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**Standard Form 298 (Rev. 8-98)**

Prepared by ANSI Std Z39-18
OMAHA DISTRICT FINAL CULTURAL RESOURCE SITE MONITORING PLAN

JUNE 2014

PREPARED BY THE OMAHA DISTRICT CULTURAL RESOURCES PROGRAM

IN CONSULTATION WITH

Affected Tribes, THPOs, SHPOs, ACHP and other consulting parties
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PREFACE


The cultural resources policy of the Omaha District is to preserve and protect significant cultural resources in a spirit of stewardship for the nation. It is the responsibility of the Omaha District to locate, identify, and evaluate cultural resources for their eligibility to the National Register of Historic Places. Once a cultural resource has been determined eligible for the National Register of Historic Places, it is our responsibility to preserve them in perpetuity or to mitigate them if they cannot be preserved. It is our goal to properly care for significant sites, stabilizing those sites threatened by erosion, mitigating those sites where stabilization is not an option, encouraging and enabling adaptive reuse of historic structures, and preserving the historic and prehistoric sites on District lands, as appropriate.

Purpose: The Omaha District Cultural Resource Program has a responsibility to preserve cultural resources on Omaha District managed lands. The Program purpose statement reads as follows: “To be effective stewards of cultural resources located on Federal lands owned and operated by the Omaha District Corps of Engineers, by proactively developing relationships with interested parties, identifying issues, and subsequently resolving those issues to the extent allowed by federal law, executive orders, regulations and related guidance, and budget constraints. To also provide support to our customers in their needs concerning cultural resource activities and compliance.”

The Omaha District believes the concept of shared stewardship is an essential element to preserving and protecting these resources. It is important for the Omaha District to continue to work closely with Tribal governments, Federal and State agencies, interested parties, and the general public in the development and implementation of the Cultural Resource Program.

These collaborative efforts have been instrumental in the development and success of the Cultural Resource Site Monitoring Program. The combined efforts of all parties have resulted in approximately forty-two percent (42%) of 5,000 identified sites being monitored on an annual basis. The valuable information provided by our PA signatories, and other non-signatory partners, contributes to the overall implementation of a successful preservation program.

The intent of the Cultural Resource Site Monitoring Plan is for PA signatories, and other non-signatory partners to cooperatively protect, manage, and inventory cultural resource sites located on Omaha District managed lands along the Missouri River system of main stem dams. The plan outlines the components and processes of cultural resource site monitoring.

The Programmatic Agreement for the Operation and Management of the Missouri River Main Stem System for Compliance with the National Historic Preservation Act (PA), Stipulation 9- Main Stem Reservoir Cultural Resource Management Plans (CRMPs) states, “…the CRMPs will provide baseline information
about cultural resource sites (including historic properties) at each reservoir...” Therefore, through consultation with PA signatories, and other non-signatory partners the Omaha District has developed CRMPs for each Main Stem Reservoir. The CRMPs provide a set of standard procedures for dealing with cultural resources including prehistoric and historic archaeological sites, traditional Native American resources (e.g., sacred sites and gathering places), and historic military sites. During the consultation process for each CRMP a list of sites to be monitored on a semi-annual and annual basis was developed. This has led to routine monitoring of identified sites and the basis for the Routine Monitoring Plan.

Background: In 2004, the Programmatic Agreement for the Operation and Management of the Missouri River Main Stem System for Compliance with the National Historic Preservation Act, as amended, (March 19, 2004) was finalized. The agreement states; “is an attempt to address all problems associated with cultural and historic resource impacts involved with the ongoing operation and maintenance of the Missouri River system of main stem dams. It is by design an initiative that will facilitate the development of processes and strategies to minimize, avoid, or mitigate the ongoing adverse impacts the system causes. It is an attempt to overcome barriers keeping worshippers from areas and resources that are essential to their continuing ability to carry out traditional worship pursuits. Furthermore, through the collective establishment and implementation of principles of Consultation, and Collaboration, and Shared Stewardship, this document will lay the groundwork for Tribes to achieve parity with the Corps of Engineers on issues directly affecting important historic, cultural, and natural resources. Though this document is limited in its scope to the application and enforcement of historic preservation and protection laws, it provides the opportunity to develop a dialogue and forum for the various Indigenous Nations and Federal agencies to begin addressing all resources considered sacred or important by Indigenous Peoples.”

The Preamble of the PA states; “For Indigenous Tribal Peoples, the Missouri River is characterized as “The Water of Life,” and the very water that created the corridor is considered sacred. When the Army Corps of Engineers built six main-stem dams on the Missouri River, life for the Indigenous Peoples who called the River home changed immediately and dramatically. Gone are many of our ancient, river-bottom homes, our medicines, our sacred places, the earthlodge and tipi village and hunting camp sites created by our beloved ancestors. Gone also are many places intrinsic to our origin stories and to events in our oral histories that are alive in our Peoples’ minds and hearts and in stories which are still related today. The loss of our river homes affected every aspect of the quality of our lives: spiritual, mental, physical, emotional, and socio-economic lifeways, all of which make up our very identity as Native Peoples. Altering the flow of the River altered the face of our Mother Earth, and we are still reeling from and dealing with the consequences of these man-made changes. As a result of the creation of the Missouri River main stem and attendant dams, there are severe threats to many of the remaining sacred places and important resources that traditional Indigenous Cultures require for continuance."

During the development of the PA interested parties requested the Omaha District, to conduct a baseline assessment of sites to identify the level of disturbance and current condition of the sites, utilizing electronic methods of recording the information. Based on the information obtained from the Baseline Monitoring the Omaha District and PA signatories, and other non-signatory partners developed a routine monitoring program and the “Draft Cultural Site Monitoring and Enforcement Plan,” dated April 2005. During a 2012 PA consultation meeting signatories, and other non-signatory partners requested the Omaha District to update the original 2005 plan, by creating separate Monitoring and Enforcement Plans.

The Corps provided a draft monitoring plan to PA signatories, and non-signatory partners in December 2013 for an eighty day review and comment period. Based on the comments and requests received during the consultation process the final plan was developed.
The Cultural Resource Site Monitoring Plan is the Omaha District’s good faith effort to meet the requirements identified in PA Stipulation 13- Site Monitoring A) which states; “The Corps shall develop and implement a monitoring program to provide continued oversight of historic properties located on federal land managed by the Corps and to collect information on site conditions and effects or threats to them (including but not limited to, erosion, recreational, agricultural and other encroachment, and looting and vandalism). The Corps shall use this information to plan and implement law enforcement and other preventive or corrective management actions.” Site Monitoring Plan B) states; “The Corps shall develop a Monitoring Plan to describe the conduct of the monitoring program. The Plan shall discuss the types and location of sites to be monitored, field methodology of monitoring and conditions recordation (including forms, data dictionary); data storage, retrieval and analysis; schedule; staffing and qualifications; and other details.”

Therefore, the following plan will provide an overview of cultural resource management and the Omaha District’s Cultural Resource Program, intent of routine monitoring, data requirements, sites to be monitored, impacts affecting cultural resource sites, methods for collecting monitoring information, monitor job description and training, monitoring documentation, monitoring procedures, coordination and revision of the Cultural Resource Site Monitoring Plan.
1. **Overview of Cultural Resource Management:** Cultural resource management refers to activities and tasks involved in the stewardship of cultural resources, including identifying, evaluating, maintaining, protecting, and otherwise treating cultural resources to comply with historic preservation and environmental laws. Department of Defense and Department of Interior regulations define cultural resources as, “… all elements of the physical and social environment that are thought to have cultural value.” This encompasses historic properties, archaeological resources, sacred sites, religious sites, burial sites, and properties of traditional religious and cultural importance.

1) **Historic Property:** is the location of a cultural resource. Historic properties are defined as, any prehistoric or historic district, site building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. It also includes properties of traditional religious and cultural importance to an Indian Tribe or Native Hawaiian organization that meet the National Register criteria to be included on the National Register of Historic Places. The National Register of Historic Places is an inventory of properties important in our Nation’s history, cultural, architecture, archeology, and engineering. The National Register office within the National Park Service maintains the inventory. Properties eligible for the National Register must be at least 50 years old, have integrity or possess unusual significance. Properties can be significant at national, state, or local levels and include districts, sites, buildings, structures, and objects. Only the Keeper of the National Register, acting through the authority of the Secretary of the Interior, can actually list a property on the National Register.

2) **Historic Preservation:** includes a broad range of activities as formally defined in the National Historic Preservation Act of 1966, as amended. These activities include identification, evaluation, recordation, documentation, curation, acquisition, protection, management, rehabilitation, restoration, education and training. Emphasis is placed on this definition because many federal agency employees and members of the public view historic preservation only as the actual “in place” preservation of a historic property. The intent of Congress is not to preserve every site listed on the National Register of Historic Places, and there are times when the public benefits of a federal project clearly outweigh the preservation of a specific historic property.

2. **Cultural Resource Site Monitoring:** The Omaha District Cultural Resource Program is directed by the Cultural Resource Program Manager. Omaha District personnel implement the Cultural Resource Program goals and objectives, of which monitoring is a high priority.

PA signatories, and other non-signatory partners are actively involved with monitoring activities. Tribal Historic Preservation Offices and Tribal Law Enforcement frequently monitor and conduct surveillance on cultural resource sites to identify and monitor environmental and human impacts. State Historic Preservation Offices, State Archeologists, State Game, Fish, Parks and Recreation
also conduct monitoring activities on sites under their management. Collaboration between all entities is important to maintain an affective monitoring program.

3. **Intent:** The intent of routine monitoring is to identify changes to cultural resource sites. Routine monitoring identifies potential impacts to sites from natural or human activities. The information obtained assists the Omaha District in identifying management activities. Management activities may include stabilizing a site, increasing monitoring to document environmental impacts, increasing monitoring to protect the site from human activities, or evaluating a site for listing on the National Register.

4. **Data Requirements:** PA Stipulation 11- Identification of Historic Properties B) states, “The Corps shall locate sites by global positioning system (GPS), complete site visit forms, and add site information to the Corps cultural resource site geographic information system GIS.” The Omaha District uses hand-held GPS units; the hardware and software is discussed later in the document. The GPS equipment allows users to record information on site conditions. The information is uploaded into a secure GIS database. The GIS database “Cultural Resource Database Management System” (CR-DMS) contains information on all identified cultural resource sites. The information contained in the database for a previously recorded site may include historical documents, historical maps, photographs, archeological site forms, archeological reports, and routine monitoring information.

PA Stipulation 17- Protection of Sensitive Information requires the Omaha District to protect information concerning the nature, character, ownership, or location of archaeological resources or historic properties. Therefore, CR-DMS is only available to Cultural Resource Program personnel within the Omaha District and PA signatories, and other non-signatory partners actively involved with monitoring activities.

5. **Sites to be Monitored:** PA Stipulation 9- Main Stem Reservoir Cultural Resource Management Plans (CRMPs) states, “... the CRMPs will provide baseline information about cultural resource sites (including historic properties) at each reservoir...” Through consultation with PA signatories, and other non-signatory partners the Omaha District has developed CRMPs for each Main Stem Reservoir. The CRMPs provide a set of standard procedures for dealing with cultural resources including prehistoric and historic archaeological sites, traditional Native American resources (e.g., sacred sites and gathering places), and historic military sites.

During the consultation process for each CRMP PA signatories, and other non-signatory partners developed a list of sites to be monitored on a semi-annual and annual basis. The list of sites and previous routine monitoring information is utilized by Omaha District personnel and PA signatories, and other non-signatory partners to develop annual monitoring plans. During the PA process it was determined the monitoring season would begin April 1st and would end November 30th each calendar year. Sometimes the monitoring season is shortened or lengthened subject to weather conditions. Collaboration between all entities conducting monitoring activities assists in preserving identified cultural resources.
The Omaha District and PA signatories, and other non-signatory partners involved in routine monitoring activities attempt to accomplish visiting every site listed in a CRMP during the monitoring season. However, it is important to note that every site may not be visited in one monitoring season.

6. **Impacts:** During the PA consultation process signatories, and other non-signatory partners identified the types of impacts that threaten the integrity of cultural resource sites located along the main stem reservoirs. The following is the list of impacts identified:

1) **Natural Impacts:** Impacts to cultural resources that result from environmental or natural processes.

   a) **Erosion:** Defined as removal of surface material from the Earth’s crust and transportation of the eroded materials by natural agencies from the point of removal. Erosion is caused by wind action, river and stream processes, and glacial processes.

      i. **Wave Action:** Is the primary impact to cultural resources in lakes, and is created primarily by wind, but also by powerboat wakes. These wind and wake waves do affect particulate solid materials (soil) in the deeper areas of the reservoir, but are most destructive near shore in the shallow zone.

      ii. **Sheet Erosion:** Erosion of sites can occur as a sheet action across the surface of cultural resources and strip the topsoil and cultural bearing strata. Sheet erosion is generally a shallow to moderately deep erosion created by wind or water action of a broad area such as a terrace. This process commonly results in exposure of features that intruded into the subsoil. This type of erosion can affect the surface of an archaeological site by stripping the topsoil and culture bearing strata.

      iii. **Shear Erosion:** Along a shoreline that is steep, erosion cuts away vertical portions of cultural resources situated along it. Undercutting results in slumping of the upper portions of the bank, cutting gradually into the sites, also called block slumping.

   b. **Uncontrolled Natural Impacts:** Impacts to cultural resource sites that result from natural factors such as prairie dog towns, threatened and endangered species, deer stripping bark, natural disasters, and other impacts not involving erosion.
2) **Human Impacts:** Impacts to cultural resources that result from human activities.

   a) **Construction:** There are direct and indirect impacts to cultural resources that result from construction activities associated with the continuing operation and management of the project area. These may include construction and maintenance of recreational facilities, road building, maintenance activities, and out grants or lease activities. Plowing, mowing, terracing, irrigating, livestock grazing and controlled burning of vegetation are all impacts associated with the continuing use of the project area by farmers and ranchers. These impacts can affect cultural sites by disturbing the integrity of archaeological sites and potentially destroying plants that may have important traditional cultural value to local Native Americans.

   b) **Looting and Vandalism:** The intensive looting of artifacts along the shoreline, especially during the winter draw down period, is a constant threat to cultural resources. Vandalism may occur on various levels from the occasional fortuitous find of an arrowhead on the ground, to regular systematic illegal surface collecting by amateur archaeologists, concerted digging and looting by pothunters, and indiscriminate defacement or destruction of cultural resources.

7. **Methods:** The Omaha District recommends routine monitoring fieldwork activities be completed by a two person team and a site monitoring schedule to be coordinated with the applicable Omaha District designated representatives. Sites should be accessed via public roads and waterways. Monitors should not trespass on private land to access sites. Remote sites should be accessed by foot, boat, jet-ski or all terrain vehicles (if permitted). All Omaha District and applicable agency safety and boating policies should be followed.

   Monitors may encounter individuals actively impacting a site on Omaha District managed lands. The safety of all monitors is of upmost concern. Therefore, monitors should not confront someone actively looting a site. Monitors should safely gather information regarding these activities and immediately report this information to the Omaha District looting/vandalism hotline: 1-866-No-Swipe (1-866-667-9473). The Field Archeologist(s) and Lake Manager of the reservoir should also be contacted. The Omaha District investigates all calls reported to the hotline and relays this information to applicable law enforcement.

   Sites may also contain human remains that are vulnerable to exposure by continuing or intermittent shoreline or bank erosion. The remains should not be removed or disturbed unless they are in immediate danger of being disturbed by animals, vandals, or sloughing banks.

   The Omaha District has a Standard Operating Procedure (SOP) for the discovery of human skeletal remains. The policy is to treat human skeletal remains respectfully and responsively in consultation with affected tribes in accordance with the North Dakota Intertribal Reinterment
Committee (NDIRC) Memorandum of Agreement (MOA), Native American Graves Protection and Repatriation Act (NAGPRA), and other applicable federal, tribal, state and local laws.

Monitors should safely gather information regarding the location of the remains and immediately report this information to the Omaha Messaging Center 1-888-761-2722. The remains should not be removed or disturbed unless they are in immediate danger of being disturbed by animals, vandals, or sloughing banks.

After receiving a call the messaging center contacts the District Archeologist and Field Archeologist(s). The Archeologist(s) investigate the area to determine if the remains are associated with a possible modern crime. If a possible crime is suspected applicable law enforcement is contacted.

If the Archeologist(s) determines the remains are not considered part of a crime scene, and if the remains are designated as Native American, Omaha District personnel will consult with tribal representatives to determine how to handle the situation.

8. **Monitor Job Description:** During the PA consultation process PA signatories, and other non-signatory partners requested monitors not be required to meet the professional qualification listed in 36CFR Part 61, Appendix A. Therefore, a job description was developed to meet requirements identified in PA Stipulation 13- Site Monitoring Program.

Monitors are required to record cultural resource site information with a GPS unit and are responsible for conducting a pedestrian inspection of identified sites. The purpose of the inspection is to identify and record natural and human impacts. The work may require performing geospatial tasks in the field and in an office, long periods in automobiles, boats, all terrain vehicles, etc; exposure to extreme weather conditions, fast moving water or other potentially dangerous risks such as snakes, insects, and poisonous plants may also be encountered. The work also requires regular physical exertion such as bending and walking over uneven surfaces for long periods of time through thick vegetation.

9. **Training:** The Omaha District provides training to employees performing monitoring activities and can provide training to PA signatories, and other non-signatory partners upon request. The training was developed to assist monitors in fulfilling PA Stipulation 13 requirements of identifying natural and human impacts. It was also designed to assist monitors in fulfilling PA Stipulation 11 requirements of recording routine monitoring information with GPS equipment. The training addresses the following items:

- Overview of the Omaha District’s Cultural Resource Program
- Cultural Resource laws, authorities and policies
- Protection of Sensitive Information
- Cultural Resource Sites along the Missouri River Main Stem
- Overview of Archeological and Historic Artifacts
- Sites identified in the CRMP for the reservoir
• Overview of other research methods to collect information on a site
• Developing a fieldwork plan
• Overview of mapping resources
• Identification of Natural and Human Impacts
• How to perform a pedestrian inspection at sites and to record information
• Overview of GIS and GPS equipment
• Overview of gathering GPS information and loading the data into CR-DMS
• When applicable monitoring contract requirements and deliverables

Training efforts by Omaha District personnel and PA signatories, and other non-signatory partners have been instrumental in the development and success of routine monitoring. However, it is important to note this training does not fulfill any qualifications listed in 36CFR Part 61, Appendix A, and is not a requirement of routine monitoring activities. Requests for training should be submitted to the Cultural Resource Program Manager.

10. Equipment/Software: PA Stipulation 11- Identification of Historic Properties requires the Omaha District to record routine monitoring information electronically. The Omaha District Cultural Resource Program utilizes hand-held GPS (GeoXT Trimble) units and TerraSync software to collect routine monitoring data, which is uploaded into CR-DMS. Pathfinder Office is utilized for pre and post processing of data. Detailed instructions for operating the GPS unit and post processing collected information is provided in Appendix B.

During the PA consultation process PA signatories, and other non-signatory partners requested the Omaha District utilize GPS equipment that could record information with a sub-meter accuracy. Therefore, the Omaha District utilizes GeoXT Trimble units to record routine monitoring information. The GPS units have TerraSync software installed on them which provides a customizable data dictionary for recording site conditions. The data dictionary is designed to record natural and human impacts. The following is a list of the items that can be recorded.

• No Impact: No visible impacts identified within the site boundary.
• Erosion Line: Erosion along a shoreline that is cutting away vertical portions of a site.
• Erosion polygon: Erosion encompassing a large area such as slumping of the upper portions of the bank which cut into the bank.
• Encroachment Line: Encroachment into a site from agricultural or recreation activities.
• Encroachment Polygon: Encroachment into a site encompassing a large area such as cattle grazing.
• Point Generic: Impact to a site such as a fire or trash pit.
• Area Generic: Impact to a site such as a large dumping area.
• Looting: Impact to site from artifact collecting.

The data dictionary is created in Pathfinder office and transferred to the unit. The data dictionary is utilized to collect information for seven days. The data dictionary is part of a geographical shapefile which contains the location of previously identified cultural resource sites within an
Omaha District management area. The shapefile graphically displays the boundaries of a site and displays information being collected. All dictionary entries allow monitors to provide recommendations which the Omaha District utilizes in determining management activities. Detailed instructions for recording information are provided in Appendix B.

The Cultural Resource Program understands the cost of equipment and software can be a limiting factor for its signatories, and other non-signatory partners involved in routine monitoring activities. Therefore, when equipment is available the Omaha District may provide partners the opportunity to borrow a GPS unit. The Omaha District does not have the licensing capability to lend TerraSync and Pathfinder Office. Therefore, the borrower is required to bring the unit to an Omaha District field office on a weekly basis for data processing.

11. Procedures: Upon entering the boundary of a previously identified site monitors walk within the boundaries of the site to identify if the site has been impacted by natural or human activities. Impacts are identified and recorded on the GPS unit. The information recorded on the GPS unit is uploaded into CR-DMS. Frequent uploading of the information assists in preservation activities. Detailed instructions for recording information are provided in Appendix B.

12. Documentation: PA Stipulation 22 requires the Omaha District to report on routine monitoring activities annually, which is included in the Cultural Resource Program Annual Report. PA signatories, and other non-signatory partners who perform routine monitoring under contract also submit a report. The report(s) detail activities that occurred during the monitoring season and provide recommendations for future monitoring activities. The Cultural Resource Program encourages all signatories, and other non-signatory partners to share information they may have regarding cultural resource sites within Omaha District managed lands. The collaboration between all partners assists in maintaining an affective preservation program.

13. Coordination and Revision: The Cultural Resource Monitoring Plan was developed through consultation with Programmatic Agreement signatories and non-signatories and will be revised as necessary or upon request.

14. Summary: The cultural resources policy for the Omaha District is to preserve and protect significant cultural resources in a spirit of stewardship for the nation. It is our goal to properly care for significant sites, stabilizing those sites threatened by erosion, mitigating those sites where stabilization is not an option, encouraging and enabling adaptive reuse of historic structures, and preserving the historic and prehistoric sites on District lands, as appropriate.

The Omaha District Cultural Resource Program is directed by the Cultural Resource Program Manager. Omaha District personnel implement the program goals and objectives, of which cultural resource monitoring activities are a high priority. The intent of routine monitoring is for the Omaha District and PA signatories, and other non-signatory partners to cooperatively protect manage and inventory cultural resource sites located along the Missouri River system of main stem dams.
The monitoring plan provides an overview of cultural resource management, the cultural resource program, intent or routine monitoring, data collection, identifies sites to be monitored, types of impacts affecting cultural resource sites, methods for gathering routine information, the job description of a routine monitor, training, equipment and software, documentation, monitoring procedures, and coordination and revision of the Cultural Resource Site Monitoring Plan.

The monitoring plan is the Omaha District’s good faith effort to meet the requirements identified in the PA. The plan was developed in consultation with PA signatories, and other non-signatory partners. Previous collaborative efforts among PA signatories, and other non-signatory partners have led to the successful implementation of routine monitoring activities, which have resulted in approximately (42%) of 5,000 cultural resource sites to be monitored on an annual basis. The Omaha District plans to continue its implementation of routine monitoring activities which assists in maintaining an affective preservation program.
LIST OF CULTURAL RESOURCE LAWS

1. **P.L. 102-575, National Historic Preservation Act of 1966, as amended through 1992.** The Act establishes preservation as a national policy and directs the Federal government to provide leadership in preserving, restoring and maintaining the historic and cultural environment of the nation. The Act authorizes the Secretary of the Interior to maintain a National Register of Historic Places, and establishes the Advisory Council on Historic Preservation (ACHP).

   Section 106 directs Federal agencies to take into account the effect of a Federal undertaking on any district site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historical Places. Federal agencies must also provide the ACHP a reasonable opportunity to comment on each Federal undertaking.

   Section 110 requires Federal agencies to assume responsibility for preservation of historic properties that are owned and controlled by agencies, and they are required to establish a program to locate, inventory and nominate all properties under the agencies ownership or control that are eligible for inclusion on the National Register. In the interim, agencies are to exercise caution to assure that significant properties are not inadvertently transferred, sold, demolished, substantially altered or allowed to deteriorate.

2. **Archaeological Resources Protection Act of 1979, as amended (16 U.S.C. 470) (hereinafter referred to as: “ARPA”).** ARPA makes it illegal for any person to excavate, remove, damage, or otherwise alter or deface, or attempt to excavate, remove, damage, or otherwise alter or deface any archaeological resource located on public lands or Indian lands unless such activity is pursuant to a permit issued under section 470cc of this title, a permit referred to in section 470cc(h)(2) of this title, or the exemption contained in section 470cc(g)(1) of this title. In addition to criminal penalties authorized in 16 U.S.C. §470ee, a person who violates a prohibition contained in an applicable regulation or a permit may also be assessed civil penalties pursuant to 16 U.S.C. §470ff. This law also makes it illegal to traffic in archaeological resources as no person may sell, purchase, exchange, transport, receive, or offer to sell, purchase, or exchange any archaeological resource if such resource was excavated or removed from public lands or Indian lands in violation of Federal law. Subsection 4(c) of ARPA, 16 U.S.C. §480cc(c), provides that if an ARPA permit "may result in harm to, or destruction of, any religious or cultural site," then before issuing the permit the federal land manager must provide notice to "any Indian tribe which may consider the site as having religious or cultural importance." This statutory requirement is implemented through the uniform regulations, 32 C.F.R. §229.7, which sets out the process through which federal land managers fulfill their legal obligation to provide notice to tribes before issuing permits.

3. **Native American Graves Protection and Repatriation Act of 1990, (Public Law 101-601, codified at 18 U.S.C. §1170 and 25 U.S.C. §§3001 to 3013) (hereinafter referred to as “NAGPRA”).** Subsections §1170(a) and (b) of NAGPRA provide that individuals who knowingly sell, purchase, use for profit, or transport for sale or profit, the human remains or cultural items of a Native American without the right of possession to those remains as provided in NAGPRA or obtained in violation of NAGPRA shall be fined in accordance with this title, or imprisoned not more than 12 months, or both, and in the case of a second or subsequent violation, be fined in accordance with this title, or imprisoned not more than 5 years, or both. In addition to the criminal provisions of NAGPRA codified at 18 U.S.C. §1170, section 3 of NAGPRA, codified at 25 U.S.C. §3002, contains provisions relating to the inadvertent discovery or intentional excavation of Native American human remains and other cultural items on federal lands or “tribal lands” (defined to include all lands within the exterior boundaries of any Indian reservation). Failure to comply with these statutory provisions and their implementing regulations may give rise to a violation of ARPA, which would be subject to criminal and/or civil penalties. The inadvertent discovery provisions of NAGPRA require that, in the area of the discovery, the activity that resulted in the discovery cease and that notice be given to the federal agency or the appropriate tribe for tribal lands. If, following compliance with the regulatory requirements for such inadvertent discoveries, the responsible federal official (for federal lands) determines that the discovered items must be excavated or removed, the NAGPRA implementing regulations make clear that such excavation or removal is subject to the provisions of NAGPRA relating to intentional excavations. 43 C.F.R. §10.4(d)(v). Any such excavation requires compliance with the permit...
requirements of ARPA, supplemented by consultation with appropriate Indian tribes. For tribal lands, the consent of the appropriate tribe is a statutory requirement. See 25 U.S.C. §3002(c); 43 C.F.R. §§10.3, 10.5.

4. **Antiquities Act of 1906. Antiquities Act of 1906 – Public Law (P.L.) 59-209 16 Uniform Standard Code (U.S.C.) 431-433.** Provides for protection of historic and prehistoric ruins and objects of antiquity, including paleontological resources on land owned or controlled by the Federal Government. The Act makes it a Federal offense to excavate, injure or destroy any historic or prehistoric ruin or monument, or any object of antiquity, situated on lands owned or controlled by the Government of the United States. Requires that permits be issued to conduct archeological work on Federal land. Authorizes the President to declare historic and prehistoric landmarks as national monuments. Federal agencies are permitted to transfer objects of antiquity to properly qualified institutions. There are no compliance requirements for the Corps of Engineers under this Act. The permit required under the Archeological Resources Protection Act of 1979 has replaced the Antiquities Permit.

5. **42 U.S.C. 1996 and 1996a, American Indian Religious Freedom Act of 1978.** On and after August 11, 1978, “it shall be the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians, including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites.” Under this law, the Omaha District must not limit access to religious sites, the possession and use of sacred objects, and the freedom to worship through special ceremonies and traditional rites. Federal agencies must make reasonable efforts to locate and coordinate with organizations and communities of groups covered by the act to insure that religious rights are accommodated during project planning, construction, and operation. Efforts must be documented in Corps project reports and NEPA documents.
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1. **Introduction:** The following manual is designed to explain the Omaha District’s routine monitoring procedures and is the Omaha District’s good faith effort to meet the requirements identified in **PA Stipulation 13- Site Monitoring A** which states; “The Corps shall develop and implement a monitoring program to provide continued oversight of historic properties located on federal land managed by the Corps and to collect information on site conditions and effects or threats to them (including but not limited to, erosion, recreational, agricultural and other encroachment, and looting and vandalism). The Corps shall use this information to plan and implement law enforcement and other preventive or corrective management actions.”

The intent of routine monitoring is to identify changes to cultural resource sites located along the Missouri River Main Stem Reservoirs. The Department of Defense and Department of Interior regulations define cultural resources as, “… all elements of the physical and social environment that are thought to have cultural value.” This encompasses historic properties, archaeological resources, sacred sites, religious sites, burial sites, and properties of traditional religious and cultural importance.

Omaha District personnel implement the Cultural Resource Program goals and objectives, of which monitoring is a high priority. PA signatories, and other non-signatory partners are actively involved with monitoring activities. Tribal Historic Preservation Offices and Tribal Law Enforcement frequently monitor and conduct surveillance on cultural resource sites to identify and monitor environmental and human impacts. State Historic Preservation Offices, State Archeologists, State Game, Fish, Parks and Recreation also conduct monitoring activities on sites under their management. Collaboration between all entities is important to maintain an affective monitoring program.

There are natural and human impacts that threaten the integrity of cultural resource sites. The following is a list of potential impacts that may be observed during routine monitoring.

1. **Natural Impacts:** Impacts to cultural resources that result from environmental or natural processes.
   a) **Erosion:** Defined as removal of surface material from the Earth’s crust and transportation of the eroded materials by natural agencies from the point of removal. Erosion is caused by wind action, river and stream processes, and glacial processes.
      i. **Wave Action:** Is the primary impact to cultural resources in lakes, and is created primarily by wind, but also by powerboat wakes. These wind and wake waves do affect particulate solid materials (soil) in the deeper areas of the reservoir, but are most destructive near shore in the shallow zone.
      ii. **Sheet Erosion:** Erosion of sites can occur as a sheet action across the surface of cultural resources and strip the topsoil and cultural bearing strata. Sheet erosion is generally a shallow to moderately deep erosion created by wind or water action of a broad area such as a terrace. This process commonly results in exposure of features that intruded into the subsoil. This type of erosion can affect the surface
of an archaeological site by stripping the topsoil and culture bearing strata.

iii. **Shear Erosion:** Along a shoreline that is steep, erosion cuts away vertical portions of cultural resources situated along it. Undercutting results in slumping of the upper portions of the bank, cutting gradually into the sites, also called block slumping.

b. **Uncontrolled Natural Impacts:** Impacts to cultural resource sites that result from natural factors such as prairie dog towns, threatened and endangered species, deer stripping bark, natural disasters, and other impacts not involving erosion.

2) **Human Impacts:** Impacts to cultural resources that result from human activities.

a) **Construction:** There are direct and indirect impacts to cultural resources that result from construction activities associated with the continuing operation and management of the project area. These may include construction and maintenance of recreational facilities, road building, maintenance activities, and out grants or lease activities. Plowing, mowing, terracing, irrigating, livestock grazing, and controlled burning of vegetation are all impacts associated with the continuing use of the project area by farmers and ranchers. These impacts can affect cultural sites by disturbing the integrity of archaeological sites and potentially destroying plants that may have important traditional cultural value to local Native Americans.

b) **Looting and Vandalism:** The intensive looting of artifacts along the shoreline, especially during the winter draw down period, is a constant threat to cultural resources. Vandalism may occur on various levels from the occasional fortuitous find of an arrowhead on the ground, to regular systematic illegal surface collecting by amateur archaeologists, concerted digging and looting by pothunters, and indiscriminate defacement or destruction of cultural resources.

2. **Sites to be Monitored:** PA Stipulation 9- Main Stem Reservoir Cultural Resource Management Plans (CRMPs) states, "... the CRMPs will provide baseline information about cultural resource sites (including historic properties) at each reservoir...” Through consultation with PA signatories, and other non-signatory partners the Omaha District has developed CRMPs for each Main Stem Reservoir. The CRMPs provide a set of standard procedures for dealing with cultural resources including prehistoric and historic archaeological sites, traditional Native American resources (e.g., sacred sites and gathering places), and historic military sites. Within the CRMP is a list of sites to be monitored on an annual and semi-annual basis. The list of sites and previous routine monitoring information is utilized by Omaha District personnel and PA signatories, and other non-signatory partners to develop annual monitoring plans. Monitors shall utilize the plan provided to them for their monitoring activities. Monitoring shall begin April 1 and end November 30 each calendar year. The monitoring season can be shortened or lengthened subject to weather conditions.
3. **Data Requirements: PA Stipulation 11- Identification of Historic Properties B)** states, “The Corps shall locate sites by global positioning system (GPS), complete site visit forms, and add site information to the Corps cultural resource site geographic information system GIS.” The Omaha District uses hand-held GPS (GeoXT Trimble) units and TerraSync software to collect routine monitoring data, which is uploaded into CR-DMS. Pathfinder Office is utilized for pre and post processing of data.

4. **Equipment/Software:** The GPS units have TerraSync software installed on them which provides a customizable data dictionary for recording site conditions. The data dictionary is designed to allow monitors to record natural and human impacts. The following is a list of the items that can be recorded.
   - No Impact: No visible impacts identified within the site boundary.
   - Erosion Line: Erosion along a shoreline that is cutting away vertical portions of a site.
   - Erosion polygon: Erosion encompassing a large area such as slumping of the upper portions of the bank which cut into the bank.
   - Encroachment Line: Encroachment into a site such from agricultural or recreation activities.
   - Encroachment Polygon: Encroachment into a site encompassing a large area such as cattle grazing.
   - Point Generic: Impact to a site such as a fire or trash pit.
   - Area Generic: Impact to a site such as a large dumping area.
   - Looting: Impact to site from artifact collecting.

The data dictionary is created in Pathfinder Office and transferred to the unit. The data dictionary is utilized to collect information for seven days (important note the unit will not record information after seven calendar days). The data dictionary is part of a geographical shapefile which visually displays the location of previously identified cultural resource sites within Omaha District management areas. It displays the boundaries of a site and the information being collected.

PA Stipulation 17- Protection of Sensitive Information and other cultural resource laws require the Omaha District to protect information concerning the nature, character, ownership, or location of archaeological resources or historic properties. Therefore, all electronic information and hardcopies should not be released to the public and should be protected at all times.

5. **Monitor Requirements:** Monitors are required to record cultural resource site information with the GPS unit and are responsible for conducting a pedestrian inspection of the identified sites. The purpose of the inspection is to identify and record natural and human impacts. The work may require performing geospatial tasks in the field and in an office, long periods in automobiles, boats, all terrain vehicles, etc; exposure to extreme weather conditions, fast moving water or other potentially dangerous risks such as snakes, insects, and poisonous plants may also be encountered. The work also requires regular physical exertion such as bending and walking over uneven surfaces for long periods of time through thick vegetation.
Sites shall be accessed via public roads and waterways. Monitors shall not trespass on private land to access sites. Remote sites shall be accessed by foot, boat, jet-ski or all terrain vehicles (if permitted). All Omaha District and applicable agency safety and boating policies shall be followed.

While performing monitoring activities a monitor may encounter individuals actively looting/vandalizing a cultural resource site. If this occurs the monitor shall safely gather information regarding the activities observed and immediately report this information to the Omaha District looting/vandalism hotline 1-866-No-Swipe (1-866-667-9473). The Field Archeologist(s) and Lake Manager of the reservoir shall also be contacted. The Omaha District will investigate all calls reported to the hotline and will relay this information to applicable law enforcement.

Sites may also contain human remains that are vulnerable to exposure by continuing or intermittent shoreline or bank erosion. If this occurs the monitors shall not remove or disturb the remains. Monitors shall safely gather information regarding the location of the remains and immediately report this information to the Omaha Messaging Center 1-888-761-2722 the Lake Manager of the reservoir shall also be contacted. If the remains are in immediate danger of being disturbed by animals, vandals, or sloughing banks they may be moved to a safer location. After receiving a call the messaging center will contact the District Archeologist and Field Archeologist(s). The Archeologist(s) will investigate the area to determine if the remains are associated with a possible modern crime. If a possible crime is suspected applicable law enforcement will be contacted.

The Omaha District Standard Operating Procedure (SOP) for the discovery of human skeletal remains shall be followed. The policy is to treat human skeletal remains respectfully and responsibly in consultation with affected tribes in accordance with the North Dakota Intertribal Reinterment Committee (NDIRC) Memorandum of Agreement (MOA), Native American Graves Protection and Repatriation Act (NAGPRA), and other applicable federal, tribal, state and local laws.

6. **Pre-fieldwork Activities:** The monitors shall consult the work plan cooperatively developed by the Omaha District and the designated agency performing the monitoring work. The plan identifies the schedule, the site number, site type, conditions previously identified, and any recommendations previously recorded. For detailed information about the site Monitors should consult the CRMP, State Archeological Site Forms, and Historical and Archeological documents.

The shapefile loaded onto the GPS unit graphically displays the location and site boundaries of all sites located within the management area. The map feature explained later can be utilized to navigate to a site. For additional information regarding the site location the monitors should consult the CRMP maps, USACE Boating and Recreation maps (provides the boundary line and recreation areas), Google Earth or Google Maps (provides aerial imagery, hybrid option provides street names on an aerial map), ACME Mapper 2.0 (provides topography, aerial and a hybrid option for map viewing).
The monitors shall ensure the GPS unit is charged before taking into the field. To charge the battery, connect one end of the AC adapter cable to the cradle and the other to an AC power outlet. Note when the unit is charging, the Power LED light is solid orange. When fully charged the LED will be green.

It is recommended that monitors download the information collected every seven calendar days. Therefore, the collected data should be downloaded and the data dictionary should be uploaded every seven calendar days. Details about uploading and downloading the data dictionary are provided below.

Monitors should also check weather conditions before fieldwork. Monitoring activities should not cause impacts to sites. Therefore, sites should not be monitored in wet/muddy conditions. Monitors should advise someone in their agency the times and locations they will be monitoring on a daily basis. This information assists in locating monitors in case of an emergency. Monitors should also be prepared to deal with extreme weather and field conditions.

7. Conducting Fieldwork: When going into the field monitors should bring the monitoring plan and notify their agency the times and locations of the proposed monitoring activities. Monitors can utilize the Map Feature in the data dictionary to navigate to the site and any additional resources they obtained in pre-fieldwork to assist them in locating the sites. The purpose of the fieldwork is to walk within the boundaries of the cultural resource site and to record visible natural or human impacts. Below are detailed instructions for recording information, and uploading and downloading the shapefile.
Field Instructions

1. Turning GPS Unit On: Press the (Power) button briefly, less than one second.

2. Once the unit is on start TerraSync: Press (Start), Select (Programs), Select (TerraSync). After selecting a window will open.

3. In the TerraSync Window: Press (Status) a drop down window will appear. In the drop down window select (Data) Tab.

4. In the Data Tab Window: Select (New) a drop down window will appear. Select (Existing File) and select the geographic Shapefile you would like to open. The Shapefile contains the location of previously identified cultural resource sites within an Omaha District management area and the data dictionary which records the site information.
5. After selecting the file a window will open (Confirm Antenna Height) Select, (Ok). The shapefile will open. Once the file is open you can display all previously identified sites in the Map View.

6. Select (Data Tab) a drop down menu will appear. Select (Map). Sites will appear and your current position will be displayed as a (Red X). If it is difficult to see where you are located select zoom in.

7. All Monitoring Data Should be collected in Map View. If you select inside a boundary a site number will appear.

8. The Map View will help you navigate to a site. Also use the monitoring plan and any maps you created during pre-field work. Keep the unit on while in the field. Type in the site number of the site you would like to navigate to. The map will display your current location and the location of the site.

9. Once you enter a site boundary an alarm will sound on the GPS unit. Upon entering the site walk around the site staying in the boundary. Identify impacts that are visible.

10. After identifying impacts you should record them on the unit. Review the list of impacts identified on (page 2) and record what you observe in the site boundary. To record information Select the (Blue Circle) in the right corner of the window. A drop down menu will appear which lists the impacts that can be recorded.
The drop down menu lists what you can record. Select, the impact you would like to record. Follow the instructions listed below to record features: Data is recording when a logging icon appears (looks like a ink pen writing) in the right corner.

- To record No Impact, stand in the middle of the site and input the required information.
- To record Erosion Line, walk along the cutbank. Make sure the logging icon is recording. Once you have walked the line fill in the required fields.
- To record Erosion Polygon, walk around the area. Make sure the logging icon is recording. Once you have walked the area fill in the required fields.
- To record Encroachment Line, walk along the encroachment. Make sure the logging icon is recording. Once you have walked the line fill in the required fields.
- To record Encroachment Polygon, walk around the area. Make sure the logging icon is recording. Once you have walked the area fill in the required fields.
- To record Point Generic, stand on the feature and input the required information.

11. After selecting the impact you would like to record a window will open which has input fields that must be filled in.

Example input fields for (No Impact_monitor)
- **Site Number** this is a required field, type in the site number.
- **Agency** this is a required field. Drop down menu will appear, select the Agency Name from the menu.
- **Monitor Name** this is a required field. Type in your name.
- **Visit Date** this is auto populated.
- **Comments** Type in description of site condition example (no impacts).

12. After recording the information tap (Ok). Repeat this process for all impacts observed at the site.

13. Visit all sites listed in your monitoring plan for the day. Repeat the process for recording information at all the sites.

14. When you are done collecting information for the day you should close TerraSync. To close TerraSync select, the file close (X) in the right corner. A window will appear asking you if you are sure you want to close the file and exit. Select (Yes) this will close TerraSync.

15. After closing TerraSync you should shut the unit off. Press the (Power Button) for one second. A window will appear tap (Shutdown). This will shut the unit off.

16. After completing fieldwork place the GPS unit, monitoring plan, and any maps in a secure location.

17. The unit should be plugged in to charge the battery. To charge the battery, connect one end of the AC adapter cable to the cradle and the other to an AC power outlet. Note when the unit is charging, the Power LED light is solid orange. When fully charged the LED will be green.

18. The shapefile needs to be removed every seven days and a new one placed on the unit. Follow the instructions on the next pages to upload/download the Shapefile.
Uploading and Downloading Shape File Instructions

As previously explained the data dictionary is utilized to collect information for seven days. The data dictionary is part of a geographical shapefile which visually displays the location of previously identified cultural resource sites within Omaha District management areas. The Omaha District will supply you with a shapefile that you will record monitoring information in. Failure to update the file every seven days will result in a loss of routine monitoring information. Follow the instructions below to upload and download the file.

**Downloading the Shapefile**

1. To remove the data collected you must download the shapefile to a computer.
2. Place the GPS unit in the cradle, connect the cradle to the computer. Connect one end of the adapter cable to the cradle and the other end to the computer.
3. The unit will be recognized by the computer through **Windows Mobile Device Center**.
4. On the computer go to (Start) select (Programs) select (Pathfinder Office) a drop down menu will appear select (Data Transfer).

5. The Data Transfer window will open.
6. In the Device Window select (GIS Datalogger on Windows CE), and make sure it shows that you are connected to the (Windows Mobile Device Center).
7. Click on the (Setting Tab) and select (Delete Files) on device after transfer.
8. Click on the (Receive Tab).

9. Click the (Add Button) choose (Data File) in the drop down menu. Select the data file to be transferred (The Cultural Resource Monitoring Shapefile).
10. Before transferring the file make sure to create a folder on your desktop for the file to be transferred to. This is very important as you want to save it to a known location.
11. Select the (Open Button) select the (Transfer All Button).
12. After the transfer is completed select the (Close Button).
13. In the Pathfinder Office drop down menu select (Export). The Export window will open.

14. The Cultural Resource Site Monitoring File you downloaded will automatically be displayed in the Selected Files block. Click the (Browse Button) to select the Cultural Resource SSF file to export to the folder you created.
15. In the Choose an Export Setup box select (Sample ESRI Shapefile Setup).
16. Select the (Properties Button). Remove the (Differential Correction Filter).
17. Check the (Coordinate System) it should list (WGS1984). If it does not list this click the (Use Export Coordinate System Radio Button). Click the (Change Button) a drop down window will appear from the menu select (WGS1984) and click (Ok).
18. In the Export window select (Ok). Click Close on the (Export Completed Window).
19. Save the file in the folder you created.
20. Zip the folder and email the zip file to the designated USACE representative.
21. You should keep the unit connected to the computer. The Original Cultural Resource shapefile provided to you for monitoring needs to be loaded back onto the unit. This is very important because the previous shapefile was deleted in the downloading process. Therefore, follow the instructions to upload the file.

**Uploading the Shapefile**

1. In the Pathfinder Office drop down menu select (Data Transfer).

2. The Data Transfer window will open.

[Image of Pathfinder Office with Data Transfer window]

Data Transfer

[Image of Data Transfer window]

Should show the GPS unit is still connected to the computer.
3. Select the (Send Tab) click the (Add Button) and select (Data File) in the drop down menu. Select the Cultural Resource file that needs to be loaded onto the unit.

4. Select (Transfer All Button). After the transfer is completed click the (Close Button).

5. Take the GPS unit off of the cradle and make sure the file transferred to the unit. Follow the instructions for turning the unit on and opening TerraSync. The file will be good for seven calendar days.