AN OVERVIEW OF CULTURAL RESOURCE MANAGEMENT IN THE UNITED STATES AND THE ROLE OF THE U.S. ARMY CORPS OF ENGINEERS

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Cultural Resource Management, or CRM, is a diverse field that utilizes the skills of anthropologists, historians, archaeologists, architects, and engineers to address the threats to cultural and historical resources posed by the rapidly developing world and adopt measures to help preserve and protect these resources for future generations. CRM is conducted at a variety of levels that include universities, State and Federal agencies, non-profit organizations, private consultants, and the public. While CRM may reflect any situation where the needs of a resource are managed, in the United States it is usually conducted to comply with existing laws and regulations at national, state, and local levels. The most commonly applied law is the National Historic Preservation Act of 1966, as amended (NHPA), specifically Section 106 of this Act. Simply put, Section 106 of the NHPA states that Federal agencies must consider how their actions will affect significant cultural resources. Although, most states have laws that govern cultural resources, they generally adhere to this same principle with variations that are unique to each state. The process of compliance in CRM results in a balance between the needs of the resource, the needs of a developing world, and the needs of the public. In this process, the needs are addressed by key players that consist of a developer, a consultant, government agencies, and the public. This paper will address the definition of CRM, the relevant laws, and the role of the key players involved. In addition, this paper will focus on how the U.S. Army Corps of Engineers meets its requirements under the NHPA and the National Environmental Policy Act (NEPA). These topics will be approached from a first person perspective and be based largely on my 16 years of experience in CRM at various levels.

First, I will start by giving my history as a CRM professional. My CRM career began in 1996 after I graduated from Texas A&M University with a BA in Anthropology with a focus on archaeology. At the time of my graduation the only jobs generally available to a newly minted
BA were field technician jobs. These jobs were usually temporary jobs, project specific, and rarely concentrated in any one part of the country. As such, these jobs usually involved travelling from state to state, living in hotels, making an hourly wage with no benefits, and receiving a per diem. The work itself involved archaeological survey, testing, and excavation that required little more than technical labor. The opportunities to publish, participate in long term analyses, or settle in a specific region were rare. Nevertheless, the work was exciting, varied from state to state, and was a great opportunity to learn the basics of the field while establishing contacts for future career related opportunities. This lifestyle is often referred to as “shovel bumming” and, while it is rewarding, can cause some people to burn out in the field if they continue doing it for too long. I worked as a “shovel bum” for two and a half years for three universities and one private consultant in Wyoming, Iowa, Illinois, Indiana, South Dakota, Minnesota, and Delaware. The work involved surveys for pipelines and highways, excavations of prehistoric hunter-gatherer and village sites, and prehistoric and historic cemeteries. The greatest benefit of this work was that it exposed me to a variety of methods, environments, formation processes, and cultural histories from the Great Plains to the Mid-Atlantic.

After my stint as a “shovel bum” I applied for a supervisory position with a large international engineering firm in Kansas City. This position afforded me greater responsibility and the opportunity to write technical reports, manage fieldwork, conduct analyses, and learn both the regulatory and business side of CRM. The projects I worked on at this firm consisted mostly of archaeological surveys in several states for energy, transportation, reservoir, and communications related development. In this role, I was responsible primarily for helping my clients, the developers, navigate and satisfy their regulatory requirements. This required a great deal of research on my own time to learn the regulations of the Federal government and for each
state we worked. It was also necessary to establish a rapport with all the agencies overseeing my work. Additionally, I had to learn how to compile budgets, schedules, and manpower needs to satisfy my bosses and my clients so that work would keep coming. In this role, as the consultant, my job was essentially balancing the needs of the resources with the needs of the client and the needs of the agency. This was both rewarding and at times disheartening since you will sometimes have to satisfy one at the expense of the others.

After working for this engineering firm for three and a half years, and still with my BA, I relocated to Texas and found work with a small environmental consulting firm in Austin. This work was very similar to my previous job with more of an emphasis on highway and municipal projects, but also somewhat easier because we only did work in Texas allowing me to become more experienced with the cultural history and regulations of a specific state. I worked for this firm for about seven years, and coupled with my previous job, I had been employed full time with benefits and good salary for over ten years. While this was a good situation, my lack of a Masters degree seriously limited the amount of responsibility I could take on a project. Although this did not limit the level at which people would let me work, based on my experience, it severely limited my ability to move to other companies into a more senior role. In fact, changing jobs would have meant starting over as a junior, entry level supervisor. This was frustrating, and finally bothered me enough to pursue my Masters degree in Anthropology at Texas State University.

While at Texas State, I continued working for the firm in Austin part time until moving to work at the Center for Archaeological Studies (CAS) at the university. Although this job technically was CRM, I worked mostly on analysis and a technical report with little regulatory or project management work. Eventually, I have ended up where I am now, at the U.S. Army
Corps of Engineers in Galveston, Texas as one of two staff archaeologists. I applied to this job through the Student Career Experience Program, which is designed to allow Federal agencies to hire students non-competitively and then promote them, upon graduation, to career positions.

**Definition of CRM**

Cultural Resource Management at its fundamental level is the practice of identifying and evaluating cultural resources to determine their significance with regards to preservation, salvage, or the mitigation of adverse effects. Cultural resources are essentially the places and spaces that reflect the culture of a people both historically and in the present. Simply put, cultural resources are obvious things like bridges, artifacts, buildings, archaeological sites, art, and cemeteries and also less obvious things like landscapes, mountains, roads, or animals. Cultural resources may be modern, historic, or prehistoric, and their significance can be local, national, or global. Within the realm of cultural resource laws in the United States, cultural resources that are considered significant are referred to as historic properties. The term “historic properties” is a very specific legal term that means cultural resources which are included in, or eligible for inclusion in the National Register of Historic Places (NRHP). The NRHP is essentially the sum of cultural resources that meet certain criteria of eligibility to qualify as historic properties. However, formally including a historic property on the NRHP can be a very involved process; therefore, cultural resources that meet at least one of the criteria for NRHP eligibility are considered historic properties. Since the majority of CRM in the United States is performed as a result of laws and regulations, the process of determining a cultural resource’s significance, and thus whether it is a historic property, is critical. This will be explained in more detail later.
There are four criteria of eligibility for inclusion in the NRHP that are defined by the Department of the Interior. The NRHP itself is maintained by the National Park Service, but the inclusion of a historic property in the NRHP is accomplished through the cooperation of State and Federal agencies. The National Register criteria of significance are defined in 36 CFR 60.4 as:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:

a. that are associated with events that have made a significant contribution to the broad patterns of our history; or
b. that are associated with the lives of persons significant in our past; or
c. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
d. that have yielded, or may be likely to yield, information important in prehistory or history.

Cultural resources may meet one or more of these criteria, however only one is required to qualify as a historic property. In general, criteria a, b, and c are applied to properties that date within the historic period. Criterion d is the most commonly used criteria for evaluating prehistoric resources. Criterion d is also considered sort of a “catch-all” since the potential for recovering important information from a resource can be broadly interpreted. These criteria
provide a benchmark with which CRM practitioners can evaluate significance, but an often overlooked aspect of these criteria is in the opening statement related to “integrity.” Without integrity a resource cannot meet any of the criteria of eligibility. So, while a property may be “neat,” or we may think it is “important,” if its integrity is compromised, then its value as a historic property is diminished. Another aspect of determining a resource’s significance is its age. Most Federal agencies only apply the criteria of eligibility to resources that are at least 50 years old; although there are exceptional cases where properties younger than 50 years old have been included in the NRHP. The Department of Interior publishes several “National Register Bulletins” that provide guidance on evaluating specific types of properties, applying the criteria of eligibility, and other technical guides. In addition to the NRHP, several states have regulations that define significant cultural resources using similar criteria to identify properties as landmarks.

The Laws

There have been several laws in the United States that have contributed to the preservation of cultural resources, as well as promulgating the need for a CRM industry. While local organizations and governments and the Federal government had been involved with historic preservation on a small scale throughout the 19th century, it was the Antiquities Act of 1906 that marked the first national legislation regarding historic preservation. This law essentially provided for the protection of cultural resources on government lands, specifically outlined punitive measures for violations, and authorized the President to declare National Monuments. Laws that followed included the Historic Sites Act of 1935, which allowed the Secretary of the Interior to acquire historic properties and established the National Historic Landmarks program,
the Federal Highway Act of 1956 which prevented use of historic properties for highways, and
the Reservoir Salvage Act of 1960 which required the government to account for cultural
resources impacted by reservoir construction. Also, several historic preservation and
archaeological projects were conducted in the 1930s as a result of Works Progress
Administration and Civilian Conservation Corps projects.

During the 1960s three of the most significant cultural resource laws in the United States
came into effect. The National Historic Preservation Act (NHPA) was established in 1966 with
its key component being Section 106; this section of the NHPA is responsible for the majority of
CRM in this country to this day. Section 106 requires Federal agencies to consider the effects
their actions may have on historic properties, however at the time, historic properties only
included resources actually included in, not just eligible for, the NRHP. This policy was
changed in 1971 when President Nixon issued Executive Order 11593, which stipulated, among
other things, that historic properties also included resources eligible for inclusion in the NRHP.
This will be discussed in more detail later. Also in 1966, the Department of Transportation Act
was established with its key component being Section 4f. Section 4f is arguably the strongest
cultural resource law in this country as it forbids the use parks, preserves, or historic properties
for highways unless there is no prudent or feasible alternative. Finally, in 1969 Congress passed
the National Environmental Policy Act (NEPA) which requires Federal agencies to evaluate the
effects of their projects on the quality of the human environment, which includes cultural
resources. Federal agencies meet the requirements of NEPA by producing Environmental
Impact Statements (EIS) or Environmental Assessments (EA).

Other significant laws regarding cultural resources as well as regulations implementing
these laws came in the following decades. The Archeological and Historic Preservation Act (or
Moss-Bennett Act) was established in 1974 extending the provisions of the Reservoir Salvage Act. In 1978, the American Indian Religious Freedom Act was established to protect the traditions and beliefs of indigenous populations as well direct Federal agencies to include these groups in consultation. Indigenous populations are also considered under the Native American Graves Protection and Repatriation Act of 1990, which required agencies or institutions receiving Federal funds to inventory and repatriate human and funerary remains of indigenous populations. Finally, the Archeological Resources Protection Act was passed in 1979 as a supplement to, but essentially replacing, the Antiquities Act of 1906 by clarifying and strengthening the existing provisions.

As stated previously Section 106 of the NHPA is the primary trigger for most of the CRM in this country. Section 106 states that:

The head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register. The head of any such Federal agency shall afford the Advisory Council on Historic Preservation established under Title II of this Act a reasonable opportunity to comment with regard to such undertaking.

In essence, Section 106 requires Federal agencies to consider historic properties in their actions. Their actions are defined as “undertakings” and may include funding projects, issuing licenses or...
permits, or regulating activity. Thus, whenever a Federal agency has an undertaking this law applies. While Section 106 is very critical, other aspects of the NHPA have established key components of the CRM process. These include the establishment of the Advisory Council on Historic Preservation (ACHP) to oversee federal actions and implement regulations governing Section 106, the establishment, funding, and responsibilities of State Historic Preservation Officers (SHPO), and the responsibility of Federal agencies for managing historic properties on Federal lands. The implementing regulations for Section 106 are established by the ACHP within the Code of Federal Regulations under 36 CFR 800. There is often confusion regarding the role of NEPA and the NHPA among CRM practitioners partly due to the overlap of the two laws. NEPA only requires the Federal agency to assess the impacts, not actually deal with them, whereas the NHPA requires the agency to actually address the impacts to historic properties. Therefore, by satisfying the requirements of Section 106 an agency is usually satisfying the requirements of NEPA, but just satisfying the requirements of NEPA does not go far enough toward satisfying the NHPA. To further complicate this, the NHPA requires agencies to look at both direct and indirect effects, while NEPA includes these plus cumulative effects.

There are several resources online that provide the full text of the above mentioned laws as well as guides for implementing these laws, common applications, and case law. It is also highly recommended that any entry level CRM professional read Thomas F. King’s book *Cultural Resource Laws & Practice*. This is not an endorsement of Mr. King, but he is well versed in the laws and regulations and this book is one of the only comprehensive overviews of CRM in the United States.

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1 A good source for information about Section 106 of the NHPA is [www.achp.gov](http://www.achp.gov). Other laws and regulations can be found at [www.nps.gov](http://www.nps.gov) as well as the history of historic preservation in America.
The Key Players in CRM

There are several key players within CRM each serving a different role in navigating the laws and regulations that govern CRM. Most CRM in the United States is conducted as a result of a federal action that triggers these laws and any subsequent CRM work. In these cases, it is the responsibility of the Federal agency to ensure that they are complying with applicable laws and regulations. The ACHP oversees and enables Federal agencies to get through this process by implementing and defining regulations as well as mediating disputes between the Federal agency, State agencies, and the general public. To ensure compliance, many Federal agencies employ full time cultural resource professionals. These professionals are usually supervised at some level by the Federal Preservation Officer (FPO), who may be either the most senior cultural resource professional or may be the head of the agency. The type of cultural resource work that is done by agency employees varies between the agencies and is largely dependent on the agency’s mission. For instance, the National Park Service, U.S. Forest Service, and other land managing agencies often investigate and manage the resources on their own lands as they have a vested interest in the use of and effects to their property. To this end, those agencies employ a much larger number of cultural resource professionals than non land managing agencies. Other agencies, like the Federal Aviation Administration or the Department of Energy, may only issue permits or licenses for activities by private ventures and will often meet their requirements under the laws by having the permit applicant investigate and manage resources, which may be on private land. In the case of the latter, agencies can require the applicant to perform all of the necessary work, usually done through a consultant, before issuing a permit.

The various Federal laws may also result in how agencies conduct CRM. In the case of non land managing agencies that assume more of a regulatory role, it is usually NEPA and
Section 106 that apply. These agencies comply with the laws by having applicants provide information that is sufficient to satisfy requirements under Section 106. This information also goes into a permit or license document, which ultimately serves as an EA satisfying the requirements of NEPA. Land managing agencies are affected by NEPA and Section 106 for actions they take on their own land, such as park maintenance or construction or actions they allow by other entities, such as logging or mining. These agencies accomplish compliance in much the same way, but in some cases may conduct the investigations themselves. Land managing agencies must also comply with Section 110 of the NHPA which requires Federal agencies to manage the historic properties on their lands and preserve them to the best of their abilities. Some agencies, such as the U.S. Army Corps of Engineers (USACE), are both land managing and regulatory agencies. The USACE owns several reservoirs and other land related to water quality and control in the country, but also regulates the use of waters of the United States through permits. So, in the case of the USACE, both approaches may used. For all Federal agencies that own land, ARPA applies with regard to protecting cultural resources as well as issuing permits for scientific studies on these resources. These laws, especially the NHPA and NEPA consist of a process that is defined by the regulations. This process includes consultation between the Federal agency, SHPO, and interested parties, like the public. This process is highly subjective, and for the public it can often be very personal. As such, the process does not always satisfy all the parties involved.

In a common scenario, a Federal agency ensures its compliance by first defining what the undertaking is and the potential effects it may have on cultural resources. This is done by establishing an Area of Potential Effect (APE) that may include both direct and indirect effects to cultural resources. The APE is generally established in consultation with the SHPO and other
consulting parties. Once the APE is established, the Federal agency will then identify what cultural resources are within the APE. This is accomplished through archival research, reconnaissance, and examination of existing databases. Identified cultural resources are then evaluated against the National Register criteria to determine if they are significant. If cultural resources are determined to be eligible for inclusion in the NRHP, then the Federal agency must determine what effects, if any, the undertaking will have on the historic property. If it is determined that a historic property will be adversely affected, the agency will find ways to mitigate the damage to the property, which may include excavation, avoidance, measured drawings, or other forms of documentation. The mitigation of adverse effects to a historic property are addressed in a document called a Memorandum of Agreement (MOA). The MOA essentially outlines the steps that will be taken as part of the mitigation. Additionally, an agency may adopt a Programmatic Agreement (PA) which is basically a management plan that addresses the management of cultural resources for a specific project or for specific types of work. For instance, a state highway department may develop a PA that outlines how to deal with commonly occurring issues so that lengthy consultation can be avoided. In reality, MOAs and PAs are contracts between the Federal agency, the ACHP, and the SHPO providing each entity a stake in the process. A Federal agency may also invite other interested parties, such as non profit or local preservation groups, to be signatories on an MOA or PA. Cultural resources that are determined to be not eligible for inclusion in the NRHP are afforded no protection under the law and therefore any effects to these resources are not considered.

The key factor of the Federal agency’s role is that the agency is responsible for complying with the laws, not the SHPO and certainly not the CRM consultant. As the responsible party, the agency has the authority to render determinations of eligibility with regard
to cultural resources. The agency is required to consult with SHPO and the public throughout the Section 106 process, but ultimately makes the final decision. If the decision of the agency is counter to that of the SHPO or the public, those parties may request the involvement of the ACHP to settle the dispute. Once again, these actions are part of a process and all the Federal agency has to do to comply with the laws is document that they followed that process, good or bad. Interested parties that wish to stop federal undertakings for reasons such as environmental concerns, concerns about noise, or simply because they do not want a project in their neighborhood\(^2\), will often use errors in the process as evidence in lawsuits to slow down or stop an undertaking.

The next key player in CRM is the SHPO, a person appointed by the governor of a state to regulate the cultural resources in their state. The SHPO typically heads a State agency that consists of CRM professionals that review projects under Federal and State laws, provide guidance for companies and individuals working in the state, and assist the state legislature with implementing laws and regulations. This agency is funded by both the state legislature as well as with funding from the Department of Interior, who also oversees and regulates the SHPO. The amount of funding a SHPO receives largely determines the scope of activities they may pursue. Federal funding is designated primarily to enable the SHPO to review projects under Section 106 and establish a database of known cultural resources within the state. Additional funding from the state legislature and donors may allow the agency to implement educational programs, research programs, develop planning guides, and promote tourism of historic sites. Since each

\(^2\) This sentiment is often referred to by the acronym “NIMBY” or “Not In My Back Yard” to reflect the public’s attitude that a project may be worthwhile, but not if it encroaches on their personal space. For instance a highway or power line is obviously beneficial to the community, but no one wants it behind their house. This is why you often see utilities and other undesirable projects in low income neighborhoods where land is cheap and voter turnout is low. NEPA attempts to address these effects through a process called Environmental Justice.
state is different, these agencies may range from a few people struggling to review thousands of Section 106 projects to dozens of individuals engaged in a variety of preservation tasks.

Although the Federal agency is the main entity responsible for compliance, the SHPO often takes a much larger role in the process. This is due to a couple of factors. First, as the State agency for cultural resources, the SHPO is often the main source of information regarding cultural resources and preservation in their state. The state is also more vested in its own resources than the Federal agency, which may only be concerned with compliance. This may be the case with Federal agencies that have no CRM professionals on staff. Finally, the SHPO is often the primary reviewer in the Section 106 process because developers and consultants will often complete their cultural resource investigations long before they actually apply for approval from the Federal agency. This is because a developer will often anticipate the need for an investigation and complete it on a schedule that suits them. So, by the time the Federal agency actually reviews a project, the SHPO may have already approved it. This is contrary to how the process should work, since the whole reason for the work in the first place is the federal undertaking. However, several states also have their own laws which generally regulate cultural resources on public lands in their state. So, while a project may fall under Federal laws, it may also fall under state laws, in which case the SHPO does make the final decision.

As outlined in the example above, the Federal agency defines the undertaking and determines what work is needed. It is then the Federal agency that should initiate consultation with the SHPO such that a developer or consultant is not in contact with the SHPO. For various reasons since the laws were implemented this process has become twisted, often times because it is faster for a consultant to get SHPO approval, which they know will ultimately be necessary. Many Federal agencies have allowed this to develop because they are understaffed or because, in
essence, they will probably end up agreeing with what the SHPO says. As a result many consultants view SHPO approval as the final word. While this seems to work fine from a practical view, it can complicate the process, which is what the Federal agency has to follow, and thus can lead to lawsuits.

The job of the SHPO ranges from regulatory to proactive management of resources and education. These agencies are often understaffed and overworked. Their biggest involvement in CRM is in regulating state laws and serving as the state’s voice in consultation with Federal agencies. As the advocate for the resources of the state, the SHPO is in the best position to offer advice on managing those resources. As such the ACHP and the Federal agencies carefully consider the opinions of the SHPO throughout the process and will only oppose the SHPO if they feel there is a good reason.

Another key player in the CRM process is the preservation consultant, archaeologists, anthropologists, and historians that may work independently or for large engineering and environmental firms. Many environmental firms employ CRM professionals because their clients not only seeking compliance with preservation laws, but also with other environmental laws. As a result, CRM professionals are often times considered part of the environmental profession along with biologists, planners, air quality specialists, and ecologists. Consultants are the source of most of the data collected in this country with regard to historic properties. Their clients may be developers that want to build pipelines, airports, railroads, or retail stores, or they may be Federal or State agencies that do not have adequate staff to complete investigations. In general, the vast majority of consultants in CRM are archaeologists and therefore the bulk of the work being done in CRM is archaeological. However, the laws cover all types of resources, so
these firms will also employ or contract with architectural historians, anthropologists, historians, architects, or even engineers as needed.

The main role of the consultant in the process is doing the work. How much work they do is dependent upon the undertaking and the client. Therefore, a consultant may assist an agency in defining the APE, scoping the work, and doing the necessary background research to identify the potential for cultural resources. The consultant may then be tasked with conducting any field investigations, analyses, and publishing the results in a technical report to be distributed to the consulting parties. The consultant is responsible for assigning a Principal Investigator (PI) to the project that oversees and is responsible for all of the investigations. The PI is a person who has training in the appropriate field at the Masters degree level or above, but may also employ field technicians, lab assistants, or specialists to accomplish the goal. Individuals without a Masters degree may assume many of the duties of the PI, based on their level of experience, but may never assume responsibility for the ultimate conclusions of the investigation. The majority of consultants in this country work for private industry clients that are constructing facilities or developing lands requiring Federal or State permits.

Developers are another key player and are usually the source of income for conducting any CRM related activities. The actions of the developer will often require permit from a government agency, who in turn requires them to address any cultural resource issues. However, several actions by developers may not have any government regulation and are therefore not subject to any of the preservation laws. This is usually the case when a developer is working on private land with private money. As such, a lot of the development in this country is unregulated with regard to cultural resources. Developers may have a wide range of opinions with regard to the resources, the laws, and the process. Many of them do not understand CRM and CRM
professionals are not always good at making this an easy process. This can create friction between the key players if a developer hires a bad consultant or the process involves an overzealous agency. For the most part, developers understand the need for CRM and just want to get through the process as quick and cheap as possible. In rare cases, developers can be true advocates for the resources they are impacting, either out of a desire for their image or a sincere interest in preservation.

The last key players in CRM are interested groups that consist of nonprofit groups, local preservation organizations, religious groups, or the interested public. As part of the CRM process, the Federal agency must consider public comments regarding their undertaking. This is often accomplished through a public notice in the newspaper or through the internet. Based on public comments, the agency may acknowledge the interests of a particular group with regard to the undertaking and invite them to be a consulting party. As a consulting party, these interested groups are included in the whole process and their comments on investigations, technical reports, or determinations of eligibility are carefully considered by the Federal agency and SHPO. Interested parties usually represent a specific voice with regard to resources and thus may inject emotion or politics into the process.

**The U.S. Army Corps of Engineers**

The final section of this paper deals with the U.S. Army Corps of Engineers’ (USACE) role in CRM, as well as my experience as a new employee with the Galveston District. As mentioned previously, within the realm of CRM the USACE is both a land managing and regulatory agency. Overall, the USACE serves as the engineers of the Federal government and is part of the Department of Defense and the U.S. Army. The USACE conducts engineering
activities for military purposes and domestic purposes, but I will only cover the domestic side of
the USACE. As engineers for the government, the USACE is tasked with constructing and
operating facilities and features related to water quality, water control, and navigation. To this
end, the USACE is responsible for constructing and maintaining flood control levees, ship
channels and harbors, reservoirs, locks and dams, and coastal barriers. Notable projects by the
USACE include the Houston Ship Channel, the Mississippi River levee system, the Intracoastal
Waterway, and the Galveston Seawall. These projects are generally cooperative efforts between
local communities and the Federal government with the government providing a portion of the
funds and the local community matching those funds. Prior to constructing a project, the
USACE conducts a feasibility study that identifies a need for the project and assesses any
impacts to the environment. Normally, this feasibility study will result in an EIS or EA as well
as economic studies that outline the benefits or risks of a project to the local community and the
nation. During the feasibility study, the USACE will also conduct cultural resource
investigations for compliance with the NHPA. Once a project is constructed the USACE may be
tasked with the operation and maintenance of these facilities, which may include the
management of cultural resources. These projects are called Civil Works projects and make up a
large part of what the USACE does. In the case of civil works projects, the undertakings are the
construction projects themselves.

The other side of the USACE is regulatory in nature. As the agency tasked with securing
the nation’s waterways, the USACE has also been tasked with enforcing Section 10 of the Rivers
and Harbors Act and Section 404 of the Clean Water Act. Both of these laws are limited to what
are termed “waters of the United States” which, with regard to the latter means all rivers,
streams, their tributaries, and wetlands and with regard to the former, only navigable waters.
Section 10 of the Rivers and Harbors Act basically regulates the placement of obstacles to navigation within waters of the U.S. and designates the USACE as the permitting agency for these actions. Projects that require a USACE permit under Section 10 may include bridges, docks or piers, tunnels, pipelines, and navigation markers. Section 404 of the Clean Water Act regulates the discharge of sediment into, or filling of waters of the U.S. Many projects that require Section 10 permits may also require Section 404 permits. Projects typically only requiring a Section 404 permit may include the filling of wetlands to build roads or buildings, construction of drainage outfalls for residential developments, and culverts. These projects are only a few examples and due to the broad nature of the laws, several projects in this country require permits from the USACE, which is a large part of the CRM work in this country. For the regulatory side of the USACE, the issuing of the permit is the undertaking and since the permit is allowing impacts to take place, the USACE must consider those impacts with regard to cultural resources. The USACE does not issue permits to itself, so the vast majority of these are issued to private developers as well as other Federal and State agencies.

To accomplish its mission, the USACE employs a number of different professionals including engineers, real estate professionals, scientists, park rangers, surveyors, and project managers. The USACE is divided into regional divisions which are further divided into districts. The geographical coverage of a district may largely depend on its mission. For instance, the Galveston District is mostly focused on navigation and coastal development and therefore it only encompasses the counties in Texas that are roughly within 100 miles of the coast\(^3\). The Fort Worth District covers almost all of the remaining counties in Texas, but its focus is mostly on reservoirs and water/flood control. Divisions tend to be more regional in nature rather than

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\(^3\) The Galveston District also includes small portions of three Louisiana Parishes that border the Sabine River between Texas and Louisiana.
focused on districts’ missions. So, the Fort Worth and Galveston Districts are within the Southwest Division, along with Tulsa and Little Rock rather than the same division as New Orleans or Jacksonville Districts which also focus primarily on navigation and coastal development. Each division is commanded by a General in the U.S. Army and the districts are commanded by a Colonel or Lieutenant Colonel. There are usually a few other regular Army personnel on staff at each district, but the majority of the staff in the USACE is civilian. Army civilians support the mission of the USACE all over the globe, even in war zones such as Afghanistan.

The USACE serves as a land managing agency for the properties it owns or maintains. Across the country, the USACE may own reservoirs, levees, locks, dams, or other lands related to water control. Often times the USACE may build recreation facilities on the land or use areas for wildlife habitat. These types of properties therefore require the USACE to employ or contract individuals to manage these lands. The Galveston District only owns two significant properties and these are the Addicks-Barker and Wallisville reservoirs. Addicks-Barker is not a persistent lake like other reservoirs, but serves mostly as a relief area for containing flood water to protect the city of Houston. Wallisville reservoir is the result of a salt water control dam on the Trinity River near where it dumps into Trinity Bay. This dam is used to control the amount of saltwater that can go upstream and the amount of freshwater allowed into the bay. As a result of the dam, a reservoir has formed. Over the years, the USACE has conducted cultural resource investigations on the properties around the reservoirs and uses this information to monitor the health of the resources. Occasionally, the USACE must conduct maintenance on the facilities or build new facilities, in which case the USACE will conduct investigations as appropriate under Section 106.
Other lands that the Galveston District manages include dredge material placement areas (DMPA). These areas are needed due to the constant dredging that is necessary for maintaining navigable ship channels. As such, there are several of these along the Texas coast, as well as offshore DMPAs. DMPAs are either upland or open water sites around which a levee is built and material dredged from a ship channel is placed within. The USACE may also allow private entities to place dredge material into the DMPAs, such a shipping company that needs to dredge around their terminal. In the past, prior to the implementation of environmental laws, the DMPAs were not always kind to the environment. These days, USACE tries to find a “best use” for the dredged material such as building islands for bird habitat, creating tidal flats and marshlands, or creating offshore reef-like areas. This can be complicated since it is costly to move the dredge material very far, so DMPAs must be near where the dredging takes place. In the case of DMPAs, the USACE does not generally own these properties, but will assist private or public entities with purchasing and maintenance.

My position at the Galveston District is a Staff Archeologist. There are four other archeologists in this district, however only one of them performs as an archeologist. The other three archeologists started at the USACE similar to me, but have since been promoted to higher positions, such as my direct boss who is the Environmental Section Chief, another woman who is a Regulatory Section Chief, and the other who is a NEPA specialist and Environmental Lead. These three still maintain some contact with the field, but overall their responsibilities have broadened. The other Staff Archeologist and I are responsible for all of the cultural resource work for the district with civil works and regulatory projects. Since, I am new, but have a strong background in consulting, I have been assigned to review all of the incoming permits, but have
also been assigned a couple of civil works projects. On average, I review one or two permits per day, although they usually come in waves.

Regulatory projects basically consist of permits that are being requested by various entities ranging from Joe Public, who wants to build a boat dock, to an international energy conglomerate that wants to build a giant barge terminal. Requests for permits go through our regulatory division where they are assigned a project manager, who is ultimately putting together the permit/EA. The project manager will then notify all parties in the district to get comments on the undertaking. So, individuals in operations may be concerned about construction affecting navigation, or the biologists may be concerned about endangered species, and of course the archeologist is concerned about historic properties. I am given five days to review and respond to these notices, however if I identify historic properties or the need for an investigation, the applicant will have to wait until those are complete.

For my review, I have a GIS database of all the archaeological sites in our districts, previous cultural resource investigations, cemeteries, and previously issued permits. This information is provided by the state, but I also have to check the state’s current database, since my information may be up to a year out of date. I will also look at various maps including the USGS topographic map, aerial photography, and historic maps and photos. Most of this information is available online. If I have identified sites or previous investigations in the permit area, I will download the Texas site form for the site and pull the report from our library. Finally, I will look at the soils and geomorphology of the permit area and what that says about the possibility of historic properties being found. Then I must make a decision about what needs to be done and this depends on the scope of the permit action, the land use history of the permit area, and, to a small degree, the applicant. My determination is sent back to the regulatory
project manager who then compiles all of the responses and issues a public notice. If I have required a survey to be done, I will also send them a letter to be forwarded to the applicant and their consultant. At this point, I often receive the results of their survey, which they have usually already coordinated with SHPO. Once I am satisfied that the applicant has provided us with enough information to meet our requirements under Section 106, I will let the project manager know that they are clear to proceed.

The USACE issues two kinds of permits, Individual Permits (IP) and Nationwide Permits (NWP). Understanding how these permits work is a mystery to many, even those that work with them day to day. Essentially, NWPs are blanket permits that cover very specific types of activities which the USACE has determined are not significant enough of an impact to warrant an IP. Things like pipelines, navigation aids, and some highways are under NWPs and do not require the applicant to provide a pre-construction notification (PCN) of their activities, they just have to comply with the conditions of the permit. While an applicant doesn’t have to issue a PCN, they do often request that the USACE determine what its jurisdiction is over the project, at which point the permit gets reviewed for cultural resources. Technically, if historic properties are going to be affected, the NWP must be elevated to an IP. This means the USACE must trust the applicant to comply, which most of them do since they know the rules and getting caught not following them is far worse. The USACE also does not have the resources to police all the activities within its jurisdiction, so by giving applicants more latitude, they get more compliance out of them. NWPs are updated and reissued every five years, so both applicants and regulators must be aware of any changes.

Effects to historic properties from permit actions by then USACE fall under Section 106 of the NHPA, however the USACE uses its own guidelines for implementing Section 106 rather
than those issued by the ACHP (36 CFR 800). This is due to the fact that the ACHP did not issue the guidelines outlined in 36 CFR 800 until the late 1990s. Prior to that time, it was the responsibility of each Federal agency to create their own guidelines, which for the USACE was Appendix C of 33 CFR 325. Most agencies have since adopted 36 CFR 800 as the standard for implementing Section 106 of the NHPA, but the USACE has not. This can complicate the process somewhat as the ACHP does not recognize Appendix C as sufficient and challenges to these guidelines in court have had mixed results. The primary distinction between 36 CFR 800 and Appendix C is the definition of the APE. For the USACE, the APE is considered to be the permit area, which is limited to affected waters of the U.S. Appendix C defines the permit area as “those areas comprising the waters of the United States that will be directly affected by the proposed work or structures and uplands directly affected as a result of authorizing the work or structures.” Under 36 CFR 800, the APE may encompass a much broader area to include the entire project as well as indirect effects to historic properties outside the project area. Appendix C includes three tests that must be satisfied for an activity occurring beyond waters of the United States to be included within the permit area:

1. Such activity would not occur but for the authorization of the work or structures within the waters of the United States
2. Such activity must be integrally related to the work or structures to be authorized within the waters of the United States. Or, conversely, the work or structures to be authorized must be essential to the completeness of the overall project or program; and
3. Such activity must be directly associated (first order impact) with the work or structures to be authorized.

The first test is often critical in determining the permit area and is usually referred to as the “but for clause.” The “but for clause” allows the USACE to look at the entire project area even if the affected waters of the U.S. are only a fraction of the project area. Common examples of applying the “but for clause” may be a land developer filling in small wetland areas to construct a residential area or retail store or a highway project that must include a bridge. Linear utility projects such as pipelines and transmission lines are exempt from the “but for clause” in Appendix C so, in these cases, the permit area is only the affected waters of the U.S.

In my opinion, Appendix C is a poorly worded set of regulations that does more to confuse the professionals using it than actual historic preservation, but for the most part it does work. The biggest problem with using Appendix C is in defining the permit area, which can be a very subjective process and the ambiguity of the guidelines offers little support. The USACE’s reluctance to do away with Appendix C in favor of 36 CFR 800 frustrates many State and Federal agencies that work on USACE projects. The saving grace of Appendix C is that because it is poorly worded there are several loopholes, which essentially leaves any decision about permit area or effects to historic properties up to the District Engineer (the Colonel). As the representative of the District Engineer, the Staff Archeologist can often find ways to manage the effects, even indirect, of their permit actions on historic properties. In reality, this boils down to how willing an applicant is to fight a jurisdictional determination.

The civil works projects I have been assigned are in their final stages, so I am essentially wrapping up the large amount of work that others have done. I’ll describe these projects as an
example of how the USACE is involved. My first project concerns dredging for a ship channel in Texas City. Due to concerns about submerged archaeological resources, the USACE hired a consultant to do a survey of the affected area. As a result of the survey, they identified a shipwreck that was going to be adversely affected. Diving on the shipwreck and archival research established that the vessel was most likely the USS Westfield, a U.S. Naval vessel sunk during the Civil War. The site was determined to be eligible for inclusion in the NRHP and since the hazardous diving conditions precluded a normal recovery, the ship was dredged up and the material sorted in sieves. All of the recovered material was then sent to Texas A&M where it is being conserved for museums, the U.S. Navy, and for teaching purposes; however some of the material will be thrown away and some will be reburied to prevent it from ending up in the antiquities market. My job now is to oversee the last stages of conservation and ensure that the remaining tasks satisfy any agreements we have with Texas A&M, the U.S. Navy, and local museums, as well as meeting all of the requirements under the law. Specific tasks include arranging for the packaging and shipping of all the artifacts via trucks to the final resting place, finding a suitable location for reburying artifacts, and coordinating with other professionals involved on this project. While this job is mostly complete, it will expose me to the various aspects of contracting in the USACE and managing these tasks.

My second project is the Brazos Island Harbor ship channel that leads to Brownsville. This project involves the widening and deepening of the ship channel to accommodate larger vessels which will entail dredging and placement of this material into a DMPA. For cultural resources, much of the area has already been surveyed or impacted by previous projects. All of the dredged material is going into existing DMPAs and the only new impacts will be to part of Brazos Island which is at the inlet to the channel. The northern part of Brazos Island (also called
Brazos Santiago) is listed on the NRHP as this location has been used sporadically throughout history by Spanish, Mexican, American, and Confederate armies and entrepreneurs as a strategic location for both military and commercial uses. The early settlements at Brazos Island, which has a natural harbor on the bay side, were instrumental in developing the ports of Brownsville and Port Isabel. Since most of the impacts to the land surrounding the channel were occurring in previously surveyed and impacted areas, it was only necessary to conduct a marine survey. A marine survey had been conducted about 10 years before and because of the way sediments shift in the Gulf of Mexico and the bays, cultural resources which were previously buried may now be visible to sonar. So, a consultant was hired to conduct the marine survey and they provided the results to the USACE, which we then coordinated with the SHPO. My remaining task involves finalizing a PA that outlines how to manage cultural resources that might be discovered during the construction phase.

My final project is overseeing the production of the final report for the Buckeye Knoll site in Victoria County. This site is one of the oldest Native American cemeteries in North America and was discovered while surveying the Victoria Barge Canal. Several years of fieldwork were conducted at the site to mitigate the adverse effects to the site. Due to this site’s significance to science, as well as its importance to Native American groups, several interested parties, including the Texas Archeological Society, the Society for American Archaeology, local politicians, Native American tribes, and the public became involved, resulting in a very politically charged process. That process was a big challenge for the USACE and in the end not every party was satisfied with the outcome. It is a good example of how the interests of science, the public, the developer, and cultures can collide during the Section 106 process. At this point,
these issues have been settled and my task simply entails coordinating with the consultant on completing the final report of investigations.

**Concluding Remarks**

As outlined in this paper, the job of the CRM professional extends far beyond the basic academics of their chosen field. Archaeologists and historians must become project managers, write budgets, deal with diverse clients and the public, and navigate a wide array of laws and regulations. The opportunities for academic research in this field may be few and far between, but it can be a rewarding experience and CRM professionals compile the majority of archaeological and historical data in this country. In each role, the CRM professional must balance the needs of all the parties involved. For the Federal archaeologist, this means balancing the laws with the needs of the public, the needs of the developer, and the needs of the state. The consultant can have a much harder time in this process as they lack any authority within the process, often finding themselves between an eager developer with little concern for historic properties and the agencies whose primary concern are the resources. In my experience, professionals who are able to find a good balance in the process often find success and happiness in this field.