indian--10,000-8000 B.C., fluted projectile points.
2. Archaic--8000 B.C. - A.D. 1.
  - a. Early--8000-5000 B.C., Hardin Barbed and Agate Basin-like dart points.
  - b. Middle and Late--5000 B.C. - A.D. 1, side-notched and basally-notched dart points. Munkers Creek dart points and knives.
3. Early Ceramic--A.D. 1-1000., corner-notched dart and arrow points, and Woodland pottery.
4. Middle Ceramic--A.D. 1000-1500, small, unnotched or side-notched arrow points, and Central Plains tradition pottery.
5. Historic--A.D. 1700-1865, Euro-American trade goods.

Representative artifact types from Paleo-Indian through the Middle Ceramic periods are illustrated in Figures 1 and 2.

Recommendations for future investigation are divided into five categories defined below:

1. No further work--This recommendation is made if the site has been investigated thoroughly, and is not likely to produce any more significant cultural information, or if it has been irretrievably lost due to inundation or physical destruction.

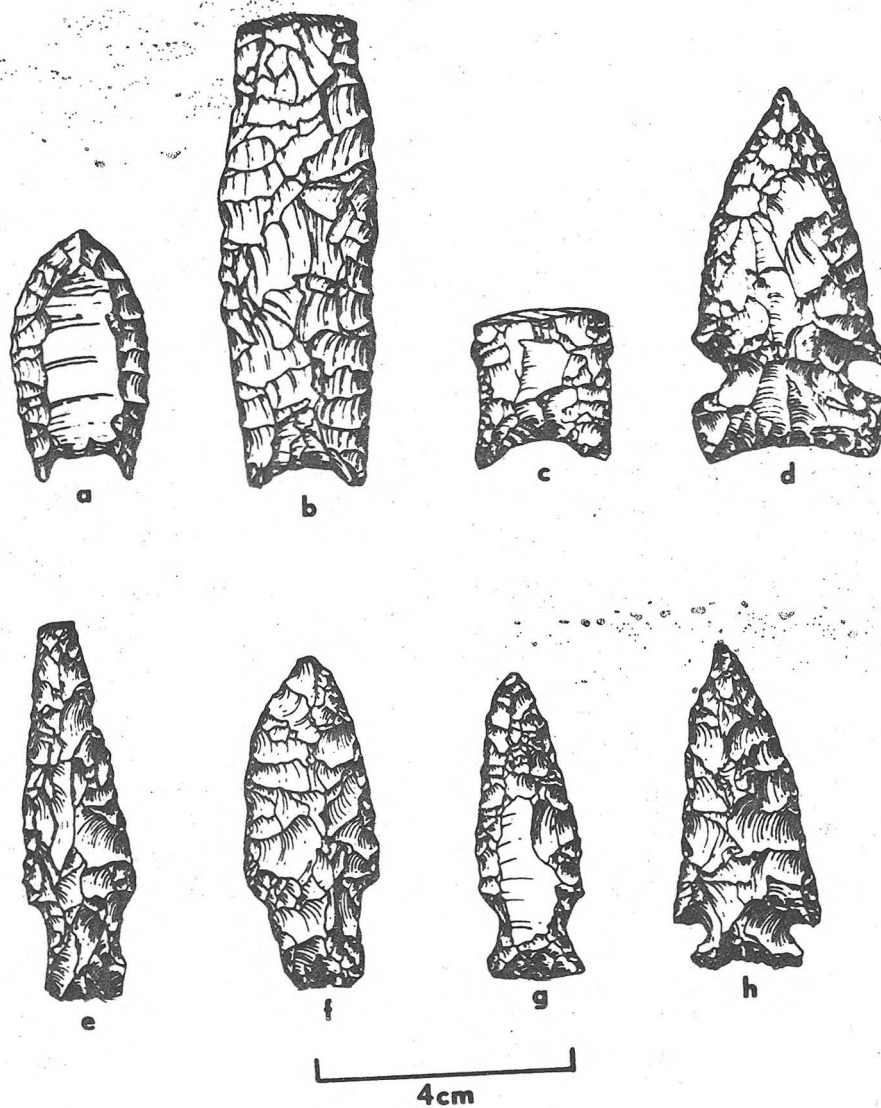


Figure 1. Projectile points from Tuttle Creek: a, Paleo-Indian; b-d, Early Archaic; e-h, Middle and Late Archaic.

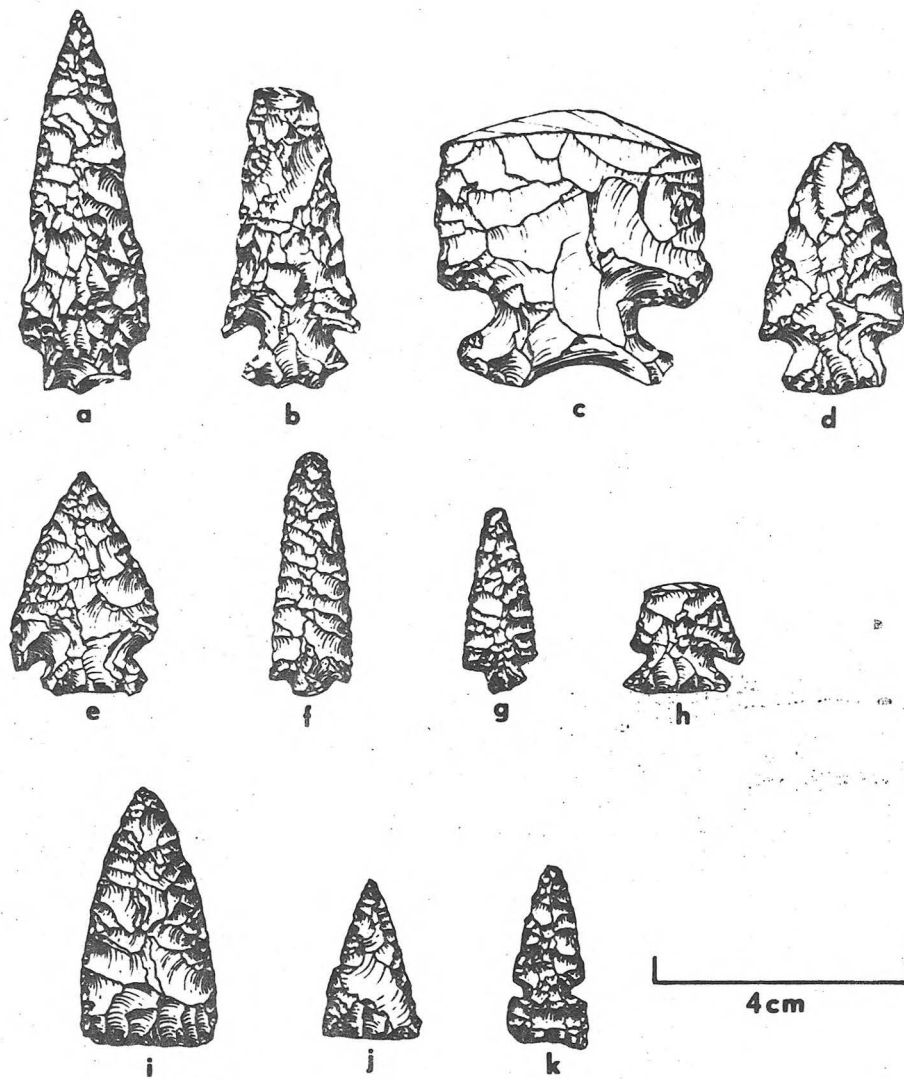


Figure 2. Projectile points from Tuttle Creek:  
a-h, Early Ceramic; i-k, Middle Ceramic.

2. Re-survey--This procedure consists of an inspection of the surface of the site. A surface-grab sample or a controlled, gridded surface collection would be gathered. Re-survey is recommended for sites on which surface cover was heavy, or, for some other reason, an adequate assessment of the site boundaries and content were impossible. Periodic re-survey may be required to evaluate susceptibility to erosion or other detrimental factors.

3. Preliminary testing--This category suggests that the site requires further investigation. Appropriate techniques such as shovel testing, auger boring, or cut-bank profiling would be used to determine extent of cultural deposits and whether further testing or excavation is justified at the site.

4. Test--Refers specifically to the evaluation of the subsurface nature of the site. Several test squares would be excavated to determine whether further effort is justified. Another objective of testing is the procurement of a representative sample of cultural and environmental data. In this report, testing is recommended for the most promising sites, i.e., those which appear most likely to yield significant cultural-historical and/or settlement-subsistence data. In some cases, test excavations may be necessary in order to make a proper evaluation of the significance of the site.

5. Salvage excavation--Consists of a major excavation with the objective of recovering a representative sample of all cultural and ecological data contained at that site. This category is reserved for significant sites which are subjected to adverse effects created by the lake. Salvage is recommended only if protection is not feasible.

Recommendations for sites on government-owned lands are based on the following existing conditions:

1. All of these sites are well within the impact area of the lake and therefore, will probably be affected adversely in one or more ways by processes and activities associated with the lake. On some sites, the damage was actually observed by archaeological survey crew members. On others the damage, if any, is more subtle, and can not easily be detected by simple surface-survey procedures.

2. All of these sites potentially contain important cultural-historical and/or settlement-subsistence data.

3. None of these sites was examined in sufficient detail to permit a conclusive statement to be made concerning adverse effects and/or scientific importance (conditions 1 and 2).

### Site Ranking

A method was devised to rank into priorities the work recommended for sites on government lands. Three



criteria were used to rank each site; these were the apparent cultural significance, the elevation, and the location of the site in relation to Tuttle Creek project features. These criteria are explained below:

1. Sites were assigned a numerical value of cultural significance. This value, ranging from 1-4, is an evaluation of the theoretical importance of a site in cultural-historical and/or settlement-subsistence studies. A value of 4 was assigned to those sites that appear to be most significant; while those of lesser significance were assigned a value of 3, 2, or 1.

Sites with diagnostic artifacts from 2 or more culture-historical periods were given a value of 3 or 4. These sites may contain a stratigraphic sequence which would be of importance in defining better the culture-history of the Tuttle Creek area. Diagnostic artifacts were not the only criteria used for evaluation, however. Others include the type, amount, and horizontal extent of cultural material.

2. Elevation is a critical variable; it reflects the degree to which a site is endangered by inundation. It is evident that sites at lower elevations are more frequently flooded than those at higher elevations. Thus a numerical value between 1 and 4 was assigned to each site, based on the following classes:

- 4. Elevation 1080 or lower
- 3. 1081-1090
- 2. 1091-1100
- 1. 1101 and above

3. Finally, sites were evaluated in terms of the Tuttle Creek project features they were likely to be affected by. A numerical value between 1 and 4 was assigned to a site according to the land use area it was located in. This value is intended to reflect the degree to which a site is threatened by human activities. A site located in a public use area, for example, was assigned a higher value than a site in a wildlife management area. Sites in public use areas would more likely be affected by land alteration and destructive human activities. The numerical value assigned to sites and the land use areas they represent are:

- 4. Developed public use areas and lands licensed to Fort Riley and Kansas State University.
- 3. Other priority one areas. These areas are adjacent to the present public use areas and provide for future expansion of the public use areas.
- 2. Priority 2 or 3 areas. These are areas leased or available for lease by non-profit organizations or agencies.

# 1. Wildlife management areas.

A maximum total value of 12 and a minimum total value of 3 were possible when all three criteria (cultural significance, elevation, and land use areas) were combined. Data for the sites are presented in Table 7. These sites are rearranged in the Management Program section, so that sites with the highest total value are recommended to be investigated first, with those of lower values being recommended in descending order.

Table 7. Data Used and Totals Obtained in the Ranking Procedure.

Site	Cultural Value	Elevation	Value	Land Use Area	Value	Total
14MH1	4	1100	2	Wildlife	1	7
14MH25	1	1100	2	Wildlife	1	4
14MH26	2	1100	2	Wildlife	1	5
14MH28	3	1100	2	Wildlife	1	6
14MH29	3	1100	2	Wildlife	1	6
14MH30	1	1120	1	Wildlife	1	3
14MH31	1	1120	1	Wildlife	1	3
14MH34	1	1110	1	Wildlife	1	3
14MH38	2	1110	1	Wildlife	1	4
14MH43	1	1120	1	Wildlife	1	3
14MH60	1	1100	2	Wildlife	1	4
14PO1	4	1090	3	Wildlife	1	8
14PO2	3	1090	3	Wildlife	1	7
14PO3	3	1090	3	Wildlife	1	7
14PO6	3	1100	2	Wildlife	1	6
14PO7	2	1100	2	Wildlife	1	5
14PO8	1	1100	2	Wildlife	1	4
14PO20	3	1070	4	Carnahan Creek	4	11
14PO22	1	1100	2	Wildlife	1	4
14PO64	3	1090	3	Priority One	3	9
14PO65	4	1100	2	Garrison	4	10
14PO66	2	1100	2	Garrison	4	8
14PO353	1	1100	2	Priority One	3	6
14PO354	1	1080	4	Garrison	4	9
14PO355	1	1080	4	Garrison	4	9
14PO357	2	1090	3	Priority One	3	8
14PO358	4	1080	4	Priority One	3	11

Table 7. (Continued)

Site	Cultural Value	Elevation	Value	Land Use Area	Value	Total
14P0362	3	1080	4	Priority One	3	10
14P0363	2	1090	3	Priority One	3	8
14P0364	4	1080	4	Priority One	3	11
14P0365	4	1090	3	Carnahan Creek	4	11
14P0366	4	1090	3	Carnahan Creek	4	11
14P0367	1	1090	3	Carnahan Creek	4	8
14P0370	2	1090	3	Randolph	4	9
14P0371	3	1090	3	Priority One	3	9
14P0372	2	1080	4	Priority One	3	9
14P0373	3	1080	4	Priority One	3	10
14P0374	2	1090	3	Randolph	4	9
14P0375	2	1080	4	Randolph	4	10
14P0376	1	1080	4	Priority One	3	8
14P0377	1	1080	4	Randolph	4	9
14RY3	2	1100	2	Wildlife	1	5
14RY4	2	1090	3	Wildlife	1	6
14RY5	2	1100	2	Wildlife	1	5
14RY6	4	1070	4	Wildlife	1	9
14RY7	2	1080	4	Priority One	3	9
14RY8	4	1090	3	Wildlife	1	8
14RY9	2	1100	2	Wildlife	1	5
14RY15	1	1090	3	Priority One	3	7
14RY16	1	1070	4	Fort Riley	4	9
14RY17	3	1070	4	Baldwin Creek	4	11
14RY18	4	1080	4	Baldwin Creek	4	12
14RY326	1	1080	4	Fancy Creek	4	9
14RY333	2	1100	2	Fancy Creek	4	8
14RY334	1	1070	4	Wildlife	1	6

Table 7. (Continued)

Site	Cultural Value	Elevation	Value	Land Use Area	Value	Total
14RY335	1	1070	4	Priority One	3	8
14RY336	1	1070	4	Priority One	3	8
14RY338	4	1080	4	Priority One	3	11
14RY339	4	1070	4	Baldwin	4	12
14RY340	4	1080	4	Fort Riley	4	12
14RY341	2	1080	4	Priority One	3	9
14RY342	2	1080	4	Priority One	3	9
14RY343	1	1080	4	Priority One	3	8
14RY344	1	1080	4	Priority One	3	8
14RY345	1	1090	3	Priority One	3	7
14RY346	2	1090	3	Baldwin	4	9
14RY347	2	1080	4	Priority One	3	9
14RY348	2	1080	4	Priority One	3	9
14RY350	1	1080	4	Fort Riley	4	9
14RY351	1	1090	3	Fort Riley	4	8
14RY352	2	1090	3	Wildlife	1	6
14RY353	3	1080	4	Wildlife	1	8
14RY354	1	1080	4	Wildlife	1	6
14RY355	3	1090	3	Wildlife	1	7
14RY356	3	1090	3	Wildlife	1	7
14RY357	3	1090	3	Wildlife	1	7
14RY358	2	1080	4	Priority One	3	9
14RY359	1	1080	4	Priority One	3	8
14RY360	1	1080	4	Wildlife	1	6
14RY361	1	1080	4	Priority One	3	8
14RY362	1	1080	4	Priority One	3	8
14RY363	3	1080	4	Priority One	3	10
14RY364	1	1080	4	Priority One	3	8
14RY366	1	1100	2	Wildlife	1	4

## MANAGEMENT PROGRAM

Recommended Archaeological Work

A comprehensive plan is proposed for the investigation of known archaeological sites on government-owned lands. Previous work conducted on these sites consisted mostly of the identification of the cultural resources. The work recommended here will be directed toward evaluation, and falls under the definition of a "cultural resources survey." This is:

an intensive, on-the-ground survey and testing of an area sufficient to permit determination of the number and extent of the resources present, their scientific importance, and the time factors and cost of preserving, recovering, or otherwise mitigating adverse effects on them (Corps of Engineers 1975:2).

Further work is recommended for 84 of the 101 sites on government-owned lands. Four sites, 14P012, 14P013, 14P014, and 14RY10 were destroyed. Another 12 sites are currently entirely inundated by the multi-purpose pool; no work is recommended for these at this time. One site (14P0356) appears to be, rather than a site, cultural material brought in with road gravel. Thus, 84 sites should be investigated further; these are listed in Table 8 according to the ranking procedure explained above.

Table 8. Priority of Sites for Years 1978-1983.

Site	Test	Preliminary Test	Re-survey
14P01*			
14P020		X	
14P0358	X		
14P0364	X		
14P0365	X		
14P0366	X		
14RY17		X	
14RY18	X		
14RY338	X		
14RY339		X	
14RY340	X		
14P064		X	
14P065		X	
14P0354		X	
14P0355		X	

Table 8. (Continued)

Site	Test	Preliminary Test	Re-survey
14P0362		X	
14P0370		X	
14P0371		X	
14P0372		X	
14P0373		X	
14P0374		X	
14P0375		X	
14RY363		X	
14P0377		X	X
14RY6	X		
14RY7		X	
14RY16		X	
14RY326		X	
14RY341		X	X
14RY342		X	X
14RY346		X	X
14RY347		X	
14RY348		X	
14RY350		X	
14RY358		X	
14P066		X	
14P0357		X	
14P0363		X	
14P0367		X	
14P0376		X	
14RY8	X		
14RY333		X	
14RY335		X	X
14RY336		X	X
14RY343		X	X
14RY344		X	X
14RY351		X	
14MH1			X
14P02	X		
14P03	X		
14RY15		X	
14RY345		X	X
14RY353		X	
14RY355	X		
14RY356	X		
14RY357	X		
14RY359		X	
14RY361		X	
14RY362		X	
14RY364		X	
14MH26		X	

Table 8. (Continued)

Site	Test	Preliminary Test	Re-Survey
14MH28	X		
14MH29		X	X
14P06	X		
14P07		X	X
14P0353		X	
14RY3		X	X
14RY4		X	
14RY334		X	
14RY352		X	
14RY354		X	
14RY360		X	
14MH25		X	X
14MH30		X	
14MH31		X	
14MH34		X	X
14MH38		X	
14MH43		X	X
14MH60		X	
14P08		X	
14P022		X	X
14RY5		X	X
14RY9		X	
14RY366		X	X

\*Given a higher priority that its value in the ranking procedure; see comments in the Recommended Archaeological Work section.

Further salvage excavations are necessary at the Coffey site (14P01) because the Big Blue River is rapidly eroding into the site. This site is one of the most spectacular stratified Archaic sites in the Plains area, with at least 12 sequent occupations at Locality I and five more at Locality II. Salvage efforts to date have secured samples of significant size from three cultural horizons (Schmits 1976), but larger samples are required to establish the nature of the occupations at the other horizons. Salvage excavations at both Locality I and Locality II are recommended, and should be conducted as soon as possible. In addition, further analyses of Coffey site materials on hand should be conducted. Additional laboratory analyses of previously-excavated materials could be used to determine the kinds of data needed to supplement the small samples already obtained from the various horizons. Thus, the results of the laboratory analysis could be used to guide future salvage excavations at the Coffey site.



Survey work is recommended for two large areas of government property. These areas exhibit a lower site density than other areas. One extends from the Pottawatomie County line southward to Fancy Creek State Park on the western side of the lake. The other extends from the Pottawatomie County line southward to Randolph State Park on the eastern side of the lake.

Sites on flowage easement properties are probably less endangered than those on government lands. The most serious threat to these sites appears to be agricultural activities. At high water periods, however, flood waters from the lake probably do have adverse effects on flowage easement sites. For this reason, it is recommended that known sites be revisited and evaluated to determine adverse effects and significance.

A systematic survey of flowage easement properties has not yet been accomplished. Therefore, a survey of these lands for previously unrecorded sites is recommended. During this survey, the 31 recorded archaeological sites should be revisited and evaluated. Preliminary testing will probably be required for most sites. This survey should begin in 1978 or 1979.

#### National Register of Historic Places

The Coffey site (14P01) has been nominated to the National Register by the Kansas Historic Sites Board of Review (Dr. Carlyle Smith, personal communication).

Materials excavated from the Bean Hollow site (14MH1) indicate that this site would pass the criteria for inclusion in the National Register. However, this site has not been visited since 1957 and the decision to nominate it to the National Register should be postponed until the site has been field-checked.

Based on the present data, 16 other sites are potential National Register candidates (Table 9). All of these sites are recommended for testing, and the decision to nominate any one of them should await the results of the tests. Testing is needed to determine if the sub-surface nature of these sites is as significant as the surface materials seem to suggest.

Table 9. Potential National Register Sites.

14MH1	14P0358	14RY18
14MH28	14P0364	14RY338
14P01	14P0365	14RY340
14P02	14P0366	14RY355
14P03	14RY6	14RY356
14P06	14RY8	14RY357

### Historic Study

Although Solecki (1953:3-5) briefly summarized the history of the Tuttle Creek area, a comprehensive study of the local history was not accomplished until 1977, when such an investigation was supported by the U.S. Army Corps of Engineers, Kansas City District (M. Johnson, U.S. Army Corps of Engineers, Kansas City District, personal communication). The results of the study will need to be incorporated in the recommendations to the National Register of Historic Places for Tuttle Creek Lake.

### Historic Architecture

It is probable that much of the historic architecture of the Tuttle Creek area was destroyed during the construction of the lake. Therefore, a literature search for previous structures should be conducted. Field study is recommended for any remaining habitation structures and other items of interest such as fence styles, bridges, etc. This study should be conducted in 1980.

### Concluding Remarks

The first priority in Tuttle Creek is the identification of significant archaeological sites. Once these have been identified and tested, archaeologists can make decisions concerning the future of these sites. Salvage may be required on some sites, while representative samples obtained from test excavations may be sufficient for others.

It is hoped that the future examination, testing, and excavation of these sites will greatly enhance our scant knowledge of the prehistoric inhabitants of the Tuttle Creek area. The excavation of sub-surface, in situ, cultural remains, along with some radiocarbon determinations, will enable archaeologists to better define the chronological periods in this area. With greater chronological controls archaeologists can begin to define synchronous settlement systems and perhaps special functions of sites within those systems.

Little research has been conducted on the historic occupation of the Tuttle Creek area. The recommended historical and historic architectural studies should fulfill that need.

## REFERENCES CITED

- Barker, William T.  
 1969 The Flora of the Kansas Flint Hills. The University of Kansas Science Bulletin, Vol. 48, No. 14, pp. 525-584. Lawrence.
- Clewlow, C. W. Jr., P. S. Hallihan, and R. D. Ambro  
 1971 A Crisis in Archaeology. American Antiquity, Vol. 36, No. 4, pp. 472-473. Washington, D.C.
- Corps of Engineers  
 1968 Tuttle Creek Reservoir, Design Memorandum 18C, Master Plan. Kansas City District.  
 1975 Draft of "Planning for Identification and Administration of Cultural Resources." Department of the Army, Office of the Chief of Engineers, Washington, D. C.
- Cumming, R. B.  
 1958 Archaeological Investigations at the Tuttle Creek Dam, Kansas. River Basin Survey Papers, No. 10. Bureau of American Ethnology, Bulletin 169. Washington.
- Davis, H. A.  
 1972 The Crisis in American Archaeology. Science, Vol. 175, No. 4019, pp. 267-272. Washington, D. C.
- Flora, S. D.  
 1948 Climate of Kansas. Report of the Kansas State Board of Agriculture, Quarterly Reports, Vol. 67, No. 285. Topeka.
- Garrison, S. D.  
 1975 A Qualitative Model for Inundation Studies in Archaeological Research and Resource Conservation: An Example from Arkansas. Plains Anthropologist, Vol. 20-70.
- Johnson, Alfred E.  
 1973 Archaeological Investigations at the Budenbender Site, Tuttle Creek Reservoir, North-Central Kansas, 1957. Plains Anthropologist, Vol. 18, No. 62, pts. 1-2.
- Kelly, Jane H.  
 1966 Archaeological Investigations in the Tuttle Creek Reservoir Area. MS, Midwest Archaeological Center, National Park Service, Lincoln.

King, Thomas F.

- 1975 Cultural Resource Law and the Contract Archaeologist. Prepared by Archaeological Resource Management Service, New York Archaeological Council. Buffalo and Albany.

Leaf, Gary

- 1976 Shoreline Survey of Lake Sakakawea: The Badlands in Southern Dunn County, North Dakota. Report Submitted to the Department of the Interior, National Park Service, Interagency Archaeological Services, Office of Archaeological and Historic Preservation. Denver.

Luchterhand, Kubet

- 1970 Early Archaic Projectile Points and Hunting Patterns in the Lower Illinois Valley. Illinois Valley Archaeological Program Research Papers, No. 3. Springfield.

O'Brien, Patricia J. et al.

- 1973 A Most Preliminary Report of the Coffey Site, 14P01: A Plains Archaic Site in Pottawatomie County. Kansas Anthropological Association Newsletter 18 (5): 1-38.

Schmits, Larry J.

- 1976 The Coffey Site: Environment and Cultural Adaptation at a Prairie Plains Archaic Site. Report submitted to Department of the Interior, National Park Service, Interagency Archaeological Services, Office of Historic Preservation, Denver.

Schoewe, W. H.

- 1949 The Geography of Kansas, Part II, Physical Geography. Transactions of the Kansas Academy of Science, Vol. 52, No. 3, pp. 261-333.

Solecki, R. S.

- 1953 Appraisal of the Archaeological and Paleontological Resources of the Tuttle Creek Reservoir, Marshall, Pottawatomie, and Riley Counties, Kansas. Mimeographed report prepared by Smithsonian Institution, River Basin Surveys, Lincoln.

Wedel, Waldo R.

- 1959 An Introduction to Kansas Archaeology. Bureau of American Ethnology, Bulletin 174. Washington.

## APPENDIX

Specific Information for Archaeological Sites  
on Government Lands14MH1  
(map 3)

Location: E 1/2 of the SW 1/4 of Sec. 16, T5S, R8E.

Previous Investigations: In 1952, Solecki and Shippee located this site and collected a surface grab sample. A field party from the University of Kansas tested the site in 1957.

Description: This site is on an oval-shaped rise approximately 1/4 mile from the junction of Bean Hollow Creek and the Black Vermillion River. Some damage occurred to the site when the farmer leveled the land. At the time of testing, the site was planted in corn.

Tests in 1957 were concentrated near the center of the rise, since this area contained the highest concentration of surface material. Intensive excavation and testing were conducted in this 50 X 50 foot area. Other areas outside of the center of concentration were tested by means of four 3 foot square pits.

Cultural Affiliation: Excavated cultural material indicated Archaic, Early Ceramic, and Middle Ceramic components.

Recommendation: Tests indicate that 14MH1 is a significant site. Efforts should be made to protect or salvage the remaining portions. It is recommended that the site be field-checked to determine the most appropriate course of action.

14MH25  
(map 4)

Location: SW 1/4 of the SE 1/4 of Sec. 12, T5S, R7E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: Chert chips, flakes, and a few artifacts were discovered on an area of slight knolls planted in alfalfa. Site size was estimated to be about three acres.

Cultural Affiliation: No diagnostic artifacts were recovered, so no cultural affiliation can be assigned.

Recommendation: Crop cover precluded a thorough examination of the area. Re-survey and preliminary testing are recommended.

14MH26  
(map 3)

Location: NE 1/4 of the NE 1/4 of Sec. 13, T5S, R7E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: The site is situated on a high terrace of Game Fork Creek that was planted in corn at the time of the survey. Site size was estimated to be about three acres.

Cultural Affiliation: One corner-notched projectile point was recovered. Thus, an Early Ceramic affiliation is suggested for this site.

Recommendation: Preliminary testing is recommended.

14MH28  
(map 3)

Location: SW 1/4 of the SW 1/4 of Sec. 18, T5S, R8E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: Chert debris, stones, and artifacts were scattered over a cornfield which slopes eastward toward the Big Blue River. Material covered about five acres.

Cultural Affiliation: An Early Ceramic cultural affiliation is suggested, based on three diagnostic projectile points.

Recommendation: Testing is recommended.

14MH29  
(map 3)

Location: NW 1/4 of the NW 1/4 of Sec. 19, T5S, R8E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: The site is situated at the base of a slope which extends from the hills on the west to the Big Blue River floodplain. Chips, flakes, and artifacts were observed over 1/4 acre of a small cornfield.

Cultural Affiliation: A total of eleven body sherds, nine of which are cord-marked, were recovered. On the basis of these sherds, a Middle Ceramic affiliation is assigned for 14MH29.

Recommendation: The Smithsonian team suggested that the grassland high up the slope should be surveyed. Re-survey and preliminary testing are recommended.

14MH30  
(map 3)

Location: NW 1/4 of the NW 1/4 of Sec. 30, T5S, R8E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: Chips and a few artifacts were found on the slope between the county road and the railroad west of the Big Blue River. The site covered about one acre of a cornfield.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14MH31  
(map 3)

Location: NW 1/4 of the SW 1/4 of Sec. 30, T5S, R8E.

Previous Investigations: Solecki and Shippee located this site in 1952; no materials were collected.

Description: Lithic debris was observed on a bench of the slope leading from the hills on the west to the Big Blue River.

Cultural Affiliation: Unknown.

Recommendation: Crop cover precluded a thorough examination of the area. Re-survey and preliminary testing are recommended.

14MH34  
(map 3)

Location: SW 1/4 of the SW 1/4 of Sec. 31, T5S, R8E.

Previous Investigations: Solecki and Shippee located this site in 1952. Material collected consists of only three fragmentary blanks.

Description: Flakes and a few artifacts were scattered on a terraced wheat field sloping southeastward to the railroad tracks. Material covered several acres.

Cultural Affiliation: Unknown.

Recommendation: Crop cover precluded a thorough examination of the area. Resurvey and preliminary testing are recommended.

14MH38  
(map 4)

Location: NW 1/4 of the NW 1/4 of Sec. 7, T8E, R5S.

Previous Investigations: A surface grab sample was collected in 1952.

Description: Chips, flakes, and artifacts were found in the cornfield on the river terrace east of the Big Blue River and south of Highway 13. Material covered one acre.

Cultural Affiliation: Diagnostic artifacts recovered include one smooth body sherd and one small triangular projectile point. On the basis of these two pieces, a Middle Ceramic affiliation is assigned.

Recommendation: Preliminary testing is recommended.

14MH43  
(map 3)

Location: NE 1/4 of the NE 1/4 of Sec. 20, T5S, R8E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: Chips, flakes, and broken pebbles were scattered on a sloping area extending from the low hills on the east to the Black Vermillion River floodplain. Material covered about two acres.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14MH60  
(map 4)

Location: NE 1/4 of the NW 1/4 of Sec. 16, T5S, R8E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: Scattered chips and stone were discovered on a large terrace north of the Black Vermillion River and east of Corn Dodger Creek. The area was plowed at the time of survey.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14P01  
(map 3)

Location: NW 1/4 of the NE 1/4 of Sec. 6, T6S, R8E.

Previous Investigations: Solecki and Shippee collected a surface grab sample in 1952. In 1957, a field crew from the University of Kansas tested the site. Field parties from the University of Kansas have conducted major excavations during the 1972 through 1975 field seasons.

Description: The site consists of several acres of lithic debris and artifacts on a gradual slope leading to the Big



Blue River. Intensive excavation was concentrated at two localities adjacent to the Big Blue River.

Cultural Affiliation: A series of Archaic occupations is indicated from excavated material. A Folsom point, suggesting a Paleo-Indian occupation, and Early Ceramic materials were also recovered.

Recommendation: More excavation is recommended for this important site.

14P02  
(map 3)

Location: Center of Sec. 6, T6S, R8E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: This site is situated on a terrace remnant of the Big Blue River. The site is rather large, covering about 15 acres of wheat and corn fields.

Cultural Affiliation: Diagnostic projectile points include a Scallorn-like point, and two corner-notched types. All three suggest an Early Ceramic cultural affiliation.

Recommendation: Testing is recommended.

14P03  
(map 3)

Location: NE 1/4 of the SW 1/4 of Sec. 6, T6S, R8E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: This site consists of lithic and ceramic material on a gentle slope northeast of the junction of Four Mile Creek and Spring Creek. The site covers about four acres of cultivated land.

Cultural Affiliation: Diagnostic artifacts include fifteen body sherds and three collared rim sherds. A Middle Ceramic affiliation is indicated.

Recommendation: Solecki (1953:15) recommended extensive testing for this site. No such tests were ever conducted. Testing is recommended.

14P06  
(map 3)

Location: SE 1/4 of the NW 1/4 of Sec. 22, T6S, R7E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: Chert chips and flakes were scattered on the high terrace just west of State Highway 13. The site covered one acre and was planted in alfalfa at the time of survey.

Cultural Affiliation: A total of 57 potsherds were recovered. These indicate a Middle Ceramic cultural affiliation.

Recommendation: Testing is recommended.

14P07  
(map 3)

Location: S edge of the NW 1/4 of Sec. 22, T6S, R7E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: Chert chips and other stone objects were scattered over the bare spots of a pasture east of the Big Blue River. The site covered one acre.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Dense grass cover precluded a thorough examination of the area. Re-survey and preliminary testing are recommended.

14P08  
(map 3)

Location: SW 1/4 of the SW 1/4 of Sec. 22, T6S, R7E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: Chert chips and flakes were observed in two acres of a plowed field east of the Big Blue River and 100 yards west of State Highway 13.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14P020  
(map 1)

Location: NW 1/4 of the NE 1/4 of Sec. 27, T8S, R7E.

Previous Investigations: A surface grab sample was collected in 1952. The 1970 survey crew revisited the area and assigned two new site numbers (14P0368, 14P0369). They suggested however, that PO 368 and PO369 were eroded out material from the almost totally inundated 14P020.

Description: In 1970, materials were scattered on the shoreline and on two sandy beach areas.

Cultural Affiliation: A Riley Cord-roughened and five plain potsherds were recovered. Based on these sherds, Early Ceramic and Middle Ceramic cultural affiliations are suggested.

Recommendation: Preliminary testing is recommended.

14P022  
(map 3)

Location: W edge of NE 1/4 of Sec. 22, T6S, R7E.  
Previous Investigations: This site was located by Solecki and Shippee. No material was collected.  
Description: Chert chips, flakes, and stone were observed on the high terrace east of the Big Blue River. State Highway 13 borders the site on the west.  
Cultural Affiliation: Unknown.  
Recommendation: Re-survey and preliminary testing are recommended.

14P064  
(map 1)

Location: NW 1/4 of the SE 1/4 of Sec. 17, T8S, R7E.  
Previous Investigations: A surface grab sample was collected in 1970.  
Description: The site is situated on a sand covered beach at the base of a hill.  
Cultural Affiliation: No diagnostic artifacts were recovered.  
Recommendation: Evidence suggests that material is being washed out of the higher ground and then redeposited by the lake. Preliminary testing is recommended.

14P065  
(map 2)

Location: NW 1/4 of the SW 1/4 of Sec. 8, T8S, R7E.  
Previous Investigations: The 1970 crew located this site. A surface grab sample and minor testing was accomplished at that time.  
Description: The site is situated near the boat ramp in Garrison State Park. Chert debris and artifacts were scattered along the beach. It was suggested that material was washing out of the slumping banks and deposited on the beach below.  
Cultural Affiliation: Three corner-notched Early Ceramic projectile points were recovered.  
Recommendation: Preliminary testing is recommended in the area above the slumping banks.

14P066  
(map 2)

Location: SW 1/4 of the NW 1/4 of Sec. 8, T8S, R7E.  
Previous Investigations: A surface grab sample was collected in 1970.

Description: This site consists of a slumping shoreline, and two other areas north of the Garrison boat ramp. One test pit was dug about 20 feet from the shore to a depth of 8-10 inches. The pit yielded a few utilized flakes and irregular waste.

Cultural Affiliation: No diagnostic artifact were recovered.

Recommendation: Preliminary testing is recommended to determine the exact nature of this site.

14P0353  
(map 1)

Location: SE 1/4 of the SW 1/4 of Sec. 8, T8S, R7E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: Material was concentrated in an area measuring 150 x 30 feet and approximately 90 x 95 feet from the shoreline.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14P0355  
(map 2)

Location: SW 1/4 of SW 1/4 of Sec. 8, T8S, R7E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: Chert debris and artifacts were discovered on a gently sloping surface composed of recent silts.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14P0356  
(map 1)

Location: SW 1/4 of the NE 1/4 of Sec. 12, T9S, R7E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: The site is situated on a knoll just north of the picnic area in Spillway State Park. A chert gravel road runs through the site.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Survey notes suggest that the lithic material recovered is foreign to the site. No further work is recommended.

14P0357  
(map 1)

Location: SW 1/4 of the SW 1/4 of Sec. 8, T8S, R7E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: The site is situated south of a gravel bar between 14P0353 and 14P065. Heavy wave action is eroding the site. Chert flakes, waste, and tools were scattered over the area.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14P0358  
(map 1)

Location: SW 1/4 of the NE 1/4 of Sec. 17, T8S, R7E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: Cultural material including more than 1000 pieces of chert debris was found on a sand covered, crescent-shaped area. Severe wave action has caused intense erosion. The site is covered by water to an elevation of 1080 during high water periods.

Cultural Affiliation: An Early Archaic affiliation is assigned to this site, based on the recovery of one Agate Basin-like projectile point.

Recommendation: Evidence suggests that the cultural material found on the beach was washed down from the higher slopes. Testing is recommended to determine the exact nature of the site.

14P0362  
(map 2)

Location: NW 1/4 of the NE 1/4 of Sec. 36, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: The site is situated on a flat, sand-covered projection south of Randolph State Park. Cultural material was found scattered over the surface with concentrations distributed along a north-south axis through the center.

Cultural Affiliation: One large, side-notched projectile point was recovered. This point is similar to the Thebes type described by Luchterhand (1970:31). Therefore, an Early Archaic affiliation is suggested.

Recommendation: Preliminary testing is recommended.

14P0363  
(map 2)

Location: SE 1/4 of the NE 1/4 of Sec. 36, T7S, R6E.

Previous Investigations: A surface-grab sample was collected in 1970.

Description: Cultural material was scattered over a sand-deposited area.

Cultural Affiliation: An Archaic cultural affiliation is suggested, based on one projectile point base.

Recommendation: Preliminary testing is recommended.

14P0364  
(map 2)

Location: NE 1/4 of the SE 1/4 of Sec. 36, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: The site consists of a flat, wind and wave eroded area. Chert debris and artifacts were scattered by the water.

Cultural Affiliation: Three cultural affiliations are suggested by projectile point types. Two Archaic, one Early Ceramic Scallorn, and one triangular Middle Ceramic point, were recovered.

Recommendation: Testing is recommended.

14P0365  
(map 1)

Location: NW 1/4 of the SE 1/4 of Sec. 22, T8S, R7E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: The site is situated on the midsection of a hill, north of the boat ramp in Carnahan Park. A road runs through the site. Cultural material was eroding out of small channels in closely spaced concentrations in the erosion channels. The site measures 200 x 65 feet.

Cultural Affiliation: One projectile point was recovered, but it is not diagnostic enough to type. A total of 58 potsherds indicate an Early Ceramic affiliation.

Recommendation: Testing is recommended.

14P0366  
(map 1)

Location: SE 1/4 of the NE 1/4 of Sec. 22, T8S, R7E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: The site is situated on a large ridge running parallel to Booth Creek, in the Carnahan Creek Public Use Area. The site is bounded by park roads to the south and west. A dirt road runs through the site. Lithic debris and artifacts were scattered throughout the area.

Cultural Affiliation: Two Lamoka-like projectile points were recovered, suggesting an Archaic cultural affiliation.

Recommendation: The 1970 survey crew recommended excavation for this site. It is suggested here that this site be tested first, to determine the subsurface nature.

14P0367

(map 1)

Location: Center NE 1/4 of Sec. 27, T8S, R7E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: The site consists of a beach area on the southern boundary of Carnahan Recreation Area. Lithic debris and tools were scattered over an area measuring 600 x 30 feet.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14P0370

(map 2)

Location: NE 1/4 of the SW 1/4 of Sec. 13, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: The site is situated on a gradual slope in the picnic area of Randolph Park. Lithic debris and artifacts were scattered over the grass and weed covered site. Wave action from the lake is eroding into the site.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14P0371

(map 1)

Location: Center of NE 1/4 of Sec. 1, T9S, R7E.

Previous Investigations: The 1970 crew located this site and collected a surface grab sample. In addition, four test pits were dug.

Description: The site is situated on the right bank of McIntire Creek, extending from the water to the tree line. Lithic debris and artifacts were scattered on the surface.  
Cultural Affiliation: An Early Ceramic affiliation is suggested based on one corner-notched projectile point.  
Recommendation: Further preliminary testing is recommended, since the results of the earlier tests were inconclusive.

14P0372  
(map 1)

Location: NE 1/4 of the NE 1/4 of Sec. 1, T9S, R7E.  
Previous Investigations: A surface grab sample was collected in 1970.  
Description: The site is situated on the right bank of McIntire Creek. Lithic debris and artifacts were scattered over a flat, muddy area.  
Cultural Affiliation: An Early Ceramic cultural affiliation is suggested, based on one projectile point.  
Recommendation: Preliminary testing.

14P0373  
(map 1)

Location: NE 1/4 of the SE 1/4 of Sec. 1, T9S, R7E.  
Previous Investigations: A surface grab sample was collected in 1970.  
Description: The site consists of a long beach flat on the east side of McIntire Creek. Lithic debris and artifacts were scattered from the water to the tree line on the west.  
Cultural Affiliation: Three archaic, and one Middle Ceramic projectile points were recovered.  
Recommendation: Preliminary testing is recommended.

14P0374  
(map 2)

Location: SE 1/4 of the SW 1/4 of Sec. 13, T7S, R6E.  
Previous Investigations: A surface grab sample was collected in 1970.  
Description: Cultural material was found along the shore and on the beach near the parking area in the northern portion of Randolph State Park.  
Cultural Affiliation: One base of an Archaic projectile point and one Early Ceramic corner-notched type were recovered.  
Recommendation: Preliminary testing is recommended.



14P0375  
(map 2)

Location: SE 1/4 of the SW 1/4 of Sec. 13, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: This site consists of a beach area east of the Randolph parking lot and picnic area. Lithic debris and artifacts were scattered over the sand.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Re-survey is recommended. Preliminary testing is also recommended for the portion of the site on the slight slope above the beach area.

14P0376  
(map 1)

Location: SE 1/4 of the NE 1/4 of Sec. 1, T9S, R7E.

Previous Investigations: The 1970 crew located this site and collected a surface grab sample.

Description: The site consists of a long beach flat that is bisected by a small creek. Material was scattered on the beach and over a gravel bar.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14P0377  
(map 2)

Location: SE 1/4 of the SW 1/4 of Sec. 13, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: This site consists of a very small area west of the picnic area in Randolph State Park.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Re-survey and preliminary testing are recommended.

14RY3  
(map 3)

Location: SE 1/4 of the SE 1/4 of Sec. 10, and SW 1/4 of the SW 1/4 of Sec. 11, T6S, R7E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: Flint debris and artifacts were scattered on the plowed slope extending from the county road to the railroad tracks east of the Big Blue River. Material covered 2 acres.

Cultural Affiliation: An Early Ceramic affiliation is suggested, based on one corner-notched projectile point.

Recommendation: Crop cover precluded a thorough examination of the area. Re-survey and preliminary testing are recommended.

14RY4  
(map 3)

Location: SE 1/4 of the NW 1/4 of Sec. 11, T6S, R7E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: Flint debris and artifacts were scattered on the surface of a terrace above Timber Creek. The site was estimated to be about 2 acres, and was planted in corn when surveyed.

Cultural Affiliation: On the basis of one side-notched projectile point, the site is assigned an Archaic affiliation.

Recommendation: Preliminary testing is recommended.

14RY5  
(map 3)

Location: Center of the NW 1/4 of Sec. 11, T6S, R7E.

Previous Investigations: Solecki and Shippee located this site in 1952. Unfortunately, they were ordered away and escorted from the land, and could not complete the investigation of this site.

Description: Lithic debris and artifacts were observed on the surface of a terrace on the south bank of Timber Creek.

Cultural Affiliation: One notched chert axe was recovered. Tentatively, an Archaic cultural affiliation is assigned to this site.

Recommendation: This site is situated on U. S. Government Land; re-survey and preliminary testing are recommended.

14RY6  
(map 2)

Location: SW 1/4 of the NW 1/4 of Sec. 28, T6S, R7E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: Cultural material was scattered on the creek and river terrace along the east bank of Swede Creek. Debris covered several acres.

Cultural Affiliation: Three Archaic, one Early Ceramic and two Middle Ceramic projectile point types were recovered.

Recommendation: Solecki (1953:29) suggested that this site be tested; no such tests were ever conducted. Testing is recommended for this potentially important site.

14RY7  
(map 2)

Location: NE 1/4 of the NE 1/4 of Sec. 28, T6S, R7E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: Chipping debris was scattered in a pasture and plowed field west of the Big Blue River. Material covered about three acres.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14RY8  
(map 2)

Location: NE 1/4 of the NW 1/4 of Sec. 9, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: Flint chips, pottery sherds, and daub were scattered in a barn yard and adjacent fields at the junction of Walnut and Fancy Creeks. Material covered two acres or more.

Cultural Affiliation: Diagnostic artifacts include 22 body sherds; one small, triangular, unnotched point. A middle Ceramic affiliation is assigned, based on these artifacts.

Recommendation: Solecki felt that this site was very promising. He recommended excavation (Solecki 1959:29). It is now recommended that this site be tested first.

14RY9  
(map 2)

Location: NW 1/4 of the SW 1/4 of Sec. 9, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: Flint chips, stone, and tools were scattered in a plowed field east of Walnut Creek. Material covered about two acres.

Cultural Affiliation: One fragment of a corner-notched point suggests an Early Ceramic occupation.

Recommendation: Preliminary testing is recommended.

14RY15

(map 2)

Location: SW 1/4 of the NW 1/4 of Sec. 26, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: A few flint chips and flakes were observed in a plowed field that slopes from the hills on the west to State Highway 13. Material covered two acres.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14RY16

(map 2)

Location: E edge of the NW 1/4 of Sec. 35, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1952.

Description: A few flint chips and flakes were scattered on a plowed slope extending from State Highway 13 eastward to the Big Blue River. Material covered one acre.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14RY17

(map 2)

Location: NE 1/4 of the SW 1/4 of Sec. 1, T8S, R6E.

Previous Investigations: Solecki and Shippee located this site and collected a surface grab sample. The 1970 survey crew re-visited the site and conducted minor testing.

Description: In 1970, the site consisted of a scatter of material on the north side of a peninsula located just south of the Baldwin boat ramp. The area was bulldozed and disturbed by construction activities. A series of test pits yielded no cultural materials.

Cultural Affiliation: Four Archaic-type projectile points were recovered.

Recommendation: Evidence suggests that this site was at least in part, destroyed by the lake and construction activities. This site, however, should be examined further. Preliminary testing is recommended.

14RY18  
(map 2)

Location: SW 1/4 of the SW 1/4 of Sec. 1, T8S, R6E.  
Previous Investigations: Solecki and Shippee located this site and collected a surface grab sample. The 1972 crew re-visited the site, this time assigning a new site number (RY356).

Description: In 1970, the site was described as a flat, mud beach, on which lithic debris and artifacts were scattered.

Cultural Affiliation: An Early Archaic affiliation is suggested, based on one projectile point base.

Recommendation: Evidence suggests that some of RY18 was destroyed by the lake. Tests are recommended to determine the exact nature of the disturbance.

14RY326  
(map 2)

Location: SE 1/4 of the NW 1/4 of Sec. 14, T7S, R6E.  
Previous Investigations: A surface-grab sample was collected in 1970.

Description: Chert debris and a few artifacts were discovered just north of the swimming area in Fancy Creek State Park.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14RY333  
(map 2)

Location: SW 1/4 of the NW 1/4 of Sec. 14, T7S, R6E.  
Previous Investigations: A surface grab sample was collected in 1970.

Description: Chert debris and a few tools were recovered in the picnic area of Fancy Creek State Park.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14RY334  
(map 2)

Location: NE 1/4 of the SE 1/4 of Sec. 10, T7S, R6E.  
Previous Investigations: A surface grab sample was collected in 1970.

Description: A small amount of lithic material was recovered from an island north of Fancy Creek State Park.

Cultural Affiliation: Unknown.

Recommendation: This site is periodically inundated.  
Preliminary testing is recommended.

14RY335  
(map 1)

Location: NW 1/4 of the SW 1/4 of Sec. 4, T9S, R7E.  
Previous Investigations: A surface grab sample was collected in 1970.

Description: The exact site description is unknown, since the site survey form is incomplete.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Re-survey and preliminary testing are recommended.

14RY336  
(map 1)

Location: NE 1/4 of the SE 1/4 of Sec. 5, T9S, R7E.  
Previous Investigations: A surface grab sample was collected in 1970.

Description: Unknown.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Re-survey and preliminary testing are recommended.

14RY338  
(map 1)

Location: NE 1/4 of the SE 1/4 of Sec. 6, T9S, R7E.  
Previous Investigations: A surface grab sample was collected in 1970.

Description: Chert debris and artifacts were scattered on the surface of a terrace above Mill Creek.

Cultural Affiliation: Three cultural affiliations are suggested by projectile points. One point is an Early Archaic, Hardin Barbed type (see Luchterhand 1970). Two points suggest a Middle or Late Archaic affiliation. Another is a fragment of a triangular point, suggesting a Middle Ceramic affiliation.

Recommendation: Testing is recommended.

14RY339  
(map 2)

Location: NW 1/4 of the SE 1/4 of Sec. 1, T8S, R6E.  
Previous Investigations: The 1970 crew located this

site and collected a surface grab sample. Minor testing was also conducted at that time.

Description: Material was found along the shoreline of a peninsula south of the boat ramp in Baldwin Creek Public Use Area. No sub-surface cultural material was found in any of the test pits.

Cultural Affiliation: One Agate Basin-like Early Archaic point and three Middle or Late Archaic points were recovered. Another point is a small, triangular Middle Ceramic type.

Recommendation: Tests in 1970, were concentrated on the peninsula. Further examination and possible testing west of the peninsula are recommended.

14RY340  
(map 2)

Location: Center of the N 1/2 of Sec. 35, T7S, R6E.

Previous Investigations: The 1970 crew located this site and collected a surface grab sample.

Description: Unknown, since the site survey form is incomplete.

Cultural Affiliation: Four projectile points, including one Archaic and three Early Ceramic types, were recovered.

Recommendation: Re-survey and possible testing are recommended.

14RY341  
(map 2)

Location: Center of E 1/2 of Sec. 35, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: The exact site description is unknown for this site and RY342-346, since the site survey forms are incomplete. Survey field notes indicate that these six sites are probably redeposited materials.

Cultural Affiliation: Diagnostic artifacts include two, small, triangular projectile points and one potsherd. A Middle Ceramic affiliation is suggested.

Recommendation: Re-survey and preliminary testing are recommended.

14RY342  
(map 2)

Location: NE 1/4 of the SE 1/4 of Sec. 35, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: see RY341.

Cultural Affiliation: One Early Ceramic corner-notched projectile point was recovered.  
Recommendation: Re-survey and preliminary testing are recommended.

14RY343  
(map 2)

Location: SE 1/4 of the SE 1/4 of Sec. 35, T7S, R6E.  
Previous Investigations: A surface grab sample was collected in 1970.  
Description: see RY341.  
Cultural Affiliation: No diagnostic artifacts were recovered.  
Recommendation: Re-survey and preliminary testing are recommended.

14RY344  
(map 2)

Location: NE 1/4 of the NE 1/4 of Sec. 2, T8S, R6E.  
Previous Investigations: The 1970 crew located this site and collected a surface grab sample.  
Description: see RY341.  
Cultural Affiliation: No diagnostic artifacts were recovered.  
Recommendation: Re-survey and preliminary testing are recommended.

14RY345  
(map 2)

Location: NW 1/4 of the NW 1/4 of Sec. 1, T8S, R6E.  
Previous Investigations: A surface grab sample was collected in 1970.  
Description: see RY341.  
Cultural Affiliation: No diagnostic artifacts were recovered.  
Recommendation: Re-survey and preliminary testing are recommended.

14RY346  
(map 2)

Location: Center of the W 1/2 of Sec. 1, T8S, R6E.  
Previous Investigations: A surface grab sample was collected in 1970.  
Description: see RY341.  
Cultural Affiliation: Two projectile points were recovered. One is undiagnostic, while the other suggests a Middle or Late Archaic affiliation.



Recommendation: Re-survey and preliminary testing are recommended.

14RY347  
(map 2)

Location: NW 1/4 of the NW 1/4 of Sec. 26, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: The site is situated on a small, grass covered terrace remainder. A road cut through a portion of the terrace exposed cultural material. Chert debris and artifacts were eroding out of the exposed portion approximately six inches below the surface.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14RY348  
(map 2)

Location: NW 1/4 of the NW 1/4 of Sec. 26, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: Chert debris and artifacts were scattered along the shoreline and on the beach south of Randolph Bridge.

Cultural Affiliation: On the basis of one projectile point base, an Archaic affiliation is assigned to this site.

Recommendation: Survey notes indicate that the material was probably washed up onto the beach. Further examination is recommended to determine if this is so, or, if material is actually eroding out. Preliminary testing is recommended.

14RY350  
(map 2)

Location: NE 1/4 of the NE 1/4 of Sec. 35, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: Chert debris and artifacts were scattered about the surface of a flat, mud cove. Material was also eroding out of a bank. Although the bank was cleared by the survey team, it failed to produce any additional material.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: This site should be examined above the eroded bank. Preliminary testing is recommended.

14RY351  
(map 2)

Location: SE 1/4 of the SW 1/4 of sec. 26, T7S, R6E.  
Previous Investigations: A surface grab sample was collected in 1970.

Description: Chert debris and artifacts were discovered along the shoreline and on the beach east of State Highway 13.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14RY352  
(map 2)

Location: SE 1/4 of the SE 1/4 of Sec. 10, T7S, R6E.  
Previous Investigations: A surface grab sample was collected in 1970.

Description: The site is situated on the southern point of a small inlet of Fancy Creek. Material was scattered over an area which slopes toward the lake.

Cultural Affiliation: An Archaic affiliation is suggested based on one of the two projectile points recovered. The other is a Scallorn point, indicating an Early Ceramic affiliation.

Recommendation: Preliminary testing is recommended.

14RY353  
(map 3)

Location: SE 1/4 of the SE 1/4 of sec. 10, T7S, R6E.  
Previous Investigations: A surface grab sample was collected in 1970.

Description: Chert debris and tools were scattered on a mud, sand, and gravel surface on the right bank of Fancy Creek. Material was found about 20 feet above the water.

Cultural Affiliation: An Archaic affiliation is indicated, based on the presence of two projectile points.

Recommendation: Survey notes indicate that material was probably washing down the slope. Preliminary testing is recommended.

14RY354  
(map 2)

Location: NW 1/4 of the SE 1/4 of Sec. 10, T7S, R6E.  
Previous Investigations: A surface grab sample was collected in 1970.

Description: Lithic material was scattered on the point of a long, high, narrow terrace remnant. At the time of the survey, the site was just 5 feet above the water.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14RY355

(map 2)

Location: NW 1/4 of the NE 1/4 of Sec. 9, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: This site is situated on the floodplain on the right bank of Fancy Creek. Cultural material was sparsely scattered over a cornfield.

Cultural Affiliation: A tentative Middle Ceramic affiliation is suggested, based on the presence of one potsherd.

Recommendation: Survey notes suggest that this site is inundated during high water periods. Testing is recommended.

14RY356

(map 2)

Location: SE 1/4 of the NW 1/4 of Sec. 9, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: The site is situated in a cornfield on the right bank of Walnut Creek. Cultural material was concentrated on the west side of the cornfield near the creek.

Cultural Affiliation: Three, plain, Kansas City Hopewell-like potsherds were recovered. Thus, an Early Ceramic cultural affiliation is assigned to this site.

Recommendation: This site is also subjected to inundation during high water periods. Thus, testing is recommended for this site.

14RY357

(map 2)

Location: NW 1/4 of the NE 1/4 of Sec. 9, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: The site is situated on the right bank of Fancy Creek. Cultural material was scattered over a small area of a cornfield.

Cultural Affiliation: Typical Middle Ceramic potsherds were recovered.

Recommendation: This site may be an extension of RY355. Test along with RY355.

14RY358  
(map 1)

Location: NW 1/4 of the SE 1/4 of Sec. 18, T8S, R7E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: Chert debris and artifacts were found on an area of the beach, measuring 150 x 30 feet.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14RY359  
(map 1)

Location: NE 1/4 of the NE 1/4 of Sec. 19, T8S, R7E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: Since survey notes are incomplete, the exact description is unknown.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14RY360  
(map 2)

Location: NW 1/4 of the SE 1/4 of Sec. 10, T7S, R6E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: The site consists of a mud-flat area on the right bank of Fancy Creek. Material was found on a point measuring approximately 30 x 24 feet.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14RY361  
(map 1)

Location: NW 1/4 of the NE 1/4 of Sec. 19, T8S, R7E.

Previous Investigations: A surface grab sample was collected in 1970.

Description: Flint debris and artifacts were scattered over the hard clay surface of this cove located south of Baldwin Creek.

Cultural Affiliation: No diagnostic artifacts were recovered.

Recommendation: Preliminary testing is recommended.

14RY362  
(map 1)

Location: SW 1/4 of the NW 1/4 of Sec. 20, T8S, R7E.  
Previous Investigations: A surface grab sample was collected in 1970.  
Description: Unknown  
Cultural Affiliation: No diagnostic artifacts were recovered.  
Recommendation: Preliminary testing is recommended.

14RY363  
(map 1)

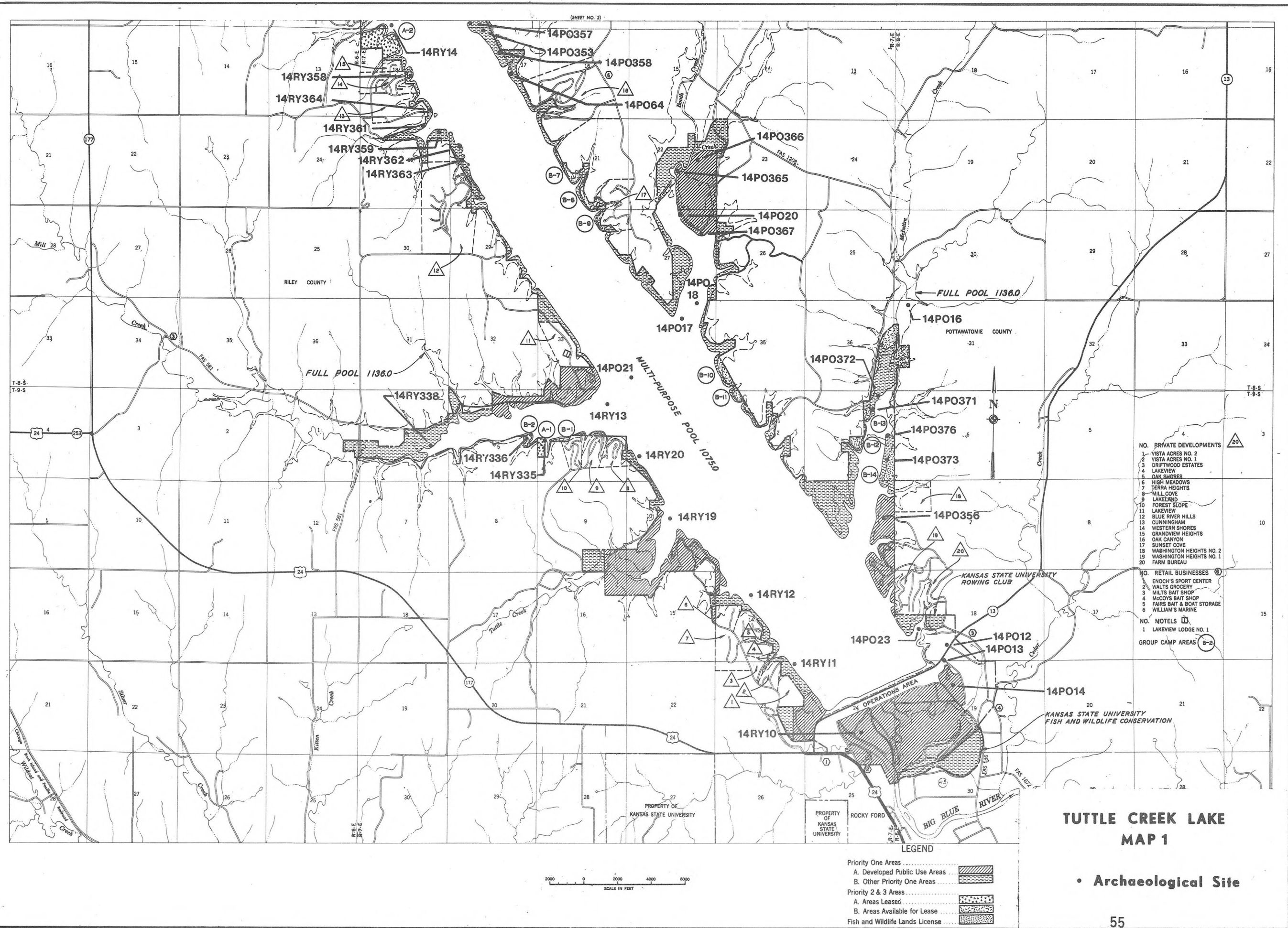
Location: SW 1/4 of the SW 1/4 of Sec. 20, T8S, R7E.  
Previous Investigations: A surface grab sample was collected in 1970.  
Description: Cultural material was found in a sandy and vegetation-free cove. Survey notes indicate that the area was probably enlarged by a local resident.  
Cultural Affiliation: Four projectile points are diagnostic enough to suggest two cultural affiliations. Three of the points are Early Ceramic corner-notched types, while the fourth is a triangular, unnotched Middle Ceramic type.  
Recommendation: Preliminary testing is recommended.

14RY364  
(map 1)

Location: SW 1/4 of the SE 1/4 of Sec. 18, T8S, R7E.  
Previous Investigations: A surface grab sample was collected in 1970.  
Description: Unknown.  
Cultural Affiliation: No diagnostic artifacts were recovered.  
Recommendation: Preliminary testing is recommended.

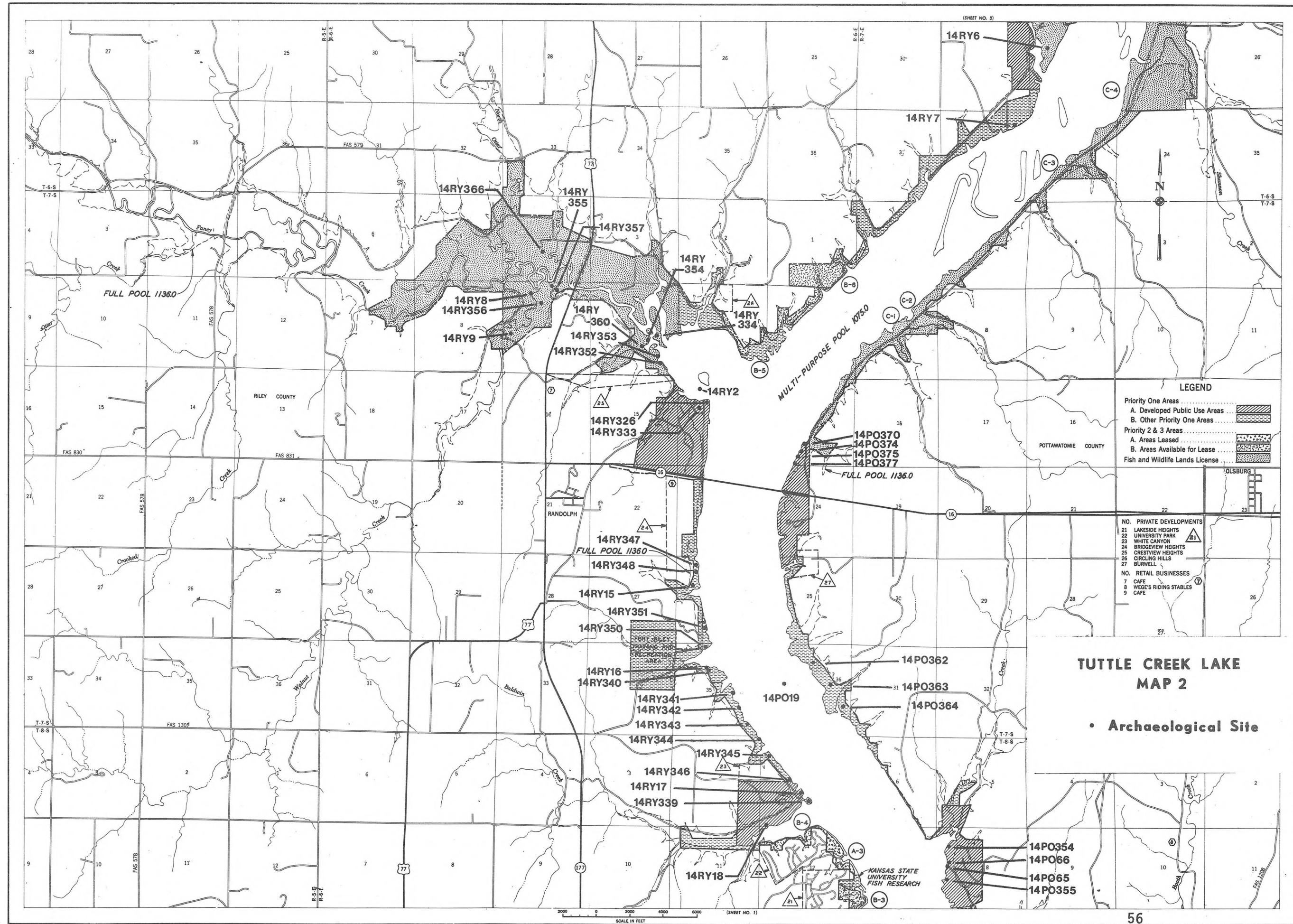
14RY366  
(map 2)

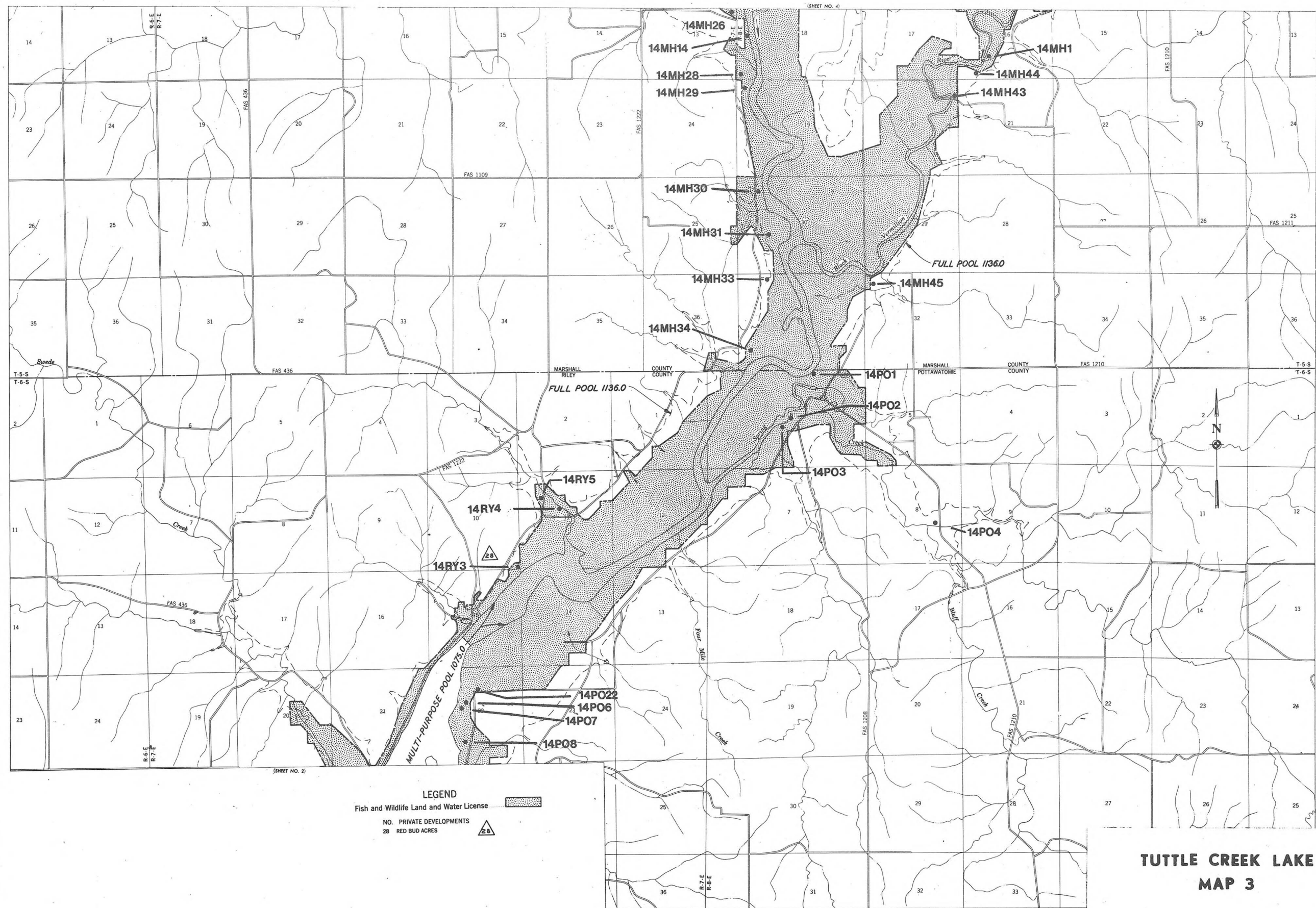
Location: NE 1/4 of the SW 1/4 of Sec. 4, T7S, R6E.  
Previous Investigations: A surface grab sample was collected in 1970.  
Description: Material was scattered on the top and east slope of a ridge on the right bank of Fancy Creek.  
Cultural Affiliation: No diagnostic artifacts were recovered.  
Recommendation: Survey notes indicate that the grass cover precluded a thorough examination of the area. Re-survey and preliminary tests are recommended.





NOTE  
This sheet was compiled from U. S. G. S. Quadrangle Sheets dated 1964.





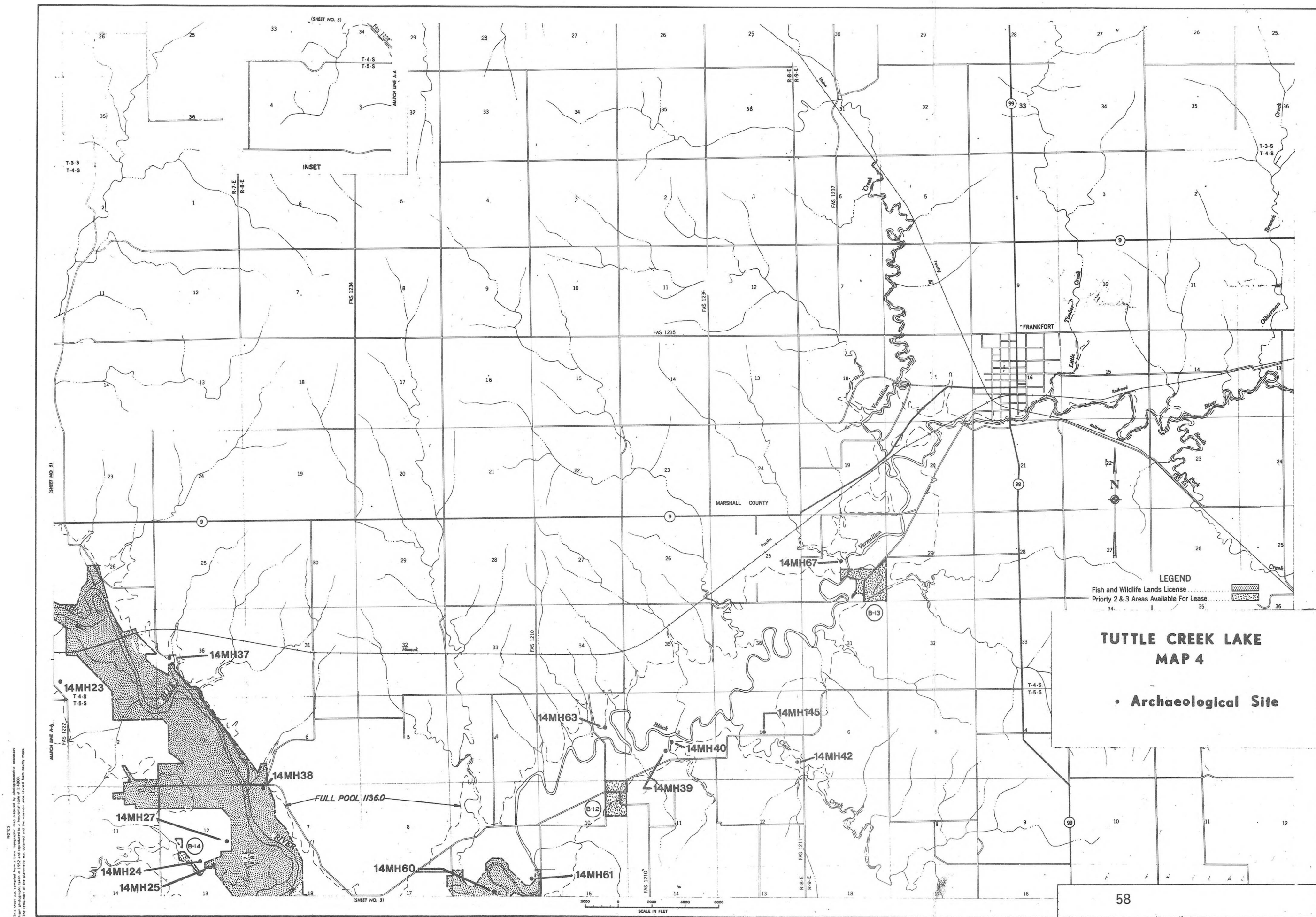
**LEGEND**  
 Fish and Wildlife Land and Water License  
 NO. PRIVATE DEVELOPMENTS  
 28 RED BUD ACRES

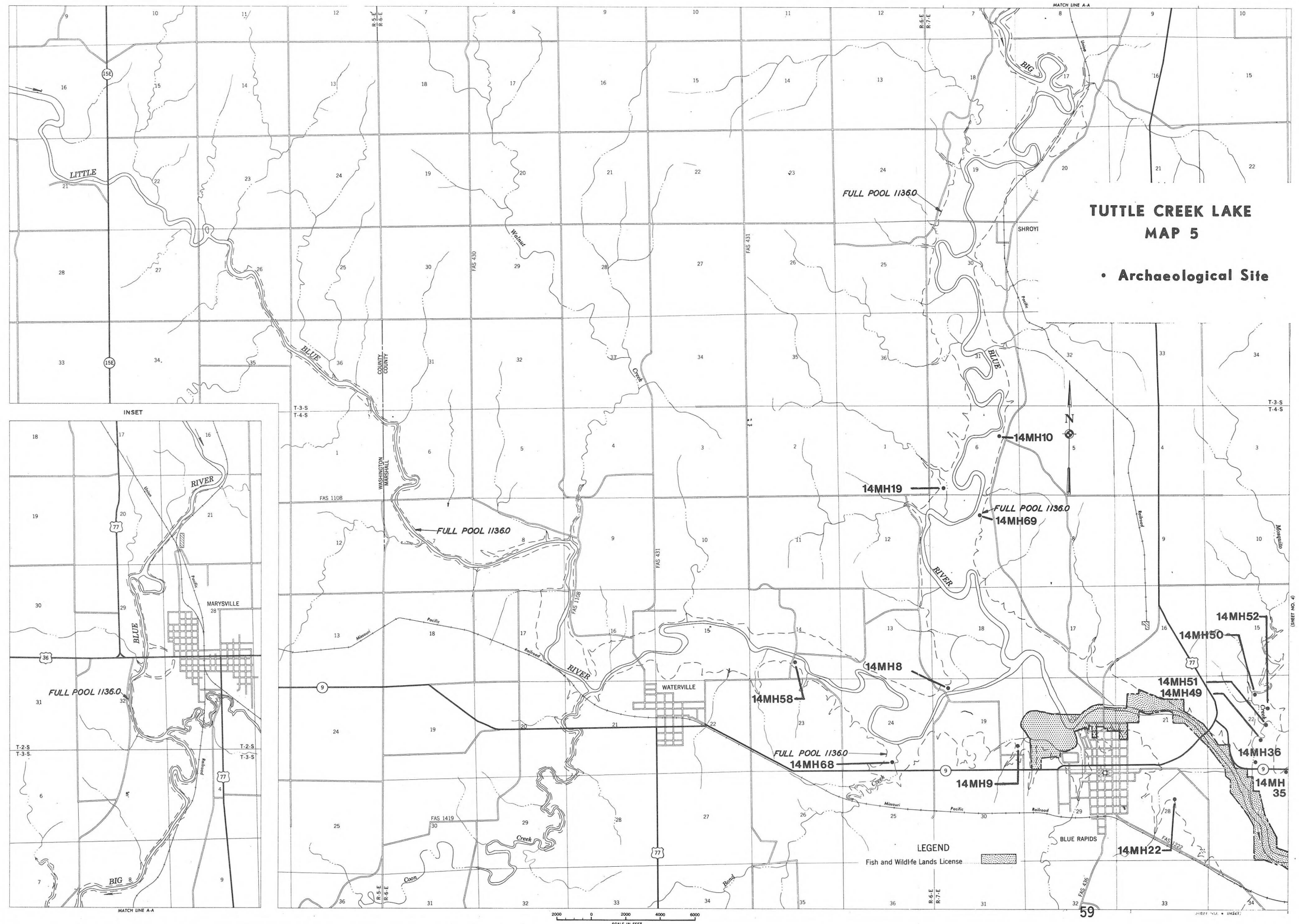
# **TUTTLE CREEK LAKE MAP 3**

• Archaeological Site

NOTES  
 This sheet was compiled from a base map prepared by photographic processes from photographs taken in 1952 and reproduced to a horizontal scale of 1:4000. The remainder of the planimetry was obtained and the reservoir area made from county maps.







NOTES  
This sheet was compiled from a series of maps prepared by photographic means from photographs taken in 1952 and reproduced in a horizontal scale of 1:4800. The remainder of the planimetry was obtained and the reservoir area revised from county maps.