

**MEMORANDUM OF AGREEMENT
AMONG
THE U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE,
THE KENTUCKY HERITAGE COUNCIL,
AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
CONCERNING THE MANAGEMENT OF HERITAGE RESOURCES
AND THE LIMITS OF ACCEPTABLE CHANGE STUDY OF THE
RED RIVER GORGE NATIONAL REGISTER DISTRICT ON THE
DANIEL BOONE NATIONAL FOREST**

WHEREAS, the U.S. Department of Agriculture, USDA-Forest Service, Daniel Boone National Forest (DBNF), is in the process of performing a Limits of Acceptable Change (LAC) study in the Red River Gorge (RRG) National Register District in an attempt to regulate the ever increasing recreational demands on the RRG that will result in the establishment of Opportunity Zones (step 6) and measurable resource standards (step 5) that constitute an Undertaking that has the potential to cause effects on properties listed in or eligible for listing in the National Register of Historic Places (NR) in the RRG (36CFR800); and

WHEREAS, the RRG, listed as a Historic District containing 442 contributing sites in the National Register of Historic Places, is home to regionally and nationally significant historic and prehistoric sites including many dry rockshelter archeological sites that contain fragile paleobotanical remains and normally perishable artifacts (woven mats and bags, wooden objects, leather moccasins, etc. Some of the earliest evidence of prehistoric plant domestication in the Eastern United States (1,500 BC) has come from paleobotanical remains recovered from these sites, increasing our understanding of Native American use of these plants and how this use changed through time; and

WHEREAS, the DBNF has determined, in consultation with the Kentucky State Historic Preservation Officer (KYSHPO) and the Advisory Council on Historic Preservation (ACHP), that while the objective of a LAC study is to address impacts of public use and to preserve the environmental setting and resources for the future, that some management actions resulting from the RRG LAC study (to be identified in Step 7 of the LAC process) have the potential to “cause effects” on historic properties in the RRG (36 CFR 800.3); and

WHEREAS, consultation also has been initiated with other Consulting Parties including users and professional advocacy groups; and

WHEREAS, the LAC process has been initiated and consultation with the Eastern Band of Cherokee Indians, Cherokee Nation of Oklahoma, United Keetoowah Band of Cherokee Indians, Absentee Shawnee Tribe of Oklahoma, Eastern Shawnee Tribe of Oklahoma, and The Shawnee Tribe (hereinafter referred to as ‘Tribes’) is ongoing; and

WHEREAS the terms used in this MOA are defined in accordance with 36CFR800.16, unless otherwise indicated; and

NOW, THEREFORE, the DBNF, the KYSHPO, and the ACHP agree that the LAC process in the Red River Gorge shall be implemented in accordance with the following Stipulations in order to take into account the effect of this undertaking on historic properties within the Red River Gorge (RRG) of the Daniel Boone National Forest in Kentucky.

BACKGROUND

I. HERITAGE RESOURCES IN THE RED RIVER GORGE NATIONAL REGISTER DISTRICT

The Area of Potential Effect and map are presented in Appendix A and Appendix B.

II. THE LIMITS OF ACCEPTABLE CHANGE STUDY IN THE RED RIVER GORGE

The Limits of Acceptable Change (LAC) system is a framework for establishing acceptable and appropriate resource and social conditions in recreation settings. The LAC is used by the FS as a method of coping with increasing demands on recreational areas in fragile resource areas. The LAC also represents a reformulation of the recreational carrying capacity concept, with the primary emphasis now on the conditions desired in the area rather than on how much use an area can tolerate. The LAC is not a new idea. It is, however, the latest step in a continuing effort to improve wildland recreation management through definition of more explicit, measurable objectives. One goal of the LAC study in the RRG is to increase protection of historic properties. Six Opportunity Zones have been identified as follows:

1. Concentrated Use – heaviest use areas (trailheads, roads, trails)
2. Roaded Natural – network of moderate to heavily used trails
3. Semi-Primitive – some low use developed maintained trails
4. Critical Habitat / Resource – some developed maintained trails – high degree of managerial presence
5. Primitive – no developed maintained trails or roads – moderate to high level of solitude and isolation
6. Pristine – no developed maintained trails or roads – high level of solitude and isolation

The nine steps involved in the overall LAC study process are outlined in Appendix C.

STIPULATIONS

The DBNF shall ensure that the following stipulations are carried out:

I. CONSULTATION AND PUBLIC INVOLVEMENT

The DBNF will continue to use the RRG LAC study public meetings as its vehicle for complying with section 800.3 of 36CFR800 and will ensure that all consulting parties have copies of all correspondence, including notice of meetings and notes on each meeting. This information is currently posted on the DBNF's website at <http://www.fs.fed.us/r8/boone/>. Consulting parties will receive this information hard copy via standard mail.

II. LAC STUDY AND DATA MANAGEMENT

As the spatial distribution of significant archaeological sites is a component of the RRG LAC study, particularly with respect to developing alternative LAC Opportunity Zone locations (step 6), the DBNF will work with the KYSHPO and the Office of State Archeology (OSA) to ensure that prior to step 6 of the RRG LAC process, all currently recorded heritage resource sites and historic properties located within and immediately adjacent to the RRG LAC study area have been entered into a Geographic Information System (GIS) data layer, along with all relevant information regarding the nature and National Register eligibility of those sites, and made available for use by DBNF archeologists and select personnel directly involved in the RRG LAC study and implementation, and that this layer is updated and maintained. It is estimated that step 6 of the RRG LAC process will begin in early 2006.

III. HERITAGE RESOURCE MANAGEMENT STRATEGY

The DBNF will develop a heritage resource management strategy (HRMS) for the RRG National Register District and LAC study area. The key purpose of this HRMS will be to provide a context for evaluating archaeological sites and developing appropriate mitigation measures. The HRMS will also prioritize areas within the RRG for future inventory and research. Portions of this HRMS that support the immediate and ongoing steps of the LAC process will be completed in conjunction with the development of these LAC steps. The entire HRMS will be completed and finalized before the end of the LAC study. This HRMS will include the following:

A. A descriptive list of Historic Properties in the RRG.

The RRG NR District currently contains 442 contributing resources. Among these are regionally and nationally significant sites. The HRMS will examine and prioritize these sites according to the significance of the research that has been conducted to date at each and their future research potential; taking into consideration their preservation qualities, depth of deposits, components

present, size, location, the cultural materials recovered or known to be present, potential to contain human remains, and their ability to address important research topics identified in Kentucky's archaeological state plan.

Any specific historic property where human remains have been documented or found (including historic cemeteries) will automatically be considered a high priority site for management and protection.

- B. A ranking of Opportunity Zones by significance and research potential, taking into consideration the number of historic properties, number of historic properties that contain burials, and the nature and extent of previous survey coverage.
- C. A monitoring and protection strategy for historic properties by Opportunity Zone.
- D. A framework for evaluating heritage resource sites discovered since the date of the National Register District study for possible inclusion in the list of historic properties and for eventual inclusion as contributing elements in the National Historic District.

IV. INVENTORY AND EVALUATION

- A. For actions that are identified by the DBNF through the LAC process and planned for implementation at the completion of LAC (as well as actions proposed in the RRG outside of the LAC process), the DBNF shall complete the identification and National Register evaluation of these project areas in accordance with the DBNF's existing Agreement with the KYSHPO for the Management of Heritage Resources (Appendix D). These actions include:
 - 1. construction, realignment, or formal designation of official Forest Service trails, trailheads, campsites, parking areas, toilet facilities, climbing areas, river access points, etc. within the RRG LAC study area; and
 - 2. Reclamation of decommissioned-official or user-created trails, trailheads, campsites, parking areas, river access points, etc. within the RRG LAC study area;

The DBNF, ACHP, and KYSHPO will develop a similar but updated Programmatic Agreement (PA) for management of heritage resources throughout the DBNF, initiating consultation in calendar year 2005, with completion during FY 2006.

- B. The remaining uninventoried areas within the RRG LAC study area will be prioritized for phased, long-term heritage resource inventory in consultation with the KYSHPO based on (1) Opportunity Zone, (2) important research questions, and (3) a sampling strategy based on environmental zones within the RRG (all three of which will be outlined in the HRMS). To date, six Opportunity Zones have been identified. They are prioritized for phased, long-term inventory as follows:

1. Concentrated Use – heaviest use areas (trailheads, roads, trails)
2. Roaded Natural – network of moderate to heavily used trails
3. Semi-Primitive – some low use developed maintained trails
4. Critical Habitat / Resource – some developed maintained trails – high degree of managerial presence
5. Primitive – no developed maintained trails or roads – moderate to high level of solitude and isolation
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The number of opportunity zones and their prioritization to be inventoried may change based on the ultimate location of these Opportunity Zones within the RRG LAC study area (determined at Step 8), potential adverse impacts to as yet undocumented archaeological sites within each Opportunity Zone, the results of ongoing monitoring (see Stipulation VII.A.), and DBNF yearly goals and objectives. Priority also will be given to research projects designed to address research questions identified in the HRMS or Kentucky's archaeological state plan.

V. EFFECTS AND TREATMENTS

- A. Pursuant to 36CFR800.5, if the DBNF in consultation with the KYSHPO determines, based on monitoring data, that activities occurring within an Opportunity Zone have led to an increase in adverse effects to historic properties (i.e. that LAC standards are being exceeded); the DBNF shall consult with the KY SHPO and ACHP to discuss the nature of the adverse effects; the number, nature of, and threats to historic properties located within the zone; and how these sites relate to research priorities in the RRG.

Based on this consultation, the DBNF will propose possible mitigation measures (management actions from step 7). These may include ways to mitigate the adverse effects without data recovery; such as permeable protective coverings (geotextiles – however, see Stipulation VII.C.1.) or fencing and signage. Excavation of historic properties within the affected zone will be based on the development of a data recovery plan that addresses important research questions identified in the RRG HRMS and Kentucky's archaeological state plan. The data recovery plan will be submitted to the KYSHPO, Tribes, ACHP, and other parties deemed appropriate by the DBNF for review and comment.

1. If monitoring data indicates that individual historic properties within any of the Opportunity Zones are suffering adverse impacts, the DBNF will propose possible mitigative measures. These may include ways to mitigate the adverse effects without data recovery; such as permeable protective coverings (geotextiles – however, see Stipulation VII.C.1.) or fencing and signage.

2. Data recovery or Phase III excavation of these individual historic properties will be considered an option and:
 - a. will only take place after consultation with the KYSHPO to discuss the nature of the adverse effects and how the individual historic properties relate to research priorities in the RRG to see if the affected historic properties warrant data recovery; and
 - b. will be based on the development of a data recovery plan that addresses important research questions identified in the RRG HRMS and Kentucky's archaeological state plan. The data recovery plan will be submitted to the KYSHPO, Tribes, ACHP, and other parties deemed appropriate by the DBNF for review and comment.
- B. For those Opportunity Zones that DBNF in consultation with the KYSHPO, determines, based on monitoring data, that implementation of the LAC has led to an overall reduction in potential adverse impacts to historic properties, the DBNF will continue the site protection strategies outlined in Stipulation VII.

VI. HUMAN REMAINS

- A. Consonant with NAGPRA, ARPA and other appropriate laws and regulations that may apply, the DBNF will make every reasonable effort to avoid disinterment or disturbance of human remains and funerary objects during identification, evaluation, or data recovery.
- B. The portion(s) of sites known with reasonable certainty to contain human remains will not be excavated or disturbed unless:
 1. it has been determined through consultation with the KYSHPO and Tribes on a site-by-site basis that the burials are in imminent danger of being looted and all other possible treatment methods have been explored and either failed or found lacking for the imminent danger at hand; or
 2. disturbance associated with management actions cannot be avoided and the human remains cannot be preserved in place; or
 3. human remains are unexpectedly encountered during identification, evaluation, or data recovery and cannot be preserved in place.

In the above instances, to ensure that any human remains and funerary objects are treated in a sensitive, respectful and careful manner:

1. The DBNF will determine if scientific study of the human remains, funerary objects and the burial matrix will be conducted by carefully weighing the contribution of scientific study against the religious and cultural significance ascribed to the remains on a site-by-site basis in consultation with the KYSHPO, Tribes, and other parties determined appropriate by the DBNF. The DBNF's decision to conduct scientific study of human remains, funerary objects, and burial matrix must be

supported by an explicit set of definitive and justified research questions on a case-by-case basis.

2. The DBNF will take into serious advisement the Eastern Band of Cherokee Indians' (EBCI) Treatment Guidelines for Human Remains and Funerary Objects and the Kentucky Organization of Professional Archaeologists' policy statement on the treatment of human remains.
3. Human remains and/or funerary objects, which have been disinterred, should be reburied as soon as possible, in a timeframe, location, and manner determined appropriate by the DBNF, on a case-by-case basis in consultation with the KYSHPO, Tribes, and other parties deemed appropriate by the DBNF. The dates, times, and location of disinterment and reburial should be considered sensitive and confidential and will be subject to restrictions under Section 304 of the National Historic Preservation Act, 36 CFR800.6(a)(5), 36CFR800.11(c), and 36CFR296.18.

VII. SITE PROTECTION STRATEGIES

- A. The DBNF will continue its archeological site monitoring program, with special emphasis on the monitoring priorities established in the RRG HRMS. The monitoring program currently monitors approximately 150 sites annually. Many of these sites are monitored more than twice per year. As part of this agreement, the DBNF will also work to establish a site stewardship program with interested local residents, rock climbers, KyOPA members, and other publics.
- B. The DBNF will continue its use of fencing and signage and closure orders in the protection of historic properties within the RRG until monitoring indicates that they are either ineffective or no longer necessary. Sites currently fenced and signed or slated for signing per recommendations concurred by the KYSHPO in the draft Gorge Report will be re-examined individually in the light of Stipulations III and IV to determine if fencing and signing are still necessary after implementation of the LAC study.
- C. The DBNF will continue to investigate, test, and utilize new site protection technologies.
 1. The DBNF is currently studying the effects of using permeable protective coverings (geotextiles) on sites containing fragile paleobotanical remains and normally perishable artifacts. This one year study involves performing various soil analyses on four dry rockshelter sites; covering two sites with geotextile and soil; and using data loggers to collect data on soil temperature and moisture levels. With the possible exception of the Military Wall site which is currently undergoing an environmental analysis for covering with geotextile and soil, if the research above indicates that there is a definite change in the physical or chemical composition of soils that could adversely affect paleobotanical and other perishable remains, the use of geotextiles will not be considered a viable

treatment method for dry rockshelter sites known with reasonable certainty to contain paleobotanical and other perishable remains. However, if the study and continued monitoring (over a five year period) indicate that there is little to no change in the physical or chemical composition of soils, the DBNF will incorporate and expand the use of geotextiles in its site protection strategies. Geotextiles would only be used where:

- a. there is a thorough understanding of the importance and nature of the heritage resources being covered;
 - b. the impact to the heritage resource – preservation, compaction, etc. is established before the action occurs; and
 - c. the site would still be accessible for researchers when appropriate.
2. The DBNF is working with FS Law Enforcement to research and purchase new and improved surveillance equipment for use in the protection of historic properties.
- D. The DBNF will continue and work towards enhancing its public education and outreach efforts.
1. In the fall of 2004, the DBNF opened the new Gladie Cultural and Environmental Learning Center in the heart of the RRG. More than half of the professionally designed exhibits in this new center are dedicated to heritage resources of the RRG and educating the public on the importance of protecting these resources. A short film also educates visitors. The DBNF will periodically enhance this educational experience with guest speakers and other presentations.
 2. Archeology Weekend is an annual event held at the Gladie Center in September. This event started 15 years ago and is now attended by approximately 2,500 people, making it one of the largest heritage outreach programs in the state of Kentucky. The primary purpose of the event is to further the public's understanding of prehistoric life ways and the inter-relationships between societies and the natural environment. This year (2005) the DBNF plans to use this opportunity to educate the public about the fragile nature of archeological resources in the RRG. Archeology Weekend (or a similar event) will continue to be held on an annual basis as financial support (from both the DBNF and cooperators) allows.
 3. The DBNF is in the process of developing an education and interpretive plan for the RRG that may include the development and presentation of educational programs in schools in the local area and regionally urban areas (Lexington and Cincinnati). Information from other National Forests with similar dispersed recreation concerns indicates that this is a more effective way to present and instill an archeological site protection / Leave No Trace message.
 4. The DBNF has developed a special 11x17" informational sign entitled "Respect Rockshelters". This sign or a sign containing a similar key

message will be placed at every kiosk within and around the RRG. A smaller (8 1/2 x 11”) version of this sign has also been developed and is being installed by backcountry rangers and volunteers from the Kentucky Organization of Professional Archeologists (KyOPA) at several “voluntary closure” sites within the RRG. This smaller sign is also affixed to the fenced sites within the RRG.

5. Over the years the DBNF has provided information for and help pay for the publication of three educational booklets published by the Kentucky Archeological Survey. As part of this agreement, the DBNF will develop two or three similar publications centered on resources and historical events more specific to the RRG such as early prehistoric plant domestication, historic era niter mining, and the early logging industry. The DBNF will strive to help publish one of these booklets every 2 years.

VIII. OVERSIGHT AND REVIEW

The DBNF will consult annually with the USFS Regional Archeologist, KYSHPO, and ACHP to review the DBNF’s progress and accomplishments in terms of this MOA. This consultation may take place either in person or via conference call. This will provide an opportunity to constructively review this MOA to determine what stipulations are working and what stipulations require amendment. This will also provide opportunity for the DBNF, Regional Office, KYSHPO, and ACHP to examine current and anticipated funding levels on the DBNF and how these funding levels will affect implementation of the stipulations in this MOA.

IX. AMENDMENT

- A. The DBNF, KYSHPO, or ACHP may request that this MOA be amended, whereupon the DBNF, KYSHPO, and ACHP shall consult to consider such an amendment.
- B. Any amendment involving the treatment of human remains or funerary objects will also require consultation with the Tribes.
- C. Any resulting amendments shall be developed and executed among the DBNF, KYSHPO, or ACHP in the same manner as the original MOA.
- D. Any amendment to this agreement will go into effect only upon written agreement of the DBNF, KYSHPO, and ACHP.
- E. Consulting / concurring parties do not have the authority to request amendments to this MOA.

X. FAILURE TO COMPLY / TERMINATION

If the DBNF, KYSHPO, or ACHP determines that the terms of this MOA cannot be or are not being carried out, then the DBNF, KYSHPO, and ACHP shall consult to seek amendment of the MOA. If the MOA is not amended, either the DBNF, KYSHPO, or ACHP may terminate it by providing thirty (30) calendar days written notice to the other parties. The DBNF shall then either execute a new agreement with the KYSHPO and ACHP pursuant to 36CFR800.6(c)(1) or request and respond to the comments of the Council under 36 CFR800.7.

XI. DISPUTE RESOLUTION

- A. Should the DBNF, KYSHPO, ACHP or consulting/concurring party object in writing within thirty (30) days to the implementation of any actions proposed pursuant to this MOA, the DBNF shall consult with the objecting party and the KYSHPO to try to resolve the objection. If the DBNF and the KYSHPO determine that the objection cannot be resolved, the DBNF shall forward all documentation relevant to the objection to the ACHP. Within fifteen (15) days after receipt of all pertinent documentation, the ACHP shall either:
 1. Provide the DBNF with a recommendation, which the DBNF shall take into account in reaching a final decision regarding the dispute; or
 2. Notify the DBNF that it shall comment pursuant to 36CFR800.7(c) and proceed to comment within the following 30 days.
- B. Any recommendations provided by the ACHP in response to a request made pursuant to Stipulation XI.A.1. shall be taken into account by the DBNF with reference only to the subject of the dispute.
- C. Any comment provided by the ACHP in response to a request made pursuant to Stipulation XI.A.2. shall be taken into account and responded to by the DBNF in accordance with 36CFR800.7(c)(4) with reference only to the subject of the dispute.
- D. The DBNF's responsibility to carry out all actions under this MOA that are not subject to the dispute shall remain unchanged.

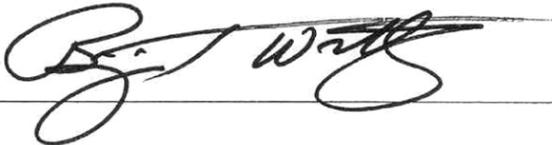
XII. DURATION

This MOA shall remain in effect for ten (10) years following its execution. Two months before the end of this time the DBNF, KYSHPO, and ACHP shall consult to reconsider the terms of this MOA and determine whether extension, amendment, or termination is in order.

EXECUTION and implementation of this MOA evidence that the DBNF has taken into account the effects of the RRG LAC study on historic properties and has afforded the ACHP an opportunity to comment on those effects. With the exception of the specific agreements described in Stipulation IV.A. of this MOA, this agreement replaces and supercedes all previous agreements among the DBNF, KYSHPO, and ACHP regarding the management of heritage resources in the RRG.

SIGNATORIES:

DANIEL BOONE NATIONAL FOREST

By:  Date: 10/4/2005

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By:  Date: 10/18/05

KENTUCKY STATE HISTORIC PRESERVATION OFFICER

By:  Date: 10-4-05

CONSULTING PARTIES:

Heritage Resources in the Red River Gorge

The Red River Gorge Geological Area / Clifty Wilderness / and Indian Creek Drainage Archaeological District is an area encompassing federal lands in parts of Menifee, Powell, and Wolfe Counties, Kentucky. The Red River Gorge Geological Area (RRGGA) is a special Management Unit of the Daniel Boone National Forest and encompasses a wilderness area known as the Clifty Wilderness. The Indian Creek drainage was added to the RRGGA boundaries for the purposes of this National Register District. This District includes a total of 664 prehistoric and historic sites, dating from more than 11,000 years ago to the twentieth century.

The entire National Register District encompasses 37,217 acres, but when 8,101 acres of private land are excluded, that leaves a total acreage of 29,116 acres within the National Register District.

The defining characteristic that unites this large District is its geographical uniqueness. The area is known for the Red River Gorge, a steep-sided, narrow-valley gorge with hundreds of miles of cliffhines. This gorge landscape has drawn people into its environs for thousands of years. Untold generations of people have made their homes and their livelihoods in this area, leaving behind traces of their presence in the form of a variety of types of archaeological sites, structures, and other cultural resources. The area is geographically remote, and that isolation has shaped the way people have adapted to its environment. For example, the hundreds of miles of cliffhines with their concomitant rockshelters have afforded shelter to people for thousands of years. Those same rockshelters made superb locations for moonshine distillery operations because of their isolation.

The present environment of the NR district varies little from its historical condition. This is a region of heavily-forested steep slopes, dramatic escarpments and natural bridges, continuous cliffhines, and narrow valleys. The major changes include reforestation during the twentieth century following major logging activities in the late nineteenth and early twentieth centuries, and its development as a recreation area.

The vast majority of properties considered as contributing elements to the district are eligible under Criterion D for their information potential. Sleepy Hollow Lodge is eligible under both Criteria A and C. The two Civilian Conservation Corps bridges (Wolf Pen Culvert and Red River Bridge) are significant under Criteria A, C, and D. Nada Tunnel is significant under Criterion A for its association with the logging industry in eastern Kentucky, Criterion C for its engineering design, and Criterion D for its potential to contribute information to our understanding of this late 19th-early 20th century remote industry. Finally, Gladie Cabin is significant under Criterion A for its association with the logging industry between 1880 and 1920.

A number of site property types and contexts were developed for the National Register nomination. A single archaeological “site” (physical place on the ground) can be represented by multiple property types and multiple contexts. For example, a rockshelter (the site) may contain archaeological deposits representing property type #2, a short-term habitation site. It may also contain deposits reflecting its use as a niter mine (property type #14). The prehistoric short-term habitation assemblage(s) may represent Archaic, Woodland, and Fort Ancient contexts (contexts #2, 3, and 4). The niter mine is associated with context #6 (Early Settlement/Frontier). This one archaeological site would be represented in the tables and

discussions as two property types components and four contextual components. As the reader will note, calculating total numbers of contributing property types, contexts, and sites may be confusing. Therefore, a table is presented below summarizing the data. Remember, a “site” refers to the physical place on the ground, and “contributing components” (or “elements”) refers to archaeological assemblages found at different sites.

442 contributing sites
222 non-contributing sites
664 total properties within the District on federal lands

317 prehistoric property type components
171 historic property type components
488 components contributing to Property Types

378 prehistoric context components
175 historic context components
553 components contributing to Contexts

All of the following property types are listed under Criterion D for their potential to yield information about human occupation and utilization of the Red River Gorge District generally, and the potential to address particular research questions, more specifically. In addition, there are several contributing properties that are also listed under Criteria A and C.

1. Unaffiliated lithic scatters
2. Short-term habitation sites
3. Long-term habitation sites
4. Rockshelters with prehistoric components
5. Lithic extraction and workshop sites
6. Rock art (petroglyphs)
7. Residences, farmsteads, and communities
8. Burials/cemeteries
9. Logging related sites
 - a. Splash dams
 - b. Animal pens
- c. Residences, boarding houses, communities
- d. Railroad related
10. Iron Industry sites
11. Civilian Conservation Corps sites
 - a. Camp sites/ residential sites
 - b. Bridges
 - c. Roads (to be developed in the future)
 - d. Powder houses (to be developed in the future)
12. Moonshine still sites
13. Niter mines
14. Tar kilns
15. Tourism and recreation

Previous Archaeological Investigations

The Red River Gorge region has received considerable attention from archaeologists over the past seventy years. In the 1930s, two archaeologists from the University of Kentucky, William S. Webb and William D. Funkhouser, explored the Gorge area with a particular focus on rockshelter sites (Funkhouser and Webb 1930, Webb and Funkhouser 1936). In these studies, the authors excavated and documented a number of shelters in Menifee, Powell, and Wolfe counties. They described the artifacts and ecofacts they

recovered, with a particular emphasis on human skeletal remains. Their archaeological methodology, however, was characterized by an emphasis on material remains with no attention on stratigraphic control, and poor data recording techniques. W.G. Haag, among others, began investigating the area in the 1930s, but were interrupted by the Depression and World War II (Wyss and Wyss 1977:45).

The Red River Gorge Geological Area was created as a special management area of the Red River Gorge Unit of the Daniel Boone National Forest in 1974. The Geological Area was more than 25,000 acres in area, and owes its existence to the failed proposal to build a dam along the Red River. This dam was proposed and authorized in 1962. After initial environmental assessments were conducted (including an archaeological survey), controversy about the impact site caused the Corps of Engineers to relocate the dam site downstream. This move prompted another round of surveys. The attention this project received led Governor Julian Carroll to withdraw his support of the dam in 1976, effectively ending the proposed construction (Wyss and Wyss 1977).

In May 1966, Frank Fryman, Jr. of the University of Kentucky, surveyed 3,140 acres that were to be inundated by the proposed dam site, in the area known as the “Lower Gorge,” near the Indian Creek drainage. Fryman’s survey included some of the cliffline just above the maximum proposed water level (Fryman 1967). These investigations documented 21 previously unrecorded sites, included 15 bottomland sites, and six rockshelters. Five of the rockshelters had been disturbed, but generally contained some percentage of undisturbed deposits. The bottomland sites were typically small campsites, with the exception of one possible village site (Fryman 1967).

In the late 1960s and early 1970s, there was some outcry against the proposed location of the dam, known as Upper Damsite, arguing that it would adversely affect an area of unique scenic beauty. A new location five miles downstream was selected, requiring additional archaeological surveys. The new survey, conducted in 1973 by University of Kentucky archaeologist C. Wesley Cowan, identified and documented 21 new sites (Cowan 1975).

The 1974 field season saw Cowan back in the Gorge, testing previously recorded sites, including 15Po17, Seldon Skidmore, which had been originally identified by Fryman in 1967. Other sites tested are 15Po31 (Anderson Site) and 15Po42 (Martin Site), two Woodland and Fort Ancient sites identified during the 1973 survey season; and 15Po47 (A and B), the Haystack Rock Shelters. The Haystack Shelters yielded normally perishable items such as plant and animal remains. 15Po49, the Jones Site, 15Po45 (Shepard Site), and 15Po32 (Dunwoody Branch Site) were also investigated during this time.

In 1975, the U.S. Army Corps of Engineers hired Dr. William Mayer-Oakes of Texas Tech University, and Dr. Jack T. Hughes of West Texas State University, to assess the archaeological potential of Red River Gorge. They concluded that the area had tremendous potential archaeological significance and “*raised the possibility that the area might well qualify for a National Historic District*” [emphasis added] (Cowan and Wilson 1977:6). Governor Julian Carroll requested that the Kentucky Heritage Commission

(KHC; now the Kentucky Heritage Council) undertake an archaeological survey to see if the area qualified for that designation.

Since the area to be inundated by the proposed lake had been previously surveyed by both Fryman (1967) and Cowan (1975), the KHC survey focused on prehistoric sites along the clifflines above the flood level. Eight new archaeological sites (four prehistoric rockshelters, three historic building foundations, and one historic rockshelter) were documented. As previous researchers had noted, Cowan and Wilson were impressed with the remarkable degree of preservation of organic remains in the Red River Gorge rockshelter sites. This unique attribute provides archaeologists with an unusual wealth of domestic and subsistence information and makes the Gorge tremendously important in the study of prehistory of the Eastern United States. By the time of Cowan and Wilson's survey, 83 prehistoric and historic sites had been documented in the Gorge. "Taken in aggregate, these 83 sites reveal that the Red River Gorge contains a remarkable concentration of archaeological sites (Cowan and Wilson 1977:47)." These surveys had only encompassed approximately one percent of the total cliffline area of the Gorge. According to Cowan and Wilson, the only comparable regions in the entire Eastern United States are the White and Buffalo River drainages of northwestern Arkansas and southwestern Missouri (Cowan and Wilson 1977:48).

Cowan and Wilson recommended the entire Red River Gorge region be nominated as a Historic District to the National Register of Historic Places (1977:52). Cowan also suggested that a cultural resource management plan be developed quickly, as the increased visitation rate to the area had already caused significant damage to the Gorge as a whole and vandalism to the archaeological resources, specifically (Cowan and Wilson 1977:48-49).

Turnbow (1976) undertook a survey to inventory and evaluate some of the known archaeological resources of the Red River Gorge. He investigated 35 prehistoric and historic sites that had been known, but never recorded. As part of his report, he presented a number of recommendations for protecting and preserving archaeological sites throughout the Geological Area. He emphasized education programs, strongly urging efforts beyond simple signage describing and interpreting the resources. He proposed a three-foci program that included interactive aspects, archaeological trails (guided or self-guided), and lots of hands-on exposure such as public digs, primitive technology demonstrations, people and environment demonstrations, even prehistoric living seminars along the lines of "survival training" weekends (Turnbow 1976).

In addition, he suggested policing the sites with psychological barriers rather than eye-jarring fencing. These psychological barriers could be low rock walls separating trails from the sites. Moats could be constructed on the side of the walls away from the public, creating additional barriers. Fences could be erected behind the walls so that they take nothing from the scenery, but afford some protection. He suggested sealing particularly sensitive or important sites with wire mesh over the site, then covered by a sterile overburden of sand, gravel, and dirt in keeping with the surroundings. Finally, if a site is immediately threatened and has the potential to yield important information, Turnbow

suggested that systematic excavation be undertaken in order to “preserve” the data (Turnbow 1976:9). As with several of the other archaeologists, Turnbow recommended that the area be nominated as a district to the National Register of Historic Places. “The research potential of the sites is immeasurable and a number of projects could be suggested. (Turnbow 1976:67).”

Wyss and Wyss (1977) surveyed approximately 6000 acres of the northeastern part of the Red River Gorge in Menifee County, approximately one-fifth of the Geological Area management unit. The project boundaries were: the North Fork of the Red River on the south, Highway 715 on the west, U.S. 460 on the north, and the National Forest boundary/Gladie Creek on the east (Wyss and Wyss 1977:1). They did not survey private lands at all. They documented 106 prehistoric components in the survey area, and 24 historic components. Their survey included all three major topographic areas (i.e., clifflines, bottomland, and ridgetops) (Wyss and Wyss 1977).

In 1977, KHC archaeologists surveyed twelve counties to create a statewide archaeological database to facilitate planning, research, and education, and to nominate eligible sites to the National Register of Historic Places. Weinland and Sanders (1977) summarized the Powell county survey. This research largely confined itself to open areas because the investigators felt that more data was needed about the county’s bottomland sites (Weinland and Sanders 1977:25). Thirty-nine sites were either visited by the investigators or documented on the basis of informant information, including 25 small camps, eight rockshelters (with five petroglyph sites), one earthen mound, and five camps or villages (Weinland and Sanders 1977:83). The authors recommend that at least two sites and two archaeological districts from among the sites examined be nominated to the National Register of Historic Places. One district would include sites 15Po50, 15Po51, 15Po55, 15Po78, and 15Po79. The second district would be discontinuous and consist of all the petroglyph sites (Weinland and Sanders 1977:86).

In May 1991, University of Kentucky archaeologists conducted a Phase I cultural resource assessment in advance of logging activities in areas of Menifee, Powell, and Wolfe counties (Tune et al. 1991). This report documented 38 sites, with 31 prehistoric components and 11 historic components (Tune et al. 1991).

Cultural Resource Assessment program archaeologists from the University of Kentucky conducted a Phase I assessment of 226 acres within and adjacent to the Gladie Creek Historic Site in 1991. This area of southern Menifee County had an interpretive center planned to educate the public about the Gladie Cabin, a nineteenth century residence. They located and documented sites within the project area, assessed the National Register eligibility of each site, and made management recommendations for the area as a whole (Pool et al. 1991).

The following year, Pool et al. conducted Phase II testing at the Gladie Creek site, 15Mf410. This testing was undertaken by professional archaeologists and members of the W.S. Webb Archaeological Society, an avocational archaeology group housed at the University (Pool et al. 1992). Their objective was to evaluate the site in terms of its

National Register eligibility and to foster cooperation between professional and avocational archaeologists and the general public. They recommended 15Mf410, Gladie Creek site as being potentially eligible for the National Register of Historic Places (Pool et al. 1992:1).

Several surveys have been conducted during the 1990s to comply with Section 106 regulations. Cultural Horizons, Inc. conducted Phase II testing at 15Mf28 in 1993. The U.S. Forest Service had proposed a septic field in the southwestern half of the site. The recommendation of this report was clearance for the project (Stallings and Ross-Stallings 1991). Fiegel (1995) documented the results of a National Register evaluation of the proposed Gladie Creek National Register District (15Mf445) and specifically site 15Mf464.

In recent years, the Forest Service archaeologists have implemented a program of annual site visits, survey, and limited testing. These are summarized in the Daniel Boone National Forest Service's Annual Reports, as well as being detailed in survey reports. The objective with these surveys is to inventory archaeological sites, monitor sites that may be threatened by recreational activities or by looting activities, and to excavate the more significant sites according to a schedule of testing (Ison 2001, personal communication).

Archaeological Integrity and Impacts Past and Present

From the discussion in the cultural background section above, past impacts within the Red River Gorge archaeological district should be clear. Humans have been living, working, and impacting the area for more than 11,000 years. The forests themselves have changed as the result of massive commercial logging in the late nineteenth and early twentieth centuries. Humans in prehistoric and historic times have impacted the forest composition through manipulation of fire. Natural resources such as game, chert, mast products, rock shelters, and many others have been heavily exploited. Despite this long period of utilization of the area, the most extensive and destructive activities have occurred in the twentieth century.

In the past hundred years, the archaeological resources within the Red River Gorge Geological Area have been highly disturbed as the direct or indirect consequence of numerous activities. For the past two hundred years or so, treasure seekers searching desperately for Swift's Silver Mines have caused significant damage to almost all of the rockshelters in the area. Thousands of years of prehistory have been severely disturbed as these people dig into the soils, chip away at the rocks, and otherwise mine for silver traces. This activity continues today.

The draw of a National Forest has led a variety of people seeking recreational activities to the area. Red River Gorge is an internationally known rockclimbing venue. In the 1970s, the problems caused by a constantly increasing visitation rate, erosion of slope soils, traffic congestion, littering, theft, rock climbing, camping, and other activities was already noted to be a problem (e.g., Cowan and Wilson 1977). In fact, Cowan noted that

“[t]he basic problem seems to be the fact that unrestricted visitation to the Gorge has reached a *saturation point* [emphasis added] (Cowan and Wilson 1977:51).”

In April 2000, the Forest Supervisor issued an order preventing camping within 100 feet of the base of any cliff or the back of any rockshelter, and prohibits building, maintaining, or using a fire, campfire, or stove fire within the same areas (Worthington 2000). Prior to this move, however, unlimited camping occurred within archaeological sites.

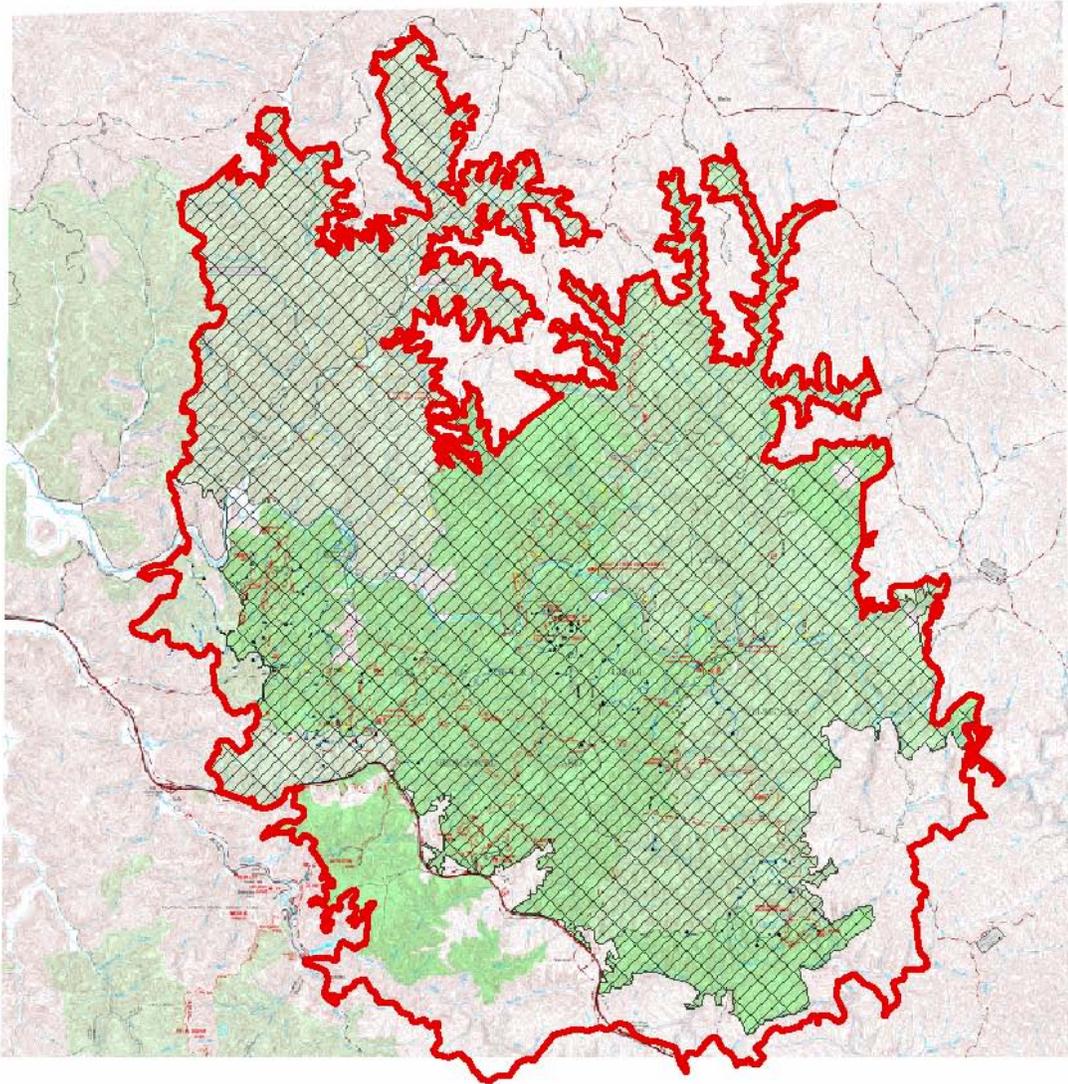
Intentional looting of archaeological sites has occurred for years, and continues to occur despite federal laws prohibiting such behavior on federal lands. The Gorge encompasses a large area that is difficult to traverse and nearly impossible to police fully on a full-time basis. Even when a pothunter is caught, it is often difficult to prosecute under the federal laws.

Another source of disturbance to archaeological sites is timbering. To minimize the adverse effects of logging, the Forest Service annually conducts, or contracts to conduct, archaeological surveys of proposed timber tracts. National Register eligibility recommendations of any sites documented within the project area are usually made at this time by the principal investigators.

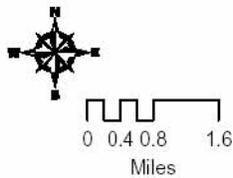
The integrity of the district remains solid, despite these activities and effects. Taken as a whole, the Red River Gorge Geological Area--including the Indian Creek drainage and Clifty Wilderness--retains significant archaeological resources from which important research questions can be addressed. Intact deposits remain, and even highly disturbed sites can yield important data. For example, the Hens Nest Shelter has been so thoroughly disturbed and the archaeological components within the shelter so mixed that no undisturbed deposits remain. However, the excellent and unusual preservation of ethnobotanical remains makes this site important. Ethnobotanists can utilize data from this site to address questions of plant and seed morphology, and domestication of plants through time, among other research problems. Nowhere else in the Eastern United States can one find a comparable concentration of rockshelter sites with such superb preservation of typically perishable remains.

Appendix B

Red River Gorge National Register of Historic Places District Daniel Boone National Forest



Legend



-  Limits of Acceptable Change Study Area Boundary
-  National Register of Historic Places District

The Limits of Acceptable Change Study in the Red River Gorge

The Limits of Acceptable Change (LAC) system is a framework for establishing acceptable and appropriate resource and social conditions in recreation settings. The LAC has been developed in response to the need of managers for a means of coping with increasing demands on recreational areas in a visible, logical fashion. The LAC also represents a reformulation of the recreational carrying capacity concept, with the primary emphasis now on the conditions desired in the area rather than on how much use an area can tolerate. The LAC is not a new idea. It is, however, the latest step in a continuing effort to improve wildland recreation management through definition of more explicit, measurable objectives. Nine steps are involved in the overall process.

A. STEP 1 – IDENTIFY ISSUES AND CONCERNS

- Purpose of this step is to identify those public issues and managerial concerns that relate to distinctive features and characteristics of the Gorge.
- Product is a narrative write up identifying unique values and special opportunities to be featured in management of the Gorge and problems requiring special attention.

B. STEP 2 – DEFINE AND DESCRIBE OPPORTUNITY ZONES

- Purpose of this step is to define a series of opportunity zones for the Gorge. An opportunity zone provides a qualitative description of the kinds of resource and social conditions acceptable for that class and the type of management activity considered appropriate. Opportunity zones are not on-the-ground allocations, nor are they derived from specific conditions found within the area. They are hypothetical descriptions of the range of conditions that managers consider likely to be maintained or restored in the area. The designation of opportunity zones often follows the basic Recreation Opportunity Spectrum (ROS) system.
- Product is a narrative description of resource, social, and managerial conditions defined as appropriate and acceptable for each opportunity zone.

C. STEP 3 – SELECT INDICATORS OF RESOURCE AND SOCIAL CONDITIONS

- Purpose of this step is to identify indicators-specific variables-that, singly or in combination, are taken as indicative of the condition of the overall opportunity class. These indicators must be measurable, such as numbers of damaged trees per campsite or number of trail encounters per day. These indicators will suggest where and when management action may be needed.
- Product is a list of measurable resource and social indicators (preferably quantifiable).

D. STEP 4 – INVENTORY EXISTING RESOURCE AND SOCIAL CONDITIONS

- Purpose of this step is to inventory conditions in the Gorge. Baseline data is needed before meaningful standards can be developed. An inventory of resource conditions is usually conducted in the field by assessing conditions of resources. These may include campsites, system trails, user-created trails, cultural sites, and rare plant sites. An inventory of social conditions is often obtained via a visitor use survey. Data collected

may include visitors perception of crowding, visitor use numbers, and visitor preferences for a variety of management techniques.

- Product is a map and/or list of existing conditions of each indicator throughout the Gorge.

E. STEP 5 – SPECIFY MEASURABLE STANDARDS FOR THE RESOURCE AND SOCIAL INDICATORS SELECTED FOR EACH OPPORTUNITY CLASS

- Purpose of this step is to assign quantitative or highly specific measures to the indicators. This greater specificity is obtained by establishing standards-measurable aspects of the indicators defined in step 3. Standards are often best expressed in terms of probabilities. For example, a standard for daily contacts while traveling in a certain opportunity class might be expressed as: “Contact between different groups on a trail will not exceed four per day on at least 90 percent of the days”.
- Product is a table of specific (quantified where possible) measures of acceptable conditions for each indicator in each opportunity zone.

F. STEP 6 – IDENTIFY ALTERNATIVE OPPORTUNITY ZONE ALLOCATIONS

- Purpose of this step is to decide what resource and social conditions are to be maintained or achieved in specific areas of the Gorge. This is a prescriptive step (it is concerned with establishing what should be), and input from both the Forest Service and the public should be used to make these decisions. Step 6 involves an analysis of inventory data collected in step 4, along with area issues and concerns identified in step 1. Some issues might prove mutually contradictory (“increase opportunities for easier access into most portions of the wilderness” and “provide greater opportunities for solitude”).
- Products are maps and tabular summaries of alternative opportunity zone allocations.

G. STEP 7 – IDENTIFY MANAGEMENT ACTIONS FOR EACH ALTERNATIVE

- Purpose of this step is to identify the differences, if any, that exist between current conditions (inventoried in step 4) and the standards (identified in step 5). This will identify places where problems exist and what management actions are needed.
- Product is a list or maps of all places where existing conditions are worse than standard and identification of what management actions would best bring conditions up to standard.

H. STEP 8 – EVALUATION AND SELECTION OF A PREFERRED ALTERNATIVE

- Purpose of this step is to select a preferred alternative.
- Product is the final allocation of opportunity zones and selection of a management program.

I. STEP 9 – IMPLEMENT ACTIONS AND MONITOR CONDITIONS

- Purpose of this step is to implement a management program to achieve the objectives of the selected alternative and to provide periodic, systematic feedback regarding the performance of the management program.

- Product is recommendations of needed changes in management program in order to obtain progress toward bringing existing conditions up to standard.

**PROGRAMMATIC AGREEMENT
BETWEEN
THE U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE
AND
THE KENTUCKY STATE HISTORIC PRESERVATION OFFICER
CONCERNING THE MANAGEMENT OF CULTURAL RESOURCES
IN THE DANIEL BOONE NATIONAL FOREST**

WHEREAS, The U.S. Department of Agriculture, Forest Service (FS) in consultation with the Kentucky State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) has determined that Forest Service activities on the Daniel Boone National Forest may affect properties included in or eligible for inclusion on the National Register of Historic Places (National Register); and,

WHEREAS, it has been determined that measures to appropriately identify and manage historic properties on the Daniel Boone National Forest may be best accomplished through development of a Memorandum of Agreement (MOA) setting forth mechanisms whereby the Forest Service can establish alternative procedures for complying with Section 106 of the National Historic Preservation Act consistent with the Southern Region Forest Service Programmatic Agreement; and

WHEREAS, the Forest Service has requested the comments of the Advisory Council on Historic Preservation (Advisory Council) pursuant to Section 106 of the National Historic Preservation Act of 1966 (16 USC 470) as amended, and its implementing regulations, "protection of Historic Properties" (36 CFR Part 800);

NOW, THEREFORE, the Forest Service and the SHPO agree that this undertaking shall be implemented in accordance with the following stipulations in order to take into account the effects of Forest Service activities on historic properties in the Daniel Boone National Forest of Kentucky.

STIPULATIONS

I. REVIEW OF UNDERTAKINGS

A. The Forest Service shall conduct a review of planned undertakings to determine their potential to affect identified and unidentified historic properties. Forest Service undertakings shall be classified as either Exempt Undertakings or Review Undertakings according to the following provisions:

1. Undertakings causing little or no ground disturbance and which meet the conditions listed in Stipulation II (B) are Exempt Undertakings and require no further review by the Kentucky SHPO.

2. Review Undertakings shall include all undertakings not meeting the requirement for Exempt Undertakings. Undertakings classified as Review Undertakings shall be treated following the procedures outlined in Stipulation III.

II. UNDERTAKINGS REQUIRING NO FURTHER REVIEW

A. Management of Forest Lands involves many undertakings that are unlikely to have an affect on properties eligible for inclusion on the National Register of Historic Places. Exempt Undertakings shall be reviewed for Section 106 purposes within the Forest Service by a Heritage Program archaeologist level should be at the forest archeologist or heritage program manager but without further review by the Advisory Council or SHPO.

B. The following activities will be treated as Exempt Undertakings on the Daniel Boone National Forest:

1. Special use actions that take place within existing road rights-of-way. These actions may include overhead or buried transmission lines, power pole placement or replacement, and/or access along Forest Service roads into adjacent private lands.
2. Chainsaw and/or herbicide site preparation on existing, previously harvested timber stands and utility Rights-of-ways.
3. Routine maintenance of historic buildings and structures (painting, etc.).
4. Hand planting of tree seedlings without mechanical site prep methods.
5. Routine recreational area site maintenance involving non-ground disturbing activities such as replacement of barriers or signs, regrading or repaving of roads and parking areas, maintenance of an existing trail within a campground, and hazard tree removal when a skidder is used unless within a known historic property boundary or archaeological site.
6. Road closures unless within a known historic property boundary or archaeological site.
7. Wildlife and Silvicultural Stand Improvement; both Mid-story and Over-story removal done by hand and mowing and fertilizing using mechanical equipment.
8. Cutting of firewood that shall not require either heavy equipment or new access roads.

9. Prescribed burns, if it can be determined that no buildings, structures, cemeteries, landscapes, or archaeological sites containing perishable materials are present within the burn area. This exclusion does not apply to proposed fire lines built by mechanical equipment, which must be surveyed for impacts on archaeological resources. An archaeologist will monitor any mop-up operations.
10. Improvements consisting of hand planting stream bank stabilization, sediment sampling, and channel improvement where the channel work is restricted to the existing stream channel.
11. Trenching done with a ditch witch resulting in a ditch less than a foot wide unless within a known historic property boundary or archaeological site.
12. Setting or replacing individual power poles or posts unless within a known historic property boundary or archaeological site.
13. Geophysical seismic monitoring unless within a known historic property boundary or archaeological site.
14. Transfer of use authorization from one authority to another when an action such as a boundary adjustment necessitates changing a right-of-way or easement from one federal authority to another.
15. Undertakings within areas that have been extensively disturbed in the past (e.g. pipeline corridors or strip mines).
16. For public safety, removal of hazard trees for 1 ½ tree height along each public road using skidders or cable unless within a known archaeological site or historic property.

III. UNDERTAKINGS REQUIRING REVIEW

A. The Forest Service shall conduct comprehensive inventories on all undertakings Forest-wide, which have potential for ground disturbance, effects to historic buildings or structures and landscapes, or which do not meet the requirements of Exempt Undertakings. Undertakings, where known National Register or eligible sites occur within or immediately adjacent to the project impact area, shall not be handled as Exempt Undertakings. Inventories will be conducted in accordance with the procedures and standards outlined in Section VIIA.

B. Examples of Review Undertakings include, but are not limited to: timber sales, land exchanges, fire lines, mineral exploration projects, wildlife ponds/openings construction and establishment, rehabilitation or demolition of buildings or other structures over 50

years old, road and trail construction or reconstruction, and new construction of buildings or other structures.

IV. PROJECT REPORTING AND SHPO REVIEW

A. Prior to implementation, undertakings requiring review will:

1. Complete a Phase I intensive survey by an archeologist and/or archeological technician as appropriate.

For surveys resulting in no historic properties or cultural resources being found within the project area a “No Find” report (Attachment 1) will be submitted to SHPO for review and comment.

For surveys resulting in the discovery of historic properties or cultural resources, a management summary (Attachment 2) will be submitted to SHPO for review and comment. Management summaries will include a discussion of the proposed undertaking, project area topographic maps and description of each site documented or affected including a statement regarding the site’s significance. The Forest Service will recommend measures to avoid, reduce or minimize the impacts of proposed projects on National Register or eligible sites.

2. All Phase I (Intensive) surveys done by outside contractors, all Phase II (Testing) projects by either Forest Service staff or outside contractors, and all Phase III (Mitigation) projects will be reported individually for each undertaking. These reports will conform to the Secretary of the Interior’s Standards for Archaeology and Historic Preservation and the SHPO’s most current Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment Reports.

B. The SHPO will review and comment within 30 working days of receipt of the required documentation. The 30-day review period may be waived on an individual project basis if so requested by the SHPO and agreed to by the Forest Service. If the SHPO does not comment within the 30-day review period the Forest Service will contact the SHPO to verify that no comments will be forthcoming.

V. MITIGATION MEASURES

Where an undertaking cannot avoid impacts to a property listed on or considered eligible for listing on the National Register the Forest Service will mitigate the site as follows:

A. In consultation with the SHPO, the Forest Service shall prepare all necessary documentation and plans as may be defined in 36 CFR Part 800 and attendant sections and subsections. These plans may include but are not limited to measures for mitigation

of adverse effects through data recovery, curation, recordation, stabilization, restrictive deed covenants, relocation and/or rehabilitation. For data recovery projects the Forest Service shall develop a research design and data recovery plan. Minimally, these shall address relevant research questions identified in the archaeological component of Kentucky's Historic Preservation Plan.

1. The plans and documentation shall be provided to the SHPO for review, and the SHPO will provide comment within 30 working days of receipt of the required documentation. If no comments are received within the 30-day review period the Forest Service will contact the SHPO to verify that no comments will be forthcoming.
 2. If the SHPO concurs with the Forest Service assessment, mitigation shall proceed. If the SHPO objects to the Forest Service recommendations, the Forest Service and SHPO will meet and attempt to resolve any objections. If the objections cannot be resolved, the Forest-Service recommendations will be submitted along with SHPO comments to the Advisory Council for review pursuant to Stipulation IX of this MOA.
- B. When approved by the SHPO, the Forest Service may substitute another listed, eligible or potentially significant site(s) for treatment in accordance with Stipulations V(A)(2b) and VI(A) above if it is determined that the substituted site(s) may offer similar or greater potential to yield archaeological or historic information than the impacted site.
1. Sites considered for substitution pursuant to this stipulation may not include those threatened by other Forest Service undertakings and the level of investigations and data recovery will be equivalent to what would have been required if no substitution occurred.
 2. Mitigation of a substituted site should occur on approximately the same schedule that investigation of the original impacted site would have occurred. If for any reason evaluation or mitigation of a substituted site cannot occur concurrent with implementation of the undertaking under review, the Forest Service must consult with the SHPO and plan for sufficient funds to conduct the investigations at a later date acceptable to the SHPO.
 3. Sites known to contain human burials are not subject to substitution under this provision.
 4. If the Forest Service and the SHPO agree to the investigation of a substituted site, no further treatment of the impacted site will be required for the undertaking being reviewed. However, the Forest Service will continue to manage the impacted site if, upon completion of the undertaking, the impacted site retains sufficient integrity to qualify for listing on the National Register.
 5. Investigation of alternative sites in accordance with this stipulation is not to be

considered as evidence of, or substitution for, the Forest Service meeting its responsibilities pursuant to Section 110 of the National Historic Preservation Act.

VI. ANNUAL REPORTS AND CULTURAL RESOURCE OVERVIEW

A. On an annual basis, the Forest Service in consultation with the Kentucky Heritage Council shall prepare an Annual Heritage Resources Report (Annual Report). Annual Reports covering the fiscal year shall be submitted to the SHPO for review and comment, and to the Advisory Council for informational purposes. The reporting procedure shall consist of the following:

1. The Cultural Resource Overview section of the Annual Report will be a cyclic synthesis of one of the major drainage systems of the Forest (Licking, Kentucky, or Cumberland) focusing on a particular district with discussions of investigations of special interest.
2. A management summary of the activities conducted on the Forest during the previous fiscal year, including summaries of the types and distributions of undertakings, the known probable effects of those actions on historic properties, and the actions planned and/or implemented to identify, protect and manage those resources.
3. The management summary shall include a table of sites, site types, cultural affiliation, National Register status, and treatment for each site investigated during the year.
4. A discussion and summary of undertakings, which were surveyed, but no sites were found.
5. Status of any mitigation, protection and preservation measures recommended or implemented during the previous year.
6. Discussion of information collected during the investigations, which may serve to update, modify or refine the existing forest overview and other research questions.
7. Maps, representative photographs, tables of artifacts, artifact illustrations, and other pertinent information.
8. Summary of cultural materials and records curated during the fiscal year and where curated.

B. Within six weeks of submission of the Annual Report at the end of the calendar year, the Forest Service and SHPO staffs will meet informally and discuss the Forest Service Heritage Program for the Daniel Boone National Forest. At that time, the Forest

Service and SHPO staffs will determine whether modifications, alterations, deletions or extensions to the terms of the MOA are appropriate. If needed, either agency may call additional meetings.

C. The Forest Service will continue to consult with the Kentucky Heritage Council to develop a Heritage Resource Management Plan and Cultural Resource Overview for the Daniel Boone National Forest.

VII. CURATION

The Forest Service shall curate all cultural materials and associated records for the previous fiscal year at a facility that meets the minimum standards for curation established by the Secretary of the Interior within 180 days of the submission of the Annual Report to the SHPO except when being used for display, research, evaluation or other educational purposes. Approved facilities in Kentucky include museums at the University of Kentucky, University of Louisville, and Murry State University.

VIII. PERFORMANCE STANDARDS

A. The Forest Service will ensure that historic property inventory, evaluation and treatment activities conducted pursuant to this PA are carried out in accordance with applicable sections of the Secretary of the Interior's Standards for Archaeology and Historic Preservation (48 FR 44716, September 29, 1983), the Section 110 Guidelines (ACHP and NPS, November 1989), the criteria for eligibility for inclusion on the National Register of Historic Places (31 CFR Part 60), and the most current version of the Kentucky SHPO's Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment Reports.

B. The Forest Service will ensure that historic preservation and management activities conducted pursuant to this PA are conducted under the professional supervision and oversight of individuals trained as archaeologists, historians, historic architects, or anthropologists and at a minimum meeting the standards set forth in either the appropriate office of Personnel Management Qualifications Standards, or the Secretary of the Interior's Professional Qualifications Standards (44 FR 447389). It is understood that activities supervised or conducted by such professionals will be within their areas of professional expertise. The Kentucky SHPO may assist the Forest Service in this matter by providing technical assistance from qualified professional historians or architectural historians in the review of plans and specifications of proposed activities affecting identified National Register or eligible properties.

C. Cultural Resource Technicians (CRTs) will work under the technical supervision of a qualified professional Forest Service archaeologist as defined in the Forest Service, Southern Region Programmatic Agreement. CRTs may conduct Phase I surveys

independently of a professional archaeologist on projects of 10 acres or less provided that:

1. A professional archaeologist develops the methods and techniques for carrying out the survey.
2. Sites recorded by CRTs will be field verified by professional archaeologists.
3. A professional archeologist prepares the necessary reports and documentation for review.
4. CRTs may not conduct archaeological testing independently of professional archaeologists, and may not make National Register evaluations.
5. At the discretion of the Forest Service, CRTs may, without restriction on project size, conduct archaeological monitoring on construction and other ground disturbing projects that have already been surveyed by the Forest Service but determined to have no effect on National Register listed or eligible sites. Such monitoring will serve as a check on the effectiveness of Forest Service survey methodology and site evaluation techniques. Should archaeological resources be discovered during project monitoring, construction should stop in the area of the discovery, until the remains can be examined by the Zone or Forest archaeologist and evaluated for potential significance.

D The SHPO will protect all sensitive, confidential, or proprietary Native American, historical or archaeological data by not allowing locational information to appear in documents or publications unless it is reasonably assured that the properties in question are adequately protected.

IX. RESOURCES DISCOVERED DURING PROJECT DEVELOPMENT

Any previously identified or unidentified archaeological or historic property, which is impacted or discovered during an undertaking, will be recorded and protected, followed by immediate consultation with the SHPO. With the exception of cultural resources identified in conjunction with wildland fire suppression activities the Forest shall halt work in the area of any actual or potential damage to the cultural resource pending completion of such consultation. For those historic properties or cultural resources identified in conjunction with wildland fire suppression activities consultation with the SHPO regarding treatment of the archaeological or historical property will be conducted after the firefighter's safety and their ability to contain and limit the spread of fire can be ensured.

X. ADDITIONAL PROVISIONS

- A. The Forest Service shall carry out its responsibilities by employment of qualified professional staff, or by contracting with outside consultants who, in the opinion of both the Forest Service and SHPO, meet all professional standards for preservation work as historians, architectural historians, and archaeologists.
- B. The Forest Service shall consult with the SHPO and other qualified professionals when questions arise from unusual survey or testing results.
- C. The Forest assures that all historic preservation work accomplished on federally owned lands owned or managed by the Forest Service will be consistent with the State Historic Preservation Plan.
- D. The SHPO reserves the right to monitor all cultural resource activities on the forest to ensure compliance with the National Historic Preservation Act.
- E. Situations not specifically covered in this agreement or by the Region 8 Programmatic Agreement unless otherwise provided in approved MOAs will be handled under applicable sections of the Advisory Council's regulations.
- F. The Forest Service, in cooperation with the Kentucky Heritage Council will continue to prepare a Heritage Resource Management Plan.

XI. DISPUTE RESOLUTION

- A. At any time a dispute should arise, the Parties shall first attempt to resolve it between them.
- B. At any time during the implementation of the measures stipulated in the MOA should an objection to any such measures be raised by the Forest Service or SHPO, and not resolved, the matter shall be referred to the Advisory Council for further comment and dispute resolution pursuant to 36 CFR Part 800.5(e). Any Advisory Council comment provided in response to such a request will be taken into account by the Forest Service in accordance with 36 CFR 800.6(c)(2) with reference only to the subject of the dispute; the Forest Service's responsibility to carry out all actions under this agreement that are not the subjects of the dispute will remain unchanged.

XII. MODIFICATION, EXTENSION, OR TERMINATION OF AGREEMENT

- A. If any of the parties to this MOA determine that its terms cannot be met, or believes a change is necessary, that party shall request the signatories to consider an amendment or addendum to this MOA. Any agreed upon amendments or addenda shall be executed in the same manner as the original MOA

B. Any party to this MOA may terminate it by providing 30 days notice to the other signatories, provided that the parties will consult during the period prior to termination to seek an agreement, amendments or other actions that would avoid termination. In the event of termination, or if the Forest Service does not carry out the terms of this MOA, the Daniel Boone National Forest, Forest Service will comply with the Southern Region Forest Programmatic Agreement.

C. If the Southern Region Forest Service Programmatic Agreement is modified or terminated, the Forest Service and SHPO shall meet within 30 days to either amend or terminate this agreement as warranted.

D. This MOA will continue in force through calendar year 2007, when it will be reviewed by the Forest Service, the Advisory Council and the SHPO for possible modification, termination, or extension. If not renewed or extended, this Programmatic Agreement terminates on December 31, 2007. No extension or modification will be effective unless all parties to the MOA have agreed to it in writing.

Execution of this Memorandum of Agreement evidences that the Forest Service has afforded the Advisory Council a reasonable opportunity to comment on its programs and their efforts on cultural resources in the Daniel Boone National Forest in Kentucky, and that the Forest Service has taken into account the effects of its activities on cultural and historic resources.

/s/
BENJAMIN T. WORTHINGTON DATE
Forest Supervisor

/s/
DAVID L. MORGAN DATE Accepted by Advisory Council DATE
State Historic Preservation Officer On Historic Preservation

EBCI Treatment Guidelines for Human Remains and Funerary Objects (Survey, Excavation, Laboratory/Analysis, and Curation Guidelines)

It is the wish of the EBCI that whenever possible, human interments be left in situ, unstudied, and protected from current and future disturbance. However, when these parameters cannot be met, the following guidance shall apply:

Archeological Surveys: The EBCI requests that in the event human remains, funerary objects, sacred objects, or objects of cultural patrimony are encountered, no photographs of such items be taken. Detailed drawings are permissible, however.

Excavations: The EBCI requests that in the event human remains, funerary objects, sacred objects, or objects of cultural patrimony are encountered, no photographs of such items be taken. Detailed drawings are permissible, however. Also, if after consultation with the SHPO and culturally affiliated, federally recognized tribes, the lead agency determines that the excavation of these items is required, the EBCI requests that only the lead archaeologist and a physical anthropologist participate in the removal of these items. The EBCI also requests that, in the case of full excavation of human remains, the entire burial matrix be removed and curated for future reburial. Lastly, EBCI requests to be sent the proposals and research designs that will be provided to the SHPO and State Archaeologist for review and approval prior to the initiation of any excavation activities.

Laboratory Treatment/Analysis: The EBCI requests that any human remains, funerary objects, sacred objects, and/or objects of cultural patrimony not be unnecessarily washed or cleaned, and that only dry brushing be consistently used. Again, we request that no photographs be taken of such objects for documentation or curation purposes, however detailed drawings are acceptable. Furthermore, in terms of human remains, we require that no destructive analyses be permitted, and we would like to have discussions and agreements about the kind of analyses, if any, that will be permitted.

Curation: The EBCI requests that in all cases where it is remotely feasible, that human remains, associated funerary objects, and the burial matrix be stored together. Furthermore, we ask that these type of objects, as well as sacred objects and objects of cultural patrimony, be removed from public viewing or public handling and that researchers not automatically be granted access to such items. Research requests should be submitted to the EBCI Cultural Resources office in the event someone wishes to study such items.

Avoidance/Preservation in Place/Excavation/Reburial: Remember, our preference is always avoidance/preservation in place. Unless there are very good reasons as to why this is not possible, we will not immediately enter into discussions of excavation, removal, study, reburial, etc. That being said, if remains must be moved, it is always our preference that they be out of the ground for only as long as it takes to move them to their new resting place, which should be as close to the original resting place as possible (within line of sight). Sometimes, we do allow minimal study of the remains, especially if it can be done with the remains in situ. If longer study is needed, we prefer a field lab to sending them off some distance to be studied in a lab. The bottom line is that the less time they are exposed to the air, the better it is for the people involved and the Tribe. If reburial is the only option, the most efficient/time sensitive reburial process is preferred. Also, capping of the burials is not typically problematic, especially if there is ample fill dirt between the individual and the foreign capping material.

KyOPA Position Statement on the Treatment of Human Remains Adopted February 2005

The Kentucky Organization of Professional Archaeologists (KyOPA) recognizes the legitimacy of both scientific and traditional cultural interests in human remains. In our commitment to understanding and communicating the richness of humanity's cultural and physical heritage, however, we are ethically required to advocate for the continued conservation of archaeological data. Research in many related scientific fields depends upon responsible scholars having collections of human remains reasonably available both for replicative research as well as research addressing new questions or employing new analytical techniques.

Although we consider this policy to be applicable to the study of all human remains, it is geared toward Native American human remains. We also recognize that the study of human remains does not occur in a cultural or historical vacuum. We seek to find mutually-agreeable solutions in which the study of Native American human remains can occur.

Position Statement

1. Wherever possible both human burials and the burial place should be avoided, left undisturbed and the integrity of the burial place should be retained without alteration.
2. In the case of discovery of human remains in a site that is not threatened by destruction, it is important to document the location and integrity of the burial place. If a valid research design does not require full excavation, a strategy of minimal disturbance may be preferable. Minimal disturbance may include exposure, recording, and visual analysis of human remains and associated artifacts, followed by replacement of the soil, without alteration of the location, position, or condition of the burial contents.
3. When avoidance or minimal disturbance cannot be achieved, all human remains should be excavated and at all times must be treated with dignity and respect. All excavations will be performed under the direct supervision of professional archaeologists and according to professional standards.
4. Conflicting claims concerning the proper treatment and disposition of excavated human remains must be resolved on a case-by-case basis through consideration of:
 - a) the scientific importance of the particular remains in question;
 - b) the cultural and religious values of lineal descendants including those who are official representatives of federally-recognized Native American tribes; and
 - c) the strength of the relationship of the descendants to the remains in question.

By weighing each case on these three factors we understand that some cases will be resolved in favor of scientific interests and other cases will be resolved in favor of traditional interests.

5. All excavated human remains should be thoroughly and appropriately studied according to standard, accepted archaeological practice. KyOPA considers appropriate study to include drawings, photographs, images, measurements, radiocarbon dating, DNA analysis, and stable isotope analysis. All photographs will be used for scientific documentation purposes only. No human remains should be reinterred before appropriate documentation and study has been completed. Where the above analyses are not immediately performed, a small bone sample will be preserved in those case-by-case instances where repatriation is the outcome.

6. All excavated human remains should be studied by qualified, responsible researchers within a limited but reasonable time frame. The time frame will be established on a case-by-case basis depending on the quantity and condition of human remains to be studied, and funding and analytical resources. KyOPA suggests all analyses be completed within five years.

7. Until repatriation is negotiated, all excavated human remains must be curated with an official state repository. After curation all Native American human remains will proceed into the consultation process outlined in the Native American Graves Protection and Repatriation Act.