BEYOND LEGAL COMPLIANCE:

A MODEL FOR COLLABORATIVE HERITAGE MANAGEMENT AT

THE JUNIPER TERRACE SITE, COCONINO NATIONAL FOREST

By Michelle S. Mattar

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Approved:

Christian Downum, Ph.D., Chair

Kelley Hays-Gilpin, Ph.D.

Lisa Jane Hardy, Ph.D.

ABSTRACT

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MICHELLE S. MATTAR

In this thesis I evaluate my summer internship with the Coconino National Forest (Coconino NF) and the development of a site management plan for the Juniper Terrace site, a 12th century pueblo community located north of Flagstaff. I examine the challenges of heritage management within the framework of the Forest agency, reflecting on my own experiences and providing recommendations for future management. I review the trajectory of heritage management theory in the United States, and consider how Indigenous theories and multivocality can and should inform the management of heritage resources. Approaches of Community-based Participatory Research (CBPR) have recently been adopted successfully in archaeological practice, and I advocate for an engaged and community-based approach to heritage management. I consider how my internship experience and the management of Juniper Terrace can be translated into the development of a model for the management of heritage resources on the Coconino NF, and how such a model can promote the sustainable management of more heritage sites on the Forest through collaboration and co-management between the agency and local descendant communities.

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CHAPTER 1:
INTRODUCTION AND INTERNSHIP ACTIVITIES

The management of heritage resources is a complex process which involves the careful balance of legal compliance and consultation with the evaluation and assignment of value and integrity to cultural heritage and archaeological resources. At the most basic level, heritage resource management can be defined as "... managing the impacts of the modern world on cultural resources (King 2003:12)," however there is much debate surrounding the definition and purpose of the profession. In the United States, heritage resource management has evolved over the decades following the trajectory of larger societal, legislative and ethical trends reflected in American perceptions of history and heritage. The justification for heritage resource management is limited to the degree in which it can benefit both various communities and society as a whole (Lipe 2009:62). The current managerial framework is the result of historical preservation legislation (Ferguson 2009:169), and there is still much work to be done to move heritage management beyond the restrictions of mandated consultation, or "legislated ethics," and toward a framework founded on collaboration between and among a variety of communities and stakeholders.

Heritage management consists of a range of activities, including but not limited to, documentation, monitoring, stabilization, public outreach, interpretation, consultation, resource inventories, and tourism development. Heritage resource management encompasses a wide range of language, concepts, and approaches. Archaeological or cultural resources refers to the tangible, definable objects of material culture from past human life or activities, whereas heritage is a more complex concept that is "…based in traditional practice and beliefs but continues to be created and negotiated in present-day interests" (Lipe 2009:54). Smith (2004:54) views heritage

as an ongoing process "…which is used to construct, reconstruct, and negotiate a range of identities and social and cultural values and their meanings in the present." In this regard, heritage is not static but rather a dynamic, complex and evolving concept created and recreated by individuals and communities over time. "Heritage transcends time, drawing on the 'past' to create a 'present' to be protected for the 'future'" (Watkins and Beaver 2008:10). Traditionally, the term "cultural resources" has been limited to discourse in the United States while the term "heritage resources" has been more globally implemented. In recent years, however, the United States has also begun to integrate the use of "heritage resources" into federal agency programs and cultural resource management discourse, as it is globally recognized as a more ethical and balanced term.

For the purpose of this thesis, I consider heritage resources to be a more encompassing term which refers to not only the tangible material culture, but also the dynamic processes of practice, belief, identity, and value of which constitute cultural heritage in the past, present and future. Although "cultural resources" and "heritage resources" are not interchangeable terms (Watkins and Beaver 2008:11), I believe that is essential to approach the management of these resources through a framework of inclusiveness which acknowledges the complexity and fluidity of heritage, and promotes the protection of heritage resources beyond the restrictions of legal definitions and tangible materials. The term Cultural Heritage Management (CHM) has been suggested to replace Cultural Resource Management (CRM) in the United States, as an approach that goes beyond the traditional limitations of CRM and embraces the inclusiveness and sensitivity of the heritage values of multidimensional stakeholders (Jameson 2008:42).

In this thesis I evaluate the management of heritage resources in the United States and promote a model of collaborative management which includes a variety of stakeholders,

especially tribal and descendant communities. I examine the challenges, ethical concerns, and shortcomings of heritage management resulting from the historical development of federal legislation, particularly as it relates to the United States Forest Service (USFS), and explore alternative approaches which promote more ethically sound, inclusive and sustainable methods of managing heritage resources. The theories guiding my discussion are grounded in the value of heritage resources and the need for their protection and preservation, informed through the integration of Indigenous theories, multivocality and collaborative methods of management.

Challenges of Heritage Management

Heritage resource management is faced with many challenges, however the most impinging challenge is the lack of funds, time, and resources to carry out comprehensive, inclusive and meaningful management. In the United States, the majority of heritage resource management is the responsibility of Federal agencies and at the mercy of Federal funding as well as the mission of the agency in charge. In agencies such as the United States Forest Service (USFS), archaeologists are often understaffed and the management of heritage resources is completed in accordance with the requirements of Section 106 of the National Historic Preservation Act (NHPA) 36 CFR Part 800. Although Section 106 of the NHPA sets out guidelines and requirements related to timing, consultation and public involvement, Federal agency heritage managers are often only able to meet the bare minimum of these requirements in order to satisfy compliance standards, resulting in a framework of management that is rushed, negligible, and conducted primarily to satisfy agency needs and requirements. As pointed out by Praetzellis and Praetzellis (2011: 87), "good archaeology is expensive; good archaeology that engages the public along the way is even more so."

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As a result of the deficiency of funding and resources, heritage managers also face challenges of site protection and preservation, looting, curation, public education, and tourism. Heritage managers are challenged with attempting to get the most management out of the least amount of money and resources, often resulting in management efforts that are stretched too thin and forced to sacrifice some aspects of heritage for the greater benefit of others. It is important to note however, that Federal archaeologists and heritage managers are not to blame as they are simply operating under the restrictive procedures and legal obligations of the larger heritage resource management framework within the United States.

Ethical Implications of Heritage Management

In addition to the many challenges faced by heritage managers, the realm of heritage resource management is also situated along a blurry line of ethical concerns, priorities and implications resulting from the ways in which heritage is managed. The principal ethical debates surround questions such as, who "owns" the past? In what ways can heritage be employed negatively? And, what is the role of intellectual property within the larger heritage management framework? These ethical dilemmas have been, and continue to be, hotly debated among archaeologists and heritage managers. Although there is no explicit solution to these ethical dilemmas, general discourse surrounding these debates has been moving in the direction of a more ethically sound approach to heritage management which is founded on inclusiveness, collaboration with descendant communities, co-management of heritage among various stakeholders, and the recognition of the varying values of heritage resources in a more multivocal and equitable manner.

When managing heritage resources, the question of who owns the past is a topic that

cannot go unnoticed. Archaeologists and heritage managers are very closely tied with, and have a great amount of influence over, heritage resources. As the ones tasked with identifying, interpreting, protecting, and disseminating information related to heritage, heritage managers have the advantage of ownership over how the past is presented to the public. The concept of ownership over heritage can be divided into two main schools of thought: "cultural internationalists" who believe cultural heritage is the property of all humankind, and "cultural nationalists" who believe it is first and foremost the property of source nations (Watkins and Beaver 2008:15). Due to the sensitivity of the topic of ownership over heritage and the past, heritage managers often avoid disputes over ownership and instead focus on preserving the heritage resources. Watkins and Beaver (2008:15) argue that this dilemma places heritage managers in the role of "complacent gatekeepers" who are "content in the fact that we've somehow 'preserved' the past rather allowing the culture to which it belongs make the decision about its disposition."

Notions of ownership and heritage are undeniably intertwined, and many heritage managers have adopted stewardship as a more appropriate approach to the management of heritage and heritage resources (Shapiro 2006:337). The stewardship approach "focuses on the why, what, and how of preservation rather than on who has the best claim to what is preserved. As such, it minimizes concerns about property versus heritage, tangibles versus intangibles, ownership versus inheritance, individual versus group, and nationalism versus internationalism" (Shapiro 2006:339). Notions of ownership and stewardship can become especially complicated when it comes to intellectual property, or the intangible aspects of culture, and heritage managers must remain aware that "managing for one aspect of the resource might place other aspects of it at risk" (Watkins and Beaver 2008:15). Additionally, it is important to note that in the United

States a majority of archaeologists and heritage managers are non-Native yet they serve as stewards of the Indigenous past. Welsh (1999:839) argues that "preserving one's own culture and preserving another's culture are two very different things. Preserving one's own culture is an expression of human rights, while working to preserve another's culture without their input and participation is, at best, paternalism." Although the stewardship approach has been widely adopted by Federal agencies and heritage managers in the United States, it has not been able to resolve the debates and sensitivity surrounding ownership over the past. In fact, Watkins and Beaver (2008:18) argue that "by invoking the concept of stewardship, archaeologists and heritage managers have essentially co-opted Indigenous heritage for their own use."

Beyond notions of ownership and stewardship, the commoditization of heritage also serves as a focus of ethical deliberation within the domain of heritage management. Heritage has become a commodity, serving as source of revenue for managing agencies and governments around the world. As Praetzellis and Praetzellis (2011:87) point out, "the past seems to be just another commodity owned by anyone who can pay for its creation and re-creation, by people with power to enforce and reinforce their own views." Although the introduction of tourism into heritage management provides necessary funding for the continuation of heritage programs, while also keeping heritage relevant by sharing it with the public, the largest impact of heritage tourism is on the communities whose heritage is being "consumed" by tourists, and it is the local communities who have the most to lose (Watkins and Beaver 2008:26). Over the past three decades heritage tourism has grown substantially, growing out of the alliance between conservationists and commercial promotors with the common goal of harnessing people's fascination and sense of connection to the past and turning it into a commodity (Jameson 2008:59). Today, heritage tourism is utilized all around the globe, however heritage managers

must be cautious in implementing tourism and other economically generating activities, ensuring that it is not at the cost of local and descendant communities.

As Jamieson (1998:66) highlights, the potential of heritage resources in economic development is encouraging, however it is imperative that heritage managers and managing agencies do not lose sight of what they are protecting, remaining aware that there are a number of potentially serious drawbacks and that the "improper treatment of cultural resources, especially when they are seen solely as tools for development, can lead to their destruction and threaten the economic wellbeing of community." Additionally, the heritage tourism industry has been critiqued for becoming "more concerned with the desire for favorable and commercially successful representations of the past than it is with accuracy and authenticity" (Shackel and Chambers 2004:26), leading to misrepresentations of the past in such a way that has very real impacts in the present. One solution is to "balance between heritage as a resource for all humanity and as something that belongs to, and remains controlled by, its communities of origin" (Brown 2005:49). By involving descendant communities, heritage managers can avoid the dangers of employing heritage negatively and inaccurately. Herbert (1995:xi) acknowledges that "dangers arise because it is relatively easy to invert history and turn heritage into a marketable product without proper regard for rigour, honesty, and factual accuracy." Local and descendant community members can act to challenge the assumptions of heritage managers, and push heritage programs in the direction of more accurate and multivocal interpretations of the past. Heritage managers are faced with the dilemma that heritage can mean all things to all people, and also can be manipulated to mean different thing to different people (Watkins and Beaver 2008:12). Placing the management of heritage into the hands of a solitary, and remarkably close-knit community such as archaeologists, is not only unrealistic but bound to be

problematic. Collaboration with a range of communities in the management process can help

alleviate these shortcomings and promote management programs that are engaging, inclusive,

and relevant to both descendant communities and society as whole. Both heritage and history are

manipulative, however "heritage is history processed through mythology, ideology, nationalism,

local pride, romantic ideas, or just plain marketing, into a commodity" (Shouten 1995:21), and

the notion that one individual can unravel and comprehend these complex processes for a range

of populations throughout time is simply impractical.

Despite the potential for negative ethical impacts, heritage management and heritage

tourism are an essential aspect of maintaining cultural heritage, unified senses of identity, and the

overall recognition of the diversity, complexity and reverence of humanity throughout history.

Heritage managers are working every day to improve the framework of heritage management,

and the wealth of discourse surrounding this topic is the first step in moving the discipline

toward authentic and ethically sound practice. Operating to satisfy the competing needs of

Federal legislation, agency directives, the general public, and local and descendant communities

is an extremely challenging but not impossible task. Through collaboration with local and

descendant communities, heritage managers can reform the way in which heritage management

is conducted and move toward a management framework that is carried out with, by, and for a

range of communities.

Internship Description

For my internship I worked for the Coconino National Forest at the Flagstaff Ranger District

Office, under the supervision of forest archaeologist Jeanne Schofer, who served as my

preceptor. The purpose of my internship was to develop a site management plan for the Juniper

Terrace site located within the Coconino National Forest. Among Federal agencies today, there

is a deficiency of time, resources, money, and humanpower to actively manage archaeological

and heritage sites on federal lands beyond the basic requirements of legal compliance. As an

intern my role was to fill that gap and work as an independent contractor to proactively manage

the Juniper Terrace site in collaboration with the Hopi Tribe, through the development of a site

management plan.

Juniper Terrace is a large pueblo site located on the edge of a lava terrace, within the zone of

Sunset Crater ash fall. Juniper Terrace was occupied primarily in the 12th century, which is

contemporary with the High Medieval Period in Europe (AD 1000-1250). It is interpreted as a

Cohonina site, which is the name archeologists give to the ancient farmers who lived primarily

on the west side of the San Francisco Peaks (American Southwest Virtual Museum 2016).

Archaeologists believe the site served as a significant cultural center related to extensive regional

exchange. Juniper Terrace contains over 20 rooms, both masonry and timber pit houses, and a

large masonry kiva, all partially enclosed by masonry walls. There is also a ballcourt located ¼

mile east of the site, which is aligned north-south.

Heritage managers play a crucial role within the framework of heritage management, tasked

with the job of "…encouraging insights and reflections into the past, developing untold stories

and perspectives, and ultimately achieving common understandings and actions for a better

future" (Praetzellis and Praetzellis 2011:86). Heritage management is a process composed of

planning, collaboration, and decision making at various levels and all bounded by time,

resources, and objectives. Collaboration itself is not a uniform idea or practice, but rather a range

of strategies (Colwell-Chanthaphonh and Ferguson 2008:1). As such, heritage management does

not consist of one single methodology but rather a continuum of methodological approaches

integrated together to satisfy the many competing demands, stakeholders, and goals involved in
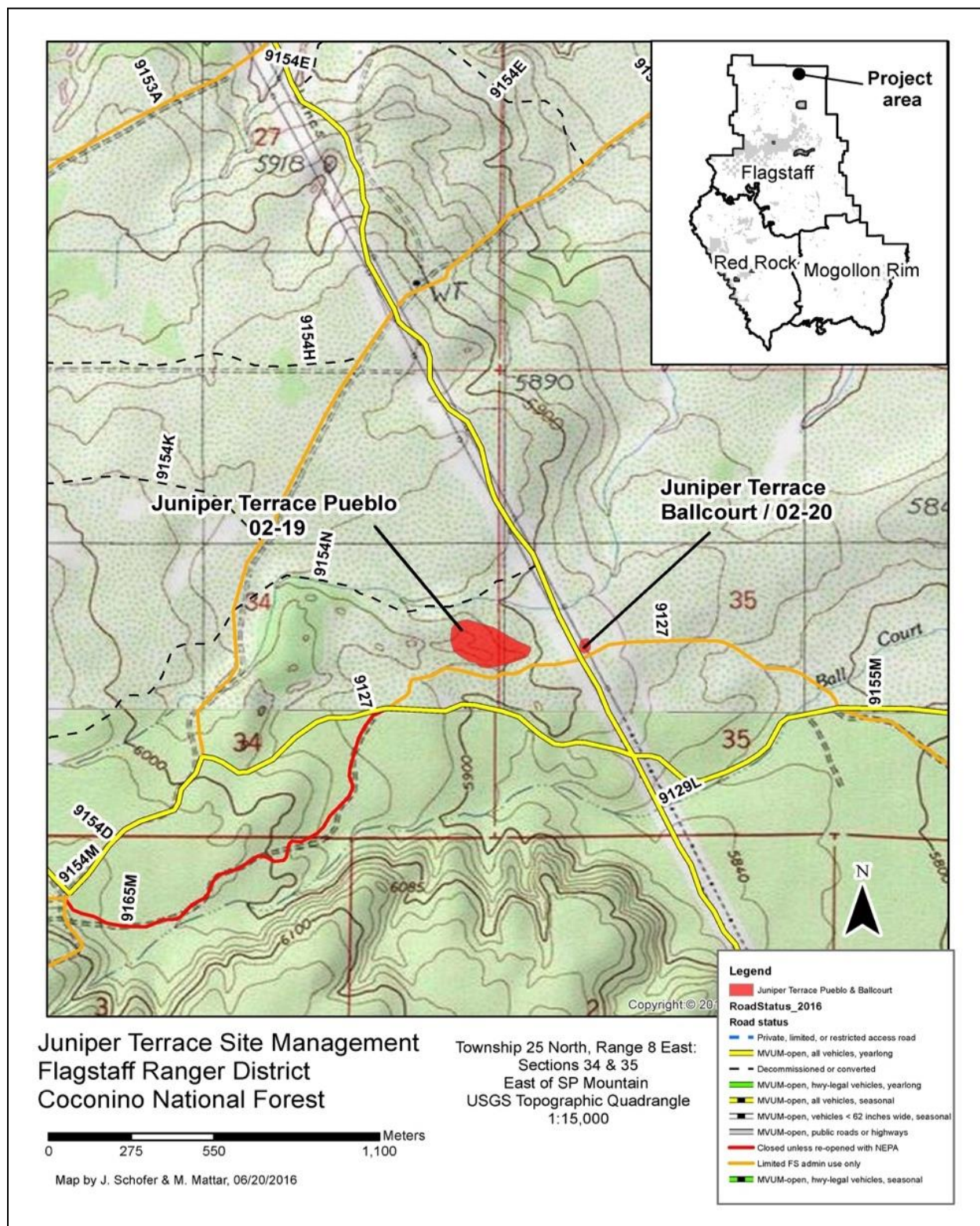
Figure 1.1. Map displaying location of Juniper Terrace within the Coconino National Forest.

the management process. As an intern I was tasked with assessing the needs and obligations of both the Coconino NF and the Hopi Tribe through consultation and collaboration, and developing a management approach which successfully balanced these needs and satisfied all obligations for all involved stakeholders.

During my internship I completed a variety of tasks and gained comprehensive experience in the management of heritage resources in the Southwest. My internship consisted of completing a literature and records search, drafting the letter to the Hopi Tribe, and conducting archaeological survey, site recording, site documentation, and site photography at Juniper Terrace, as well as other archaeological sites located in the Coconino NF. Throughout my internship I worked independently under the supervision of Jeanne Schofer, however I also worked in collaboration with Coconino NF Forest Archaeologist Peter Pilles, the Coconino NF Tribal Relations Specialist Craig Johnson, and members of the Hopi Tribe from the Hopi Cultural Preservation Office (CPO) and the Hopi Cultural Resources Advisory Task Team (CRATT). Additionally, I devoted time toward expanding my understanding of the archaeology of the Southwest and the Flagstaff region, familiarizing myself with the historical development of heritage resource management (HRM) legislation and the United States Forest Service (USFS), and reviewing the global discourse surrounding heritage resource management.

Internships are designed to be exploratory, and although my internship began with a focus on site management, my interest in and passion for tribal relations emerged throughout my internship experience and became a clear focus for the topic of my thesis. My preceptor Jeanne Schofer facilitated my internship experience, and it became clear to me during my internship that tribal relations is the aspect of site management in which I am most interested. Site management and tribal relations are inherently interconnected, and throughout both my internship and the

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writing of my thesis I focused on familiarizing myself with the discourse surrounding tribal relations in the United States, with the goal of providing insights and recommendations for improving tribal relations on the Coconino NF and promoting a model of co-management with descendant tribes.

Internship Deliverables

My first deliverable consisted of completing a records search of files and publications pertaining to Juniper Terrace, and summarizing the previous archaeological work completed at the site. I began the records search on March 10, 2016. I met Jeanne Schofer, my preceptor, and Peter Pilles at the Museum of Northern Arizona (MNA) Anthropology building, where Jeanne and I planned to pull the original excavation records and site files for Juniper Terrace, searching for any additional information on the site and excavation history. The MNA site number for Juniper Terrace is NA1814, which differs from the Coconino NF and Arizona State Museum site numbers. Jeanne and I began pulling out long drawers filled with yellow-tinted index cards, searching for the cards labeled "NA1814" by a typewriter many years ago. These index cards led us to other drawers and other cards, until finally we located the Juniper Terrace site records. I was disappointed to find that the excavation files on Juniper Terrace were very sparse. Nonetheless, we went through every page and selected items to scan, which took no more than two hours. Jeanne and I scanned the documents at MNA so that the site files and information on Juniper Terrace could be digitally stored within the Coconino NF database and accessible to Coconino NF archaeologists and resource managers in the future for educational and management related decisions.

Juniper Terrace was excavated three times in total, in the years of 1931, 1932, and 1948,

and other subsequent archaeological surveys and basic monitoring of the site were conducted up until 2008. Due to the over 70-year research history at Juniper Terrace, compiling a summary of previous work was not a simple task and required deciphering hand-written field journals from the early 1930s, locating sources that made corrections to the data collected in the earlier eras, and identifying the projects and site monitoring efforts undertaken by the Coconino NF. Unfortunately the original records did not provide any significant new information about Juniper Terrace, but digitizing and making these records accessible to the Coconino NF was one step toward increasing the availability of this information. The availability of this information to Coconino NF heritage managers is essential for informing future management decisions at Juniper Terrace, as well as providing an accurate and comprehensive interpretation of the Juniper Terrace site for purposes of public education and outreach.

On August 10, 2016 I returned to MNA, this time to access the original excavation photos located within the Easton Collection Center. I experienced difficulty in scheduling an appointment to access the original excavation photographs, which ideally should have been accessed in July. The original excavation photographs provide the unique opportunity to visualize the condition of the site during the excavations of 1931 and 1932. I was looking particularly for photos that captured the condition of the masonry architecture, as this information is critical in guiding the stabilization and management of these structures. The goal of stabilization is to maintain the original structural condition, and the best way to do so is by using the 1931 photographs to guide stabilization work. Due to restrictions of the Native American Graves Protection and Repatriation Act (NAGPRA), approximately five photographs of burials and burial related objects were removed before I accessed the collection. I was, however, able to access 43 photographs in total. I took notes on each photograph card, and used

the scans of the original excavation journals to cross reference photographs and determine missing information when possible.

The photographs consisted of mainly structural and feature images, however there were also artifact photographs which included photos of ceramic bowls, metates, and manos. Many of the photos consisted of close-up shots of ventilator shafts and their associated features. Altogether I flagged 15 photographs for scanning, which consisted of photographs best depicting the architectural condition of the masonry structures at Juniper Terrace. I was not able to obtain the scanned photographs until late in October 2016, after returning to the Easton Collection Center to sign a publication release waiver and re-identifying the photographs I requested.

I conducted an extensive literature review on the archaeology of the Flagstaff region, looking particularly for information pertaining to the Cohonina cultural designation recognized by archaeologists. As a novice to Southwest archaeology, it was crucial that I familiarized myself with the archaeological literature and interpretation of this region, allowing me to contextualize Juniper Terrace temporally, geographically, and in regard to archaeological and historical significance. This step is required to help establish a strong purpose and need for the project, identify the significance of the site, and begin assessing the areas of the site with the greatest need of management. Significance is the foundation of any heritage management plan. Thus, it is essential that a heritage manager completes a thorough literature and records search, becoming fully informed on the past, present, and foreseeable future condition of the heritage site and providing the best decision-making capabilities.

My second deliverable consisted of drafting the letter to the Hopi Tribe in which the Coconino NF offered the Hopi tribal government the opportunity to consult on the proposed project at Juniper Terrace. The letter informed the Hopi tribal government of the proposed

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project, provided a brief background on the Juniper Terrace site, described the purpose of and need of management at Juniper Terrace, and extended an invitation to schedule a site visit with Hopi community members and collaborate on all stages of development in the site management process. Often incorrectly referred to as "consultation letters," these letters do not actually constitute consultation and rather serve as an *offer* for tribes to consult on projects proposed by the Coconino NF. Consultation takes place after the tribal government responds to the offer letter. The offer letter was officially sent to the Hopi Cultural Preservation Office (CPO) on July 7, 2016, after circulating among various rounds of editing between myself and Jeanne Schofer. The letter was sent to the Hopi CPO by the Coconino NF Tribal Relations Specialist, Craig Johnson, who handles all direct correspondence between the Coconino NF and tribal governments. Fortunately, the Hopi Cultural Preservation Office (CPO) responded to the offer letter by the end of July, expressing great interest in the proposed management project and agreement to schedule a site visit to Juniper Terrace. In the response letter, the director of the Hopi Cultural Preservation Office, Leigh Kuwanwisiwma, stated:

> We appreciate and accept your invitation for a site visit with members of our Cultural Resources Advisory Task Team and participation in all stages of this management project, working collaboratively to stabilize the site and experience a connection with the history of this ancestral location [Hopi Cultural Preservation Office 2016].

I researched literature pertaining to tribal consultation, reviewing the discourse surrounding collaboration with Indigenous communities and varying agency consultation processes, as well as looking at examples of previous tribal offer letters prepared by the

Coconino National Forest. Although the tribal consultation process was orchestrated by the Coconino NF Tribal Relations Specialist, Craig Johnson, my direct involvement consisted of the drafting of the offer letter to the Hopi Cultural Preservation Office (CPO). I worked closely with my preceptor Jeanne Schofer to draft a two-page letter which included a site description, summary of the current site condition, brief description of the proposed management tasks, photos of the site taken by myself and Jeanne, and a map of the location of the site generated using geographic information system (GIS) software. Completing the primary literature and records search of the site proved to be essential in drafting a concise tribal offer letter that expressed the history, significance, and purpose and need of developing a site management plan at Juniper Terrace in a way that might grasp the attention of the Hopi Cultural Preservation Office (CPO).

Upon receiving a positive response from the Hopi Cultural Preservation Office, a site visit to Juniper Terrace was scheduled through coordination between the Hopi Cultural Preservation Office and the Coconino NF Tribal Relations Specialist. The in-field consultation visit to Juniper Terrace with Hopi consultants took place on September 7, 2016. Attendance to the site visit included myself, three members of the Hopi Cultural Resource Advisory Task Team (CRATT), two members of the Hopi Cultural Preservation Office staff, my preceptor Jeanne Schofer, Coconino NF Forest Archaeologist Peter Pilles, Coconino NF Tribal Relations Specialist Craig Johnson, Coconino NF Flagstaff District Ranger Mike Elson, Coconino NF archaeologist Dagmar Galvan, and Northern Arizona University professor Dr. Chris Downum. The primary goals of the site visit included receiving Hopi interpretations of the Juniper Terrace site and its significance, determining the degree of management needed at Juniper Terrace, identifying what management actions the Hopi would like implemented at Juniper Terrace, and

establishing the desired results of management.

I prepared a document to help guide the in-field consultation during the Hopi site visit to Juniper Terrace. This document consisted of topics to cover during the site visit, Juniper Terrace site information, varying degrees of site significance, a site map, a photo of a petroglyph believed to be located at the site, questions for the Hopi consultants, and questions regarding the logistics of management and stabilization at the site. Throughout the site visit I actively listened and took notes, documenting the knowledge shared by the Hopi consultants. One specific task I hoped to achieve during the site visit was to locate a potential petroglyph at the site, which had no formal documentation or record except for an unlabeled photograph in the Juniper Terrace site file discovered by Flagstaff district archaeologist Jeremy Haines.

With the help of everyone attending the site visit, we were able to locate the petroglyph, which the Hopi experts interpreted to be a depiction of Ma'saw, the powerful deity with whom the Hopi made a covenant to earn stewardship of the earth by "taking care of their homeland, to preserve its balance through prayer and ceremony, and to protect its most rare, life giving element-water" (Kuwanwisiwma 2001; Kuwanwisiwma et al. 2003:53). The Hopi experts noted that they knew the petroglyph depicted Ma'saw because his "arms are open wide," which represents Ma'saw giving the Hopi responsibility for the earth. In addition to locating the petroglyph that was in the photograph, Hopi members identified at least one other Ma'saw petroglyph and one petroglyph depicting corn, both of which were extremely faint and barely visible on the face of a basalt outcropping. To the naked eye these petroglyphs were extremely difficult to see. Many of us at the site struggled to see them until directly pointed out and outlined by the Hopi experts, however once we located the first petroglyph the Hopi experts immediately began identifying additional petroglyphs on the basalt outcropping, demonstrating

their close connection with the land and all of its features.

Although I prepared the informative document to help guide the in-field consultation, this document in no way governed the direction of the site visit. Rather, I used the document to guide my questions for the Hopi consultants and to take notes, recording the Hopi perspectives, comments, and management recommendations. The purpose of this on-site consultation visit was to receive input from Hopi consultants regarding their requests, concerns, and recommendations for the management of the Juniper Terrace site, as well as their interpretations of the site significance and educational value. The site visit served as a forum for the Hopi consultants to share their knowledge and voice their desired directions and degrees of management implemented at Juniper Terrace.

Figure 1.2. Photograph of Dr. Chris Downum describing the archaeological interpretation of the Juniper Terrace ballcourt to the attendees of the on-site Hopi consultation visit on September 7, 2016. Photo taken by Peter Pilles, Coconino Forest Archaeologist.

The valuable information attained at this site visit served as the basis of the Juniper Terrace site management plan. I aspired to create a management plan that prioritizes the needs and desires of the descendant Hopi community with that of the Coconino NF, and the in-field consultation and site visit with Hopi consultants was the first step in developing a site management plan that satisfied these needs. The site visit was extremely informative, collaborative, and beneficial, providing me with my first experience in tribal consultation. The Hopi consultants expressed great interest in continuing involvement in the management process at Juniper Terrace, even suggesting the involvement of Hopi youth in the management process.

My third and final deliverable consisted of drafting the Juniper Terrace Site Management Plan. Drafting of the management plan began after a substantial meeting with Jeanne Schofer and Peter Pilles at the Coconino National Forest Supervisor's Office on August 9, 2016. At this meeting, it was decided that my internship deliverables would end with the completion of a site management plan, and that the stabilization plan was in fact a separate entity beyond on the scope of my internship. The difference between a site management plan and a site stabilization plan was made very clear to me. A site management plan defines the site significance, states the purpose and need of management, and provides a strategy for carrying out management at the site. A stabilization plan states exactly how management is to be carried out, and results in the implementation of the proposed management and stabilization protocols.

Site management refers to the administrative direction and control of a site, usually with the goal of maximizing opportunities and minimizing efforts (Pilles 2003). The aims of management are to provide long-term protection of the site by: 1) implementing policies and practices to minimize impacts, damage, or destruction to the site by other management activities, 2) elucidating and trying to understand, respect, and conserve the various values of the site to the

various publics served by the Agency, and 3) providing for the long-term protection, enhancement, and realization of those values (Pilles 2003). The foundation of any site management plan is the statement of significance, and the purpose of a site management plan is to perpetuate those qualities that make the site significant, identify the range of options available at the site within the context of its significant values, and document the thought process used to arrive at management decisions (Pilles 2003).

I began working on the site management plan by assessing the significance of Juniper Terrace as a heritage resource, and in terms of the National Register of Historic Places (NRHP). I identified the scientific, tribal, educational, and social values of Juniper Terrace within the context of history, significance and integrity. Once I established the significance of Juniper Terrace, I then began to formulate a range of alternative actions that could maximize the significant values of the site. For example, I considered the ways in which the tribal value of Juniper Terrace could be maximized through management, as well as the ways in which the other educational, scientific, and social values could either enhance or diminish the tribal value of the site. This process helped me formulate questions to ask the Hopi consultants during the site visit to Juniper Terrace, and encouraged me to begin thinking about how the significance and values of the site could be maximized through management actions.

The information I attained from the Hopi consultants during the on-site consultation visit served as the foundation for writing the remaining components of the management plan and determining what management actions to recommend at Juniper Terrace. I followed the management plan format provided to me by Peter Pilles (2003), which identifies 19 required contents of a site management plan. These contents include: 1) a statement of ownership and legal authorities authorizing and governing the management of the site, 2) a statement of

philosophy and general policy, 3) a description of the site that places it in a regional context, 4) the statement of significance (scientific, tribal, educational, and social), 5) identification of other significant features in the management area, 6) physical or environmental constraints and threats, 7) specific issues, concerns, and opportunities related to the management of the site, 8) the present and projected visitor use of the site, 9) a statement of appropriate use of the site, 10) the physical protection needs, 11) the interpretative plan, 12) the conservation plan, 13) artifact collection and curation policy, 14) management objectives, 15) management structure and responsibilities, 16) monitoring plan and schedule, 17) maintenance plan and schedule, 18) schedule for review of the management plan, and 19) budget projection and time frames (Pilles 2003). By using the information I attained from the Hopi consultants to inform the writing of each of these sections, I was able to ensure that I satisfied both the content requirements of the management plan for the Coconino NF and the management needs, requests, and recommendations of the Hopi Tribe.

Although this approach proved to be time-consuming and delayed the writing of the management plan until after the on-site Hopi consultation visit to Juniper Terrace, I found it extremely enlightening to critically consider Hopi views, needs, and recommendations while approaching and writing each section of the site management plan. By using the information obtained directly from consultants of the Indigenous descendant community as a guide, I hoped to develop a management plan that more equitably balanced the needs of both the Agency and the Hopi Tribe, rather than allowing agency needs to overshadow the needs of the tribe. Although I am still in the stages of completing the Juniper Terrace Management Plan, my goal is to have consultants from the Hopi Cultural Preservation Office (CPO) review and edit the management plan and provide feedback on the document, in addition to the edits and feedback I

receive from the Coconino NF. I envision a model of heritage management that is inclusive and collaborative with descendant communities, and it is my goal to actively involve Hopi consultants in determining the degree of management carried out at Juniper Terrace through ongoing collaboration between the Hopi Tribe, the Coconino NF, and Northern Arizona University.

Internship Obstacles

Throughout my internship, insufficient time proved to be the biggest obstacle. Although the response letter from the Hopi Cultural Preservation Office (CPO) was dated to July 14, 2016, I was not notified of the Hopi response until August 1, 2016. I was not aware of this delay until I was reviewing my internship documents for the preparation of this thesis. Although this response time is extremely fast in the grand scheme of tribal consultation, for the scope of a summer internship and my own personal goal to develop a truly collaborative management plan informed by the Hopi voice from the onset, even a two week delay can be problematic. Nonetheless, this is one example of how the tribal consultation process can be problematic. Written correspondence can easily be delayed or lost, and as a result the entire management process can be prolonged. During my internship this proved to be extremely challenging, as internships are intended to be confined to the duration of one summer.

After receiving notification of the Hopi response letter in early August, I began coordinating with the multiple involved stakeholders mentioned earlier, to schedule the field visit to Juniper Terrace. Due to competing schedules, the site visit was scheduled for September 7, 2016, at which time the fall 2016 semester at Northern Arizona University had already commenced and my summer internship had technically ended. Although I remained busy throughout the summer,

completing the records and literature search, familiarizing myself with southwestern archaeology and techniques of pueblo preservation, learning the workings of the Agency, attending various field visits and conducting field work at Juniper Terrace and other surrounding sites with Jeanne Schofer and Dagmar Galvan, another archaeologist at Coconino NF, I could not begin drafting the actual site management plan until after attending the on-site Hopi consultation visit and working directly with Hopi consultants to determine how they wanted Juniper Terrace to be managed. Because truly collaborative and community-based approaches call for collaboration in all stages of management, I found it imperative to begin writing the site management plan only after hearing the Hopi interpretations and management recommendations for the site. Writing the management plan first and supplementing in tribal views later is a common sequence within heritage management, however I wanted to approach the development of the site management plan through the informed Hopi voice rather than simply supplementing in Hopi views and recommendations to an already developed and agency-biased management plan.

As a result of the lengthy consultation process, and the Hopi site visit not taking place until September 2016, I had to delay the writing and completion of the site management plan until after completing my graduate coursework at NAU in May 2017. In an ideal world, all phases of the heritage management process would be carried out in a timely and consecutive manner while in direct collaboration with local and descendant communities, however the reality of the heritage management process is one of complicated planning, scheduling, and communicating among a variety of stakeholders all with competing interests and bound by restraints of time, money, and resources. Throughout my internship, it became clear to me that the original task I was charged with- carrying out the management process from start to finish- was not an endeavor that can be realistically completed within one short summer. Although my preceptor

and I were able to re-evaluate my internship duties and deliverables half way through my internship, I would suggest that future internships of this kind begin after the tribal consultation process is initiated and the on-site consultation visit has been scheduled by the agency. This would allow for the intern to enter into the internship with an established set of goals and the proper resources to complete them within one summer. The management process is complex and interminable, and my internship provided me with first-hand experience of the complications and set-backs heritage managers face along the way.

Discussion and Conclusions

The experience of accessing original excavation records and photographs in a museum collection proved extremely rewarding. I gained experience in the records management and curation protocols of MNA, as well as experience in accessing original primary documents and resources. At first I was disappointed at the limited information available on the excavation of a large and significant site such as Juniper Terrace. I quickly realized however, how far archaeological methods and practice have come since the 1930s and that my role as an archaeologist today is to continue working on improving our approaches and practices. The excavation and resulting conditions of Juniper Terrace cannot be reversed, however I had the unique opportunity to apply my archaeological knowledge and skills to preserve what is left of the site as it stands today and do so in collaboration with the Hopi Tribe. Projects such as this one serve as a stepping stone toward a collaborative and community-based heritage management that does not ignore archaeological practices of the past, and seeks to rectify past injustices by continually working to improve archaeological knowledge, approaches and practices through tribal and multi-disciplinary collaboration.

Tribal consultation is critical in all stages of site management, and the Indigenous voice should inform all aspects of a site management plan. Due to the nature of consultation as a lengthy process, it is imperative that initiating tribal consultation is a primary priority. Ideally the on-site Hopi consultation visit should have taken place earlier in my internship, however it is never too late for consultation. There is still a need for additional site visits with the Hopi to mitigate access routes and determine stabilization measures at Juniper Terrace, however this initial site visit proved to be a step forward in not only the management protocol at Juniper Terrace, but also in improving the relationship between the Coconino NF and the Hopi tribe.

The development of the Juniper Terrace site management plan is part of an ongoing learning process, seeking to determine the most efficient strategy of site management on the Coconino NF. There is no site management protocol in place at the Coconino NF, however part of my internship consisted of keeping a record of this long and complex process, with the hope of deciphering the most efficient protocols for future management. I hope to apply my own experiences and challenges to improve the future management of heritage resources on the Coconino NF.

Chapter 2:
The Juniper Terrace Site
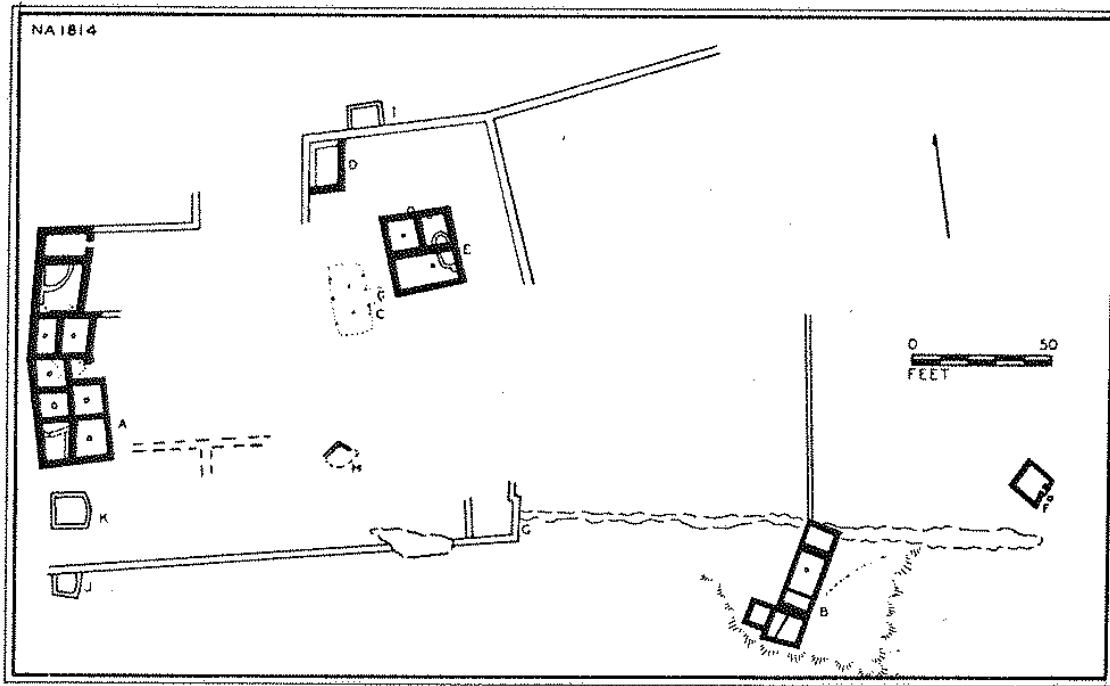
Figure 2.1. Site map of Juniper Terrace. Reprinted from Harold Colton's *The Sinagua* (1946).

Juniper Terrace is a large Cohonina site that was discovered and excavated in the 1930s during a series of archaeological expeditions conducted by the Museum of Northern Arizona (MNA). The MNA site number for Juniper Terrace is NA1814. The Juniper Terrace site is composed of eight surface and subterranean structures (Table 2.1). These include over 20 masonry pueblo rooms, both masonry and timber style pit houses, and at least two masonry kivas, all partially enclosed by masonry walls which have been interpreted as a compound by some archaeologists (Colton 1946:145). The masonry walls follow the natural lava outcropping along the southern and northern boundaries of the landform, connecting the two masonry pueblos on the eastern and western boundaries of the site, and is partitioned into two parts by a cross wall

(Colton 1946:147). Archaeologists speculate that at one time the masonry walls may have fully enclosed the site, however obstruction by cinder dunes in the area, which can result in the burying of surface artifacts and features, makes it difficult to investigate through surface surveying techniques. Nonetheless, archaeologists such as Colton (1946), Pilles (1993) and Morales (1994) often refer to the site as the Juniper Terrace "compound."

Juniper Terrace also contains a ballcourt which is located ¼ mile east of the site. The Juniper Terrace ballcourt is aligned north-south and partially outlined with basalt rocks (Coconino National Forest 2008). Peter Pilles (1993:8) has referred to Juniper Terrace as a "chief village," which he designates by a number of distinctive characteristics:

> All [chief village sites] lie along likely historic trade routes, are located on hilltops, have a community room as well as inner and outer courtyards delineated by stone walls, and are associated with ballcourts. Such sites have a greater than average quantity of tradeware pottery and exotic artifacts, and they were likely inhabited by the religious, social, and political leaders of the day [Pilles 1993:8].

Juniper Terrace is considered just one of the chief villages in the surrounding area during this time, accompanied by Ridge Ruin, Wupatki, Winona Village, and Three Courts Pueblo (Pilles 1993:8). Based on ceramic and tree-ring data, the Juniper Terrace site dates to approximately 1070-1175 AD (Colton 1946:154). Juniper Terrace is most closely associated with the Elden cultural phase, one of the five identified post-eruption cultural phases in the Flagstaff region. This period of prehistoric activity and occupation in the Flagstaff area was significant in contributing to a better understanding of the historical development and cultural

configuration of the Cohonina. The Coconino National Forest has determined that Juniper

Terrace is considered eligible for the National Register of Historic Places (NRHP) under

criterion 'd,' and the current management use of the site is listed as "scientific investigation"

(Coconino National Forest 2015).

Table 2.1. Juniper Terrace (NA1814) Structures and Descriptions

Structure	Description
NA1814A	~10 room masonry pueblo
NA1814B	~4-6 room masonry pueblo
NA1814C	Hohokam style timber pit house, burned and later used as trash dump, contained Burial 1
NA1814D	Masonry surface room
NA1814E	Large masonry pit house/ big kiva, contained Burial 2
NA1814F	Masonry pit house/ kiva, contained Burials 3, 4, 5, and 6, two sets of loom holes

Ownership, Location and Environment

Juniper Terrace is under the jurisdiction of the Coconino National Forest (Coconino NF).

The Coconino NF serves as the legal authority authorizing and governing the management of the

site. Juniper Terrace is located in the northeastern boundary of the Flagstaff district of the

Coconino National Forest, situated north of Flagstaff and south of Wupatki National Monument.

The Juniper Terrace site is located on the edge of a lava terrace within the zone of the Sunset

Crater ash fall. The vegetation in this area is dominated by juniper.

Previous Archaeological Work

Archaeological investigation into Juniper Terrace began in the early 1930s, with the most intensive period of investigation taking place between 1931 and 1932. Prior to these archaeological investigations, the area surrounding Juniper Terrace had been under examination by the Museum of Northern Arizona (MNA) as part of the Museums' efforts to refine the dates of the Sunset Crater volcanic eruption and expand upon the knowledge of the Pueblo II period in the San Francisco Mountain region. These efforts consisted of a series of archaeological expeditions which took place in the pre-World War II era, between the years of 1930 and 1941. Since the 1931 and 1932 excavations of Juniper Terrace, archaeological investigation into the site has been limited, with little additional survey work or published literature on the site. The primary contributor to archaeological studies of Juniper Terrace was the Museum of Northern Arizona (MNA).

Juniper Terrace was discovered in 1931 by archaeological surveyors from the Museum of Northern Arizona (MNA) who stumbled across a broken bowl of Deadman's Black-on-gray pottery lying exposed on the surface while surveying the surrounding area. The broken bowl was exposed by illegal looting of the burial ground at Juniper Terrace, however the discovery of this Deadman' Black-on-gray vessel caught the attention of Museum staff. At the time of the discovery, no other restorable vessels of the Deadman's Black-on-gray pottery type had been recorded. This unique discovery, combined with the complex ceramic assemblage present at Juniper Terrace, led the Museum of Northern Arizona (MNA) to the decide to excavate the Juniper Terrace site (Colton 1946:145-146).

The excavation of Juniper Terrace began in the summer of 1931, and extended into the 1932 season, under the direction of Lyndon L. Hargrave as part of the MNA Archaeological

Expedition of 1931. The Expedition of 1931 had three main goals: 1) to locate burned pit house structures beneath layers of Sunset Crater ash to aid in dating the eruption, 2) to further delineate the temporal boundaries and cultural characteristics of the Pueblo II stage in the region, and 3) to trace the cultural continuity of Pueblo II into the Pueblo III stage (Downum 1988:112-113). Hargrave selected two sites north of Flagstaff, Juniper Terrace (NA1814) and Heiser Springs (NA1754), to investigate the above questions. Juniper Terrace was one of the first Cohonina sites to ever be excavated, and it is still considered to be the largest and only multi-story Cohonina site ever excavated.
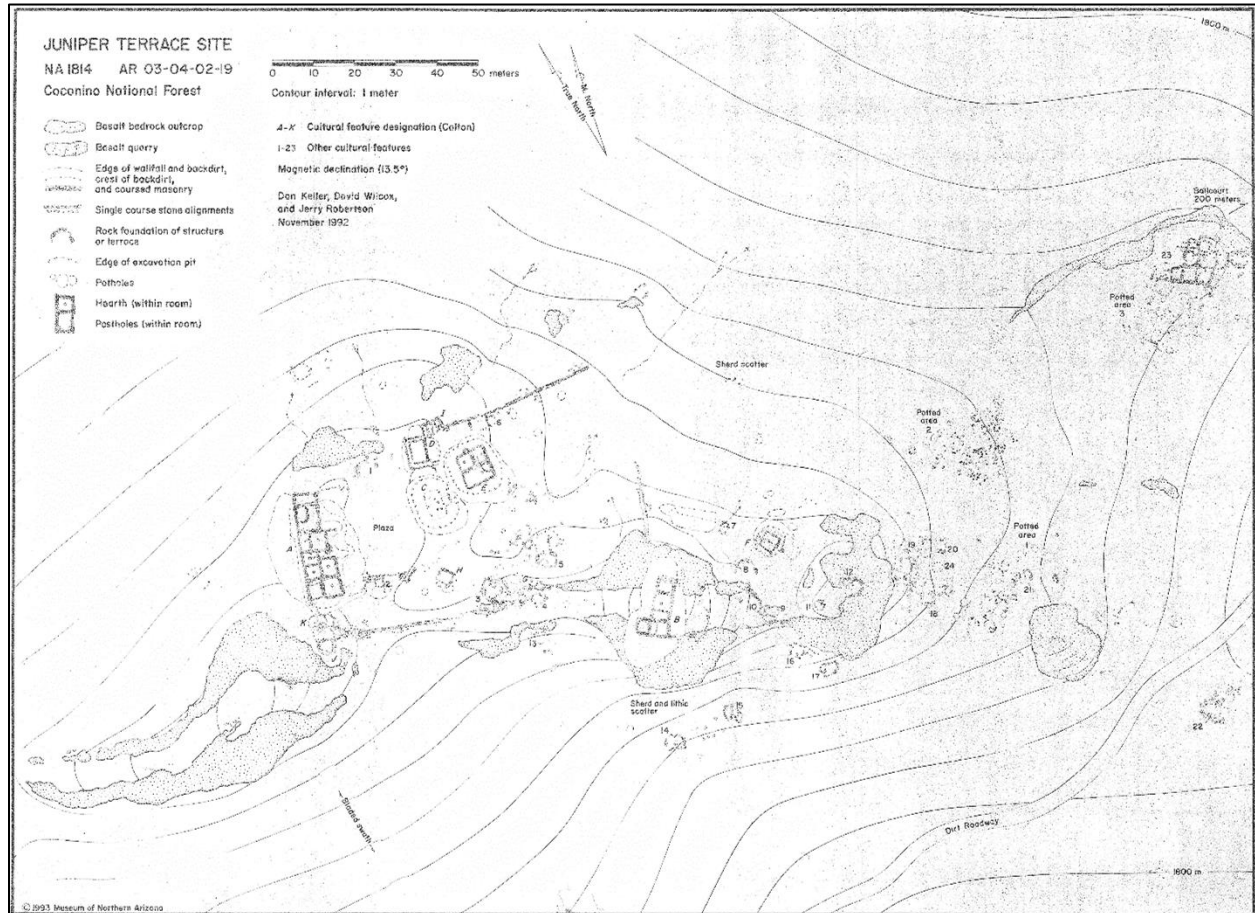
Figure 2.2. The most recent and up-to-date map of the Juniper Terrace site, created by Don Keller, David Wilcox, and Jerry Robertson in 1992.

Figure 2.3. Photos comparing the condition of Structure C, a timber pit house, at Juniper Terrace between 1931 and today to demonstrate the deteriorated condition of the site and the need for management. The top image depicts the condition of Structure C in 1931, and the bottom photo depicts the deteriorated condition of Structure C in the present.
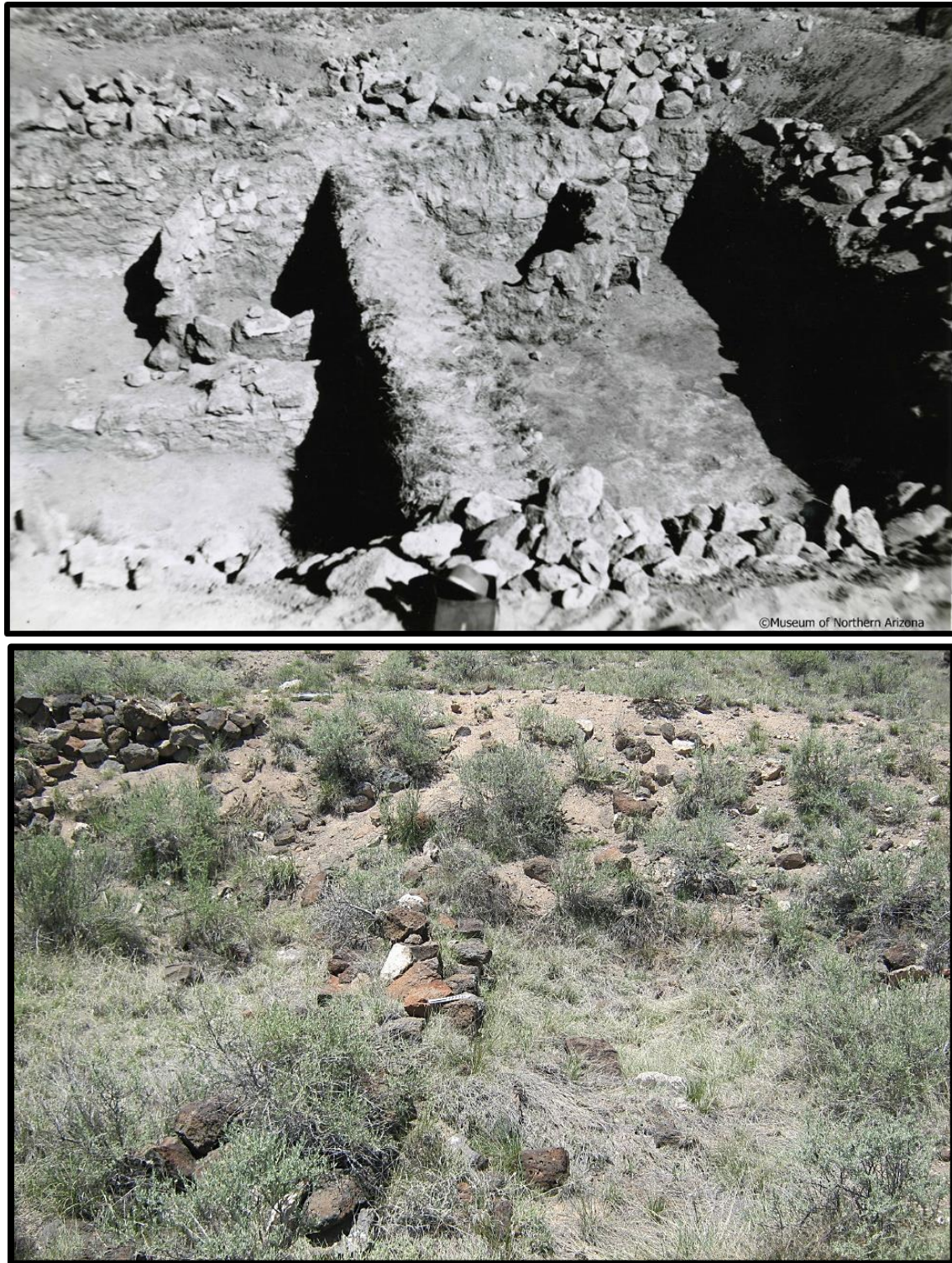
Figure 2.4. Photos comparing the condition of Structure E, a masonry pit house or kiva, at Juniper Terrace between 1931 and today to demonstrate the deteriorated condition of the site and the need for management. The top image depicts the condition of Structure E in 1931, and the bottom photo depicts the deteriorated condition of Structure E in the present.

Figure 2.5. Overview photos of Pueblo A at the Juniper Terrace site. Photos taken by the author to demonstrate the deteriorated condition of the masonry architecture at the site in the present and the need for management.

Figure 2.6. Overview photos of Pueblo B at the Juniper Terrace site. Photos taken by the author to demonstrate the deteriorated condition of the masonry architecture at the site in the present and the need for management.

1931-1932

Excavation at Juniper Terrace began on May 4, 1931. The excavation crew, composed of Hargrave, an assistant archaeologist, a camp cook, and three field laborers, worked out of their base camp which was located in Medicine Valley. The original excavation of Juniper Terrace was fairly substantial. Hargrave and his crew excavated all six identified structures (A-F) at the site during the 1931 and 1932 field seasons. The Juniper Terrace ballcourt (NA804) was also partially excavated during the 1931 field season. At the time of excavation, however, it was only interpreted as a large elongated depression associated with the site, and it was not until later that its function as a ballcourt was proposed.

The excavation methods used at Juniper Terrace are undocumented, and there is no evidence that an official plan of work was ever prepared for the excavation of the site, however it appears that a variety of excavation techniques were utilized to examine different types of features, structures, trash mounds, and burials. Artifacts obtained from the excavations, and surface specimens deemed as significant, were collected. Dating of the occupation of the site was determined from a combination of dendrochronology, or tree-ring dating, and dating of the ceramic assemblage at the site. The quality and quantity of field documentation is fairly poor, which is best explained by the recording and documentation standards of that time, as well as the use of inexperienced crew members in the field. Excavation notes, site records, lab worksheets, and artifacts from the original excavation of Juniper Terrace are housed in MNA's Easton Collection Center and curatorial facilities.

Ballcourt The Juniper Terrace ballcourt (NA804) is located one quarter of a mile east of the Juniper Terrace compound. The ballcourt is aligned north-south and measures approximately 110 feet in length and 65 feet in width. At the time of discovery, the function of this large oval

surface depression was not determined and it was postulated that it served as a water reservoir for the prehistoric occupants of Juniper Terrace. In 1931, Hargrave and his crew dug a test pit in NA804 to investigate its viability as a reservoir (Colton 1946:76). The results of the test pit were inconclusive with the attributes of a water reservoir, and no further excavation of NA804 was conducted during the 1931 and 1932 expeditions.

Artifacts The excavation of Juniper Terrace resulted in the collection of a wide variety of material culture and artifacts, which has contributed substantially to the archaeological record of the Flagstaff region. In total, 583 artifacts were collected from the site and are currently curated in MNA. The artifact assemblage consists of over 30 different ceramic types, various bone tools and artifacts, lithic flakes, tools, and projectile points made from obsidian, chert, and chalcedony, shell fragments, beads, bracelets, an abalone pendant, turquoise beads, yellow ochre, specimens of hematite, calcite and gypsum, and a sample of copper carbonate, among many other items. Extensive analysis of the ceramic assemblage at Juniper Terrace has been conducted, however analysis of the other artifact types and assemblages from the site have been minimally explored. Harold Colton (1946:155) noted that abundant amounts of lithic and bone implements were collected from the site but never underwent complete analysis, providing opportunities for future investigation into the Juniper Terrace artifact assemblage beyond ceramics.

Tree-ring Dating In addition to the complex artifact assemblage, excavation at Juniper Terrace also consisted of the collection of 146 beam specimens for tree-ring dating. John McGregor, another archaeologist from MNA, accompanied Hargrave and his crew in the field on the weekends to assist with the removal of tree-ring samples. Tree-ring samples were collected from wooden beams within structures NA1814C and NA1814E. Tree-ring data indicates that the construction of NA1814C took place in AD 1129, and that the pit house was burned not long

after construction. This conclusion was drawn from the lack of evidence of later tree-ring dates, which would indicate longevity of use and repair of the structure (Downum 1988:384). According to the tree-ring data, the roof of kiva NA1814E was constructed in AD 1136 and was in use until at least AD 1139, after which the structure was filled with trash and burned with the roof still intact (Downum 1988:387).

Burials Six burials were uncovered during the excavation of Juniper Terrace. Burial 1 was uncovered from NA1814C and consisted of a woman younger than 30 years of age with a deformed skull and buried in an extended position with her head toward the west. This burial had the most offerings of all the burials excavated at Juniper Terrace. Burial 2 was uncovered from NA1814E and consisted of a well preserved child buried in a flexed position. Burials 3, 4, 5, and 6 were uncovered from NA1814F. Burial 3 consisted of a female between 25 and 30 years of age found in a flexed position. Burial 4 consisted of a male between 35 and 40 years of age found in a flexed position. Burial 5 consisted of a very poorly preserved infant, and Burial 6 consisted of an unidentified individual buried in a flexed position with their head toward the southeast. Colton (1946:154) notes that in addition to the six identified burials uncovered from Juniper Terrace, there are two other skeletons that were uncovered from NA1814F which could not be distinguished in either the field or laboratory notes. Both of these skeletons are female, one about 20 years of age and the other 25 to 30 years of age, and it is quite possible that one of these skeletons is the unidentified individual from Burial 6.

Loom holes A final significant aspect of the original excavation of Juniper Terrace includes the discovery of two sets of loom holes in the floor of NA1814F (Figure 2.7.). The loom holes were located on the west end of the structure, with one set measuring 41 inches in length and the other set measuring 52 inches in length. The impression of a rectangular board was found in the

center of the structure, west of the loom holes. The four burials uncovered from NA1814F were found above the floor containing the loom holes and board impression. The loom holes uncovered in the floor of NA1814F are the earliest loom holes recorded in this area of the Southwest (Colton 1946:155).

Figure 2.7. The only existing photo of the loom holes uncovered in NA1814F. This photo is from the 1931-1932 excavations (Archival Collections, Museum of Northern Arizona).

The original excavation of Juniper Terrace provided significant information regarding the Cohonina-Sinagua frontier and trade interactions with the Hohokam, valuable knowledge of prehistoric development and settlement patterns in the Flagstaff region, and played a formative role in the historical development of archaeological science in the Southwest.

1935

In September of 1935, the Juniper Terrace Ballcourt (NA804) was revisited for further

investigation. After the discovery and excavation of the Winona Ballcourt (NA2132) in 1935,

John McGregor and others from MNA began to revisit other similar oval depression features

with previously undetermined functions. In 1935 John C. McGregor, Watson Smith, and J.

Ferrell Colton partially excavated the Juniper Terrace ballcourt with the help of students from the

Arizona State Teachers College at Flagstaff, known today as Northern Arizona University. This

excavation was funded by the Federal Emergency Relief Administration (Colton 1946:76).

Colton describes the 1935 excavation efforts:

A search was made for the end and center markers, the walls were sectioned, and the

end ramps excavated. The walls were found to be plastered with white clay. Under the

clay floor a south end marker, consisting of four basalt stones set in a sort of box, was

discovered. Neither the north nor center marker was located. The walls were estimated

to have been 7 feet high. The north and south entrances were lined by rocks and a ramp

led down to the floor of the court. The court probably fell into ruin sometime between

1130 and 1150 A.D. There were not enough sherds to give an indication of the culture

[Colton 1946:77].

Excavation methods used at the Juniper Terrace ballcourt included trenching, which was

common for that time. The ballcourt was mapped and a sherd analysis was conducted. A total of

eight types of pottery were recorded, with three painted types and five unpainted types.

McGregor concluded that use of the ballcourt ended between 1130 and 1150 AD, which falls in

the epicenter of occupational activity at the Juniper Terrace site (1070-1175 AD).

The Juniper Terrace ballcourt is one of four ballcourts that were constructed in the frontier zone following the eruption of Sunset Crater, along with Second Sink, Wupatki Road, and Wupatki Pueblo ballcourts (O'Hara 2015:378). Following the 1935 excavation, a few decades passed before the Juniper Terrace ballcourt would be revisited for investigation. In these later studies (Downum 1988; Morales 1994; and O'Hara 2015), knowledge pertaining to the surface assemblages of artifacts pushed the dates of the use of the ballcourt a little later, to between 1130 and 1160 AD, placing the use of Juniper Terrace ballcourt contemporaneously with the use of Wupatki ballcourt (O'Hara 2015: 378). Nonetheless, the information gained from the 1935 excavation was significant in expanding the knowledge surrounding prehistoric ballcourt
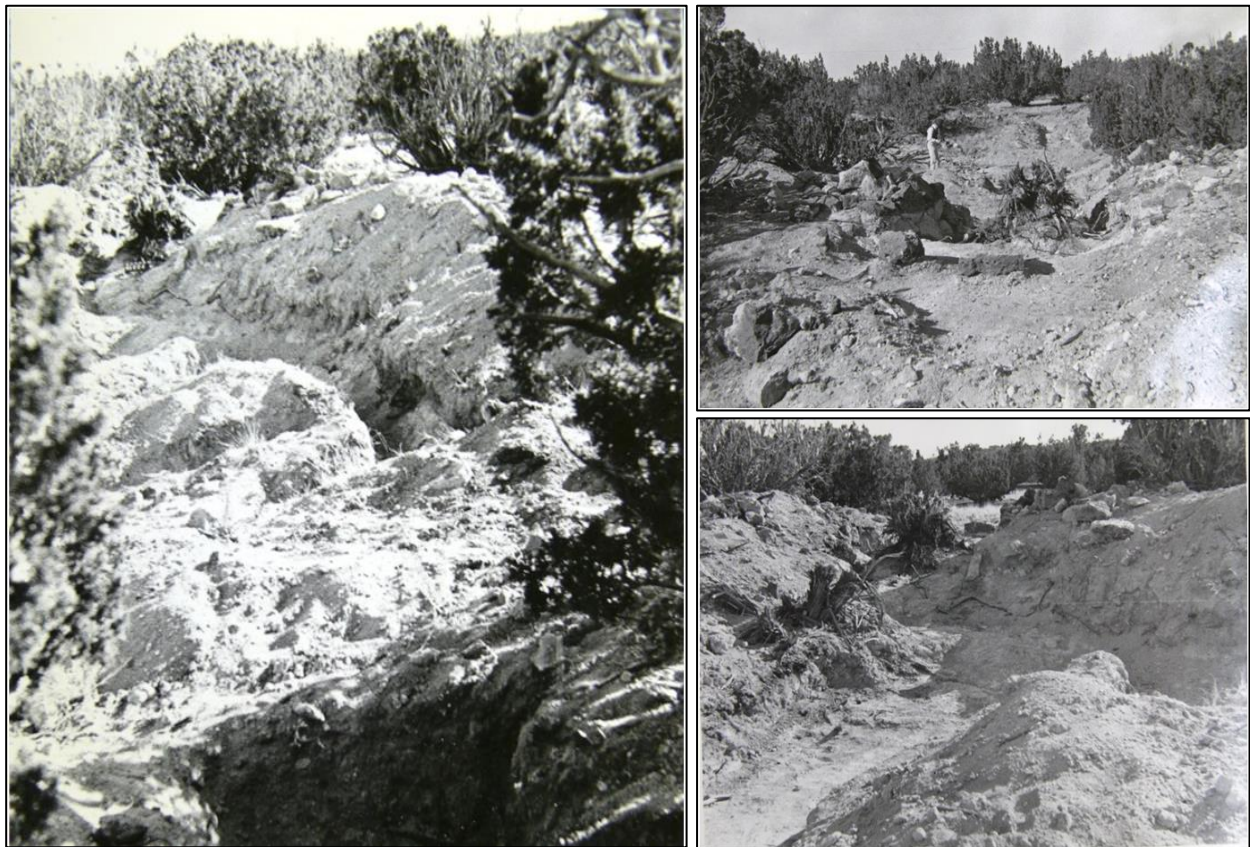
Figure 2.8. Photos from the 1935 excavation of the Juniper Terrace Ballcourt (NA804). These photos were obtained from the Coconino National Forest site records.

identification, function and interpretation in the Flagstaff region.

1948

In 1948 Juniper Terrace was revisited for archeological investigation by Watson Smith as part of the Big Hawk Valley Project, a post-war Archaeological Expedition headed by MNA. The primary goal of the Big Hawk Valley Project consisted of further investigation into the cultural patterns and interactions among the Anasazi, Sinagua, and Cohonina branches of culture, particularly the intermixture and geographical penetration of territories among these three branches (Smith 1952:5). The project focused on six sites in the Big Hawk Valley region of Wupatki National Monument, an area situated among the northern boundary of ash and cinder fall from the Sunset Crater eruption, which Smith referred to as the "frontier region." The excavations ran from June 15 to August 1, 1948. The excavation consisted of ten crew members, including Watson Smith as the director, Milton A. Wetherill as the general assistant and foreman, a camp cook, three graduate students, three Hopi laborers (Elmer Masayouma, Norman Sumatzkuku, and Herbert Lomatewa), and one Navajo laborer, Haskie Yazzie (Smith 1952:1).

At Juniper Terrace excavation was focused on NA1814E, a large Pueblo III masonry pit structure or possible kiva which was only partially excavated by Hargrave in 1931 and 1932 (Downum 1988:260). In 1948 Smith and his crew removed the eastern half of the thick east-west cross wall and excavated the exposed area to determine the presence of a ventilator shaft in the eastern wall of Structure E (Smith 1952:77). This excavation exposed charred fragments of pinyon logs, various post holes, fully kernelled corn cobs, two storage bins, fragments of red painted plaster, two large basalt deflector stones, and the presence of two distinct levels of plaster floor.

No sherd collection or analysis was conducted during the 1948 excavation, due to the complete ceramic analysis conducted by Hargrave in 1931 and 1932. Smith concluded that the

original excavations of the structure must have only penetrated the second, upper level floor, and never reached the first floor level. Additionally, the 1948 excavation of NA1814E provided Smith with evidence to establish the structure's original function as a kiva. Smith (1952:80) concluded that the construction of this kiva was consistent with the style of the Kayenta Branch, however with strong elements of Cohonina and Sinagua influence. At the time of this synthesis, NA1814E represented the most southerly known example of a kiva in the Flagstaff region. The 1948 Big Hawk Valley Expedition was significant in the fine tuning of the complex cultural diversity and fluidity of the Flagstaff region, and NA1814E contributed to the understanding and designation of kiva structures in northern Arizona.
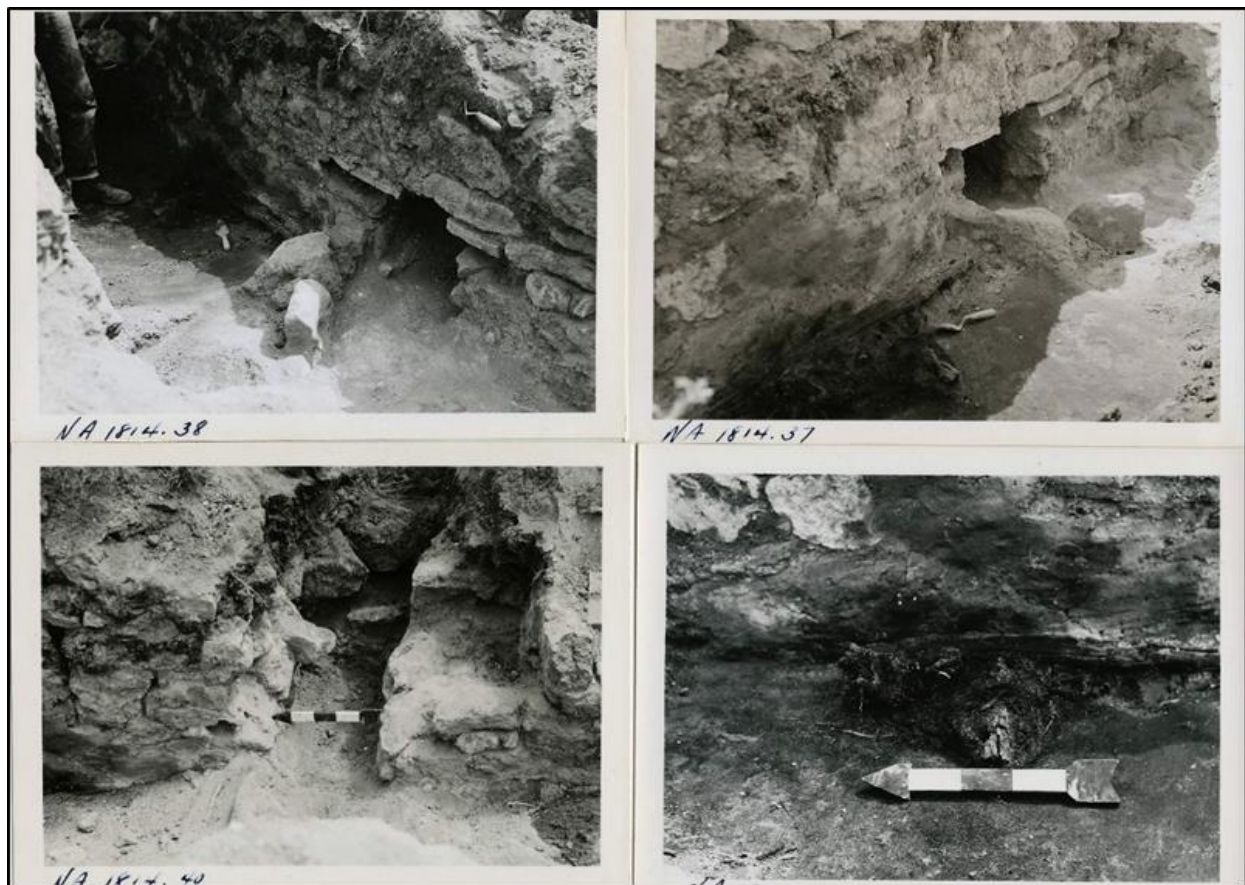
Figure 2.9. Photos from the 1948 excavation of NA1814E. (Archival Collections, Museum of Northern Arizona).

Chronology, Phases and Cultural Classification

Juniper Terrace is interpreted as a Cohonina site, which refers to the cultural classification given by archaeologists based on the location, artifact assemblages and architectural styles of prehistoric populations. In the Flagstaff region there are two distinct archaeological cultures, known as the Cohonina and the Sinagua cultures. Cohonina is a branch of the Patayan culture root, whereas Sinagua is a branch of the Mogollon culture root.

The Cohonina culture inhabited the area west of the San Francisco Peaks, north of the Mogollon Rim, and south of the Little Colorado River (Figure 2.10.). Based on tree-ring data, the Cohonina culture dates to between approximately AD 700 and AD 1275. The culture traits of the Cohonina were influenced by surrounding Sinagua, Hohokam and other ancestral Puebloan peoples, however the distinguishing characteristic of the Cohonina is the paddle-and-anvil-formed pottery type referred to as San Francisco Mountain Gray Ware. Despite the lack of water resources in the area, the Cohonina prospered in the cinders of the Sunset Crater ash fall by utilizing a combination of maize farming and hunting. The height of the Cohonina culture was during the Padre and Elden Phases (AD 1130-1225), however by AD 1150 Cohonina populations began to migrate north of the San Francisco Peaks and abandon their traditional homeland (American Southwest Virtual Museum 2016). The production of San Francisco Mountain Gray Ware stopped by AD 1275, and it is likely that the once distinct Cohonina culture was amalgamated by surrounding cultural groups.

Following the eruption of Sunset Crater, which took place between AD 1040 and 1100, the region underwent a series of rapid cultural changes, referred to as cultural phases, particularly in the patterns of site location, architecture, ceramics, and trade relations. Within the earliest phases, regional populations shift from higher elevation ponderosa pine forests to lower

elevation pinyon and juniper landscapes, with a high concentration of settlement taking place in

the area of Sunset Crater ash fall. Additionally, these phases are marked by the introduction and

integration of Hohokam cultural traits in the Flagstaff region resulting from intensive trade and

interaction. Hohokam cultural traits adopted in the region include the occurrence of trash

mounds, shell jewelry, red-on-buff pottery, cremation burials, and ballcourts. Several large

pithouse villages associated with the presence of Hohokam-style ballcourts were established in

the region during these phases (Downum 1988:36-37).
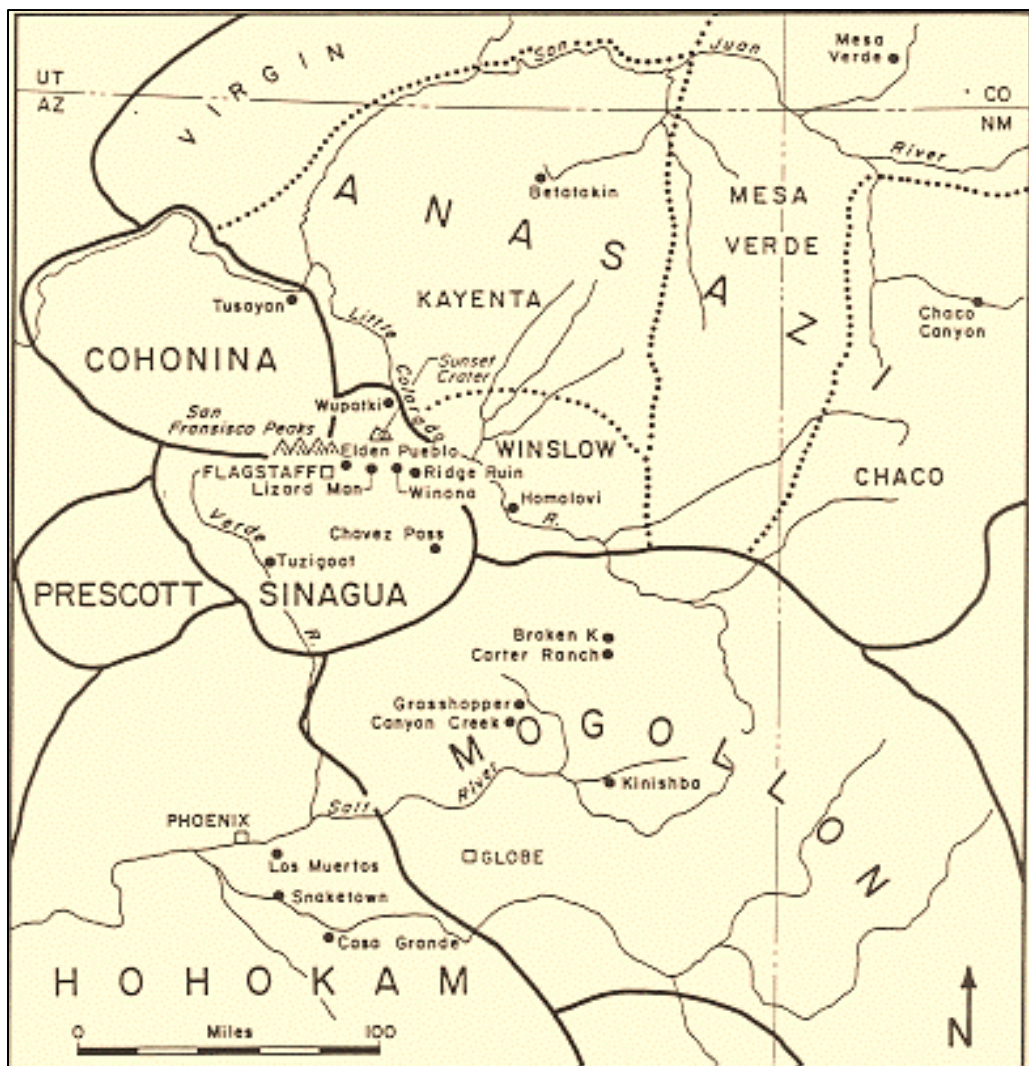
Figure 2.10. Map of Prehistoric Culture Areas in Arizona.

Table 2.2. Post-Eruption Cultural Phases in Northern Arizona

Cultural Phase	Approximate Dates
Winona Phase	AD 1064 (eruption) – 1100
Padre Phase	AD 1130 – 1200
Elden Phase	AD 1150- 1225
Turkey Hill Phase	AD 1200 -1300
Clear Creek Phase	AD 1300 - 1400

The Elden cultural phase, which dates from approximately 1150 to 1225 AD, is marked by an intensification of cultural trends from the earlier phases, especially those related to settlement size and architecture. Populations begin to construct larger pueblos containing over 20 rooms, and settling in extensive communities of scattered pueblos and pithouses comprised of hundreds of people. Diverse agricultural systems utilized water and soil control strategies related to the rotation between seasonal agricultural field houses (Downum 1988:37-39). A wide variety of exotic material goods are introduced during the Elden phase, resulting from the extensive regional exchange system. It is during the Elden phase that the largest settlements of the region were constructed, serving as cultural centers which contained plazas, ballcourts, and other unique features (Pilles 1988:149). Following the Elden phase, population size begins to decrease in the Flagstaff region and settlements become more restricted in geographical scope.

Juniper Terrace served as one of the major cultural centers of the Elden phase, operating as a Cohonina trade center between the Sinagua and Kayenta peoples. During a time of pronounced cultural change in the Flagstaff region, Juniper Terrace was one of the major cultural frontiers

that fostered the integration and growth of cultural complexity. Juniper Terrace contains many attributes of Hohokam influence, including a ball court, a Hohokam style pit house, red-on-buff pottery, shell jewelry, and cremation burials. The complex cultural configuration exhibited at Juniper Terrace is exemplary of a truly significant time in the region's prehistory.

Statement of Significance

The Juniper Terrace site is considered to be eligible for nomination to the National Register of Historic Places under criterion 'd' of 36CFR60. Criterion 'd' applies to sites that "…have yielded or may be likely to yield, information important to history or prehistory." The archaeological resources contained in the Juniper Terrace compound have yielded valuable information on prehistoric development in the Flagstaff area, and the proper management of this site will help preserve the remaining wealth of information for future generations. Juniper Terrace contributed important information about the Cohonina-Sinagua frontier and trade interactions, as well as the nature of Cohonina land use and subsistence, settlement patterns, and interaction with the Hohokam following the eruption of Sunset Crater.

Scientific Value. As an archaeological resource, the data obtained from Juniper Terrace has contributed significantly to the understanding of the shift in cultural patterns of the region following the eruption of Sunset Crater, particularly related to the delineation and comprehension of the Cohonina as a distinct culture. Additionally, Juniper Terrace played a formative role in the historical development of archaeological science in the Flagstaff region through the efforts of the 1931 and 1932 MNA Archaeological Expeditions.

Tribal Value. Juniper Terrace holds significant value to the Hopi Tribe as a "footprint" of the migration of their ancestors. For current and future tribal generations the site holds value as a

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classroom in which tribal members can learn about and reconnect with the tangible history, identity and location of their ancestors.

Educational Value. As an educational resource, Juniper Terrace is valued for its contribution to the knowledge of Cohonina development and occupation in the Flagstaff area. The Juniper Terrace compound serves as a monument to the ingenuity and economic complexity of the Cohonina for past, present and future generations.

Social Value. The social value of Juniper Terrace is embraced through the collaboration between tribal members and the Coconino National Forest in the promotion of the preservation and management of the history and prehistory of the region for all present and future generations.

Chapter 3:
Managing Heritage:
Cultural Resource Law and the U.S. Forest Service

In this chapter I examine the role of my internship within the larger context of heritage management in the United States. This chapter provides a foundation for the context in which the management of heritage resources operates according to both agency policies and heritage resource management (HRM) legislation. First, I present the historical background of the U.S. Forest Service, the Coconino National Forest, and the U.S. Forest Service Heritage Program. I consider how the historical development of the U.S. Forest Service and surrounding heritage resource management (HRM) legislation is relevant to the management of Juniper Terrace and other heritage sites. I present the context of heritage management within the mission and objectives of the Coconino NF, considering the difference between "reactionary" compliance and "pro-active" heritage management. How does work related to compliance with Section 106 of the National Historic Preservation Act (NHPA) differ from the responsibility of agencies to comply with Section 110 of NHPA? How does Section 106 compliance limit the agency's ability to conduct pro-active management per Section 110 compliance?

Additionally, I examine the relationship between the Hopi Tribe and the Coconino NF and how tribal-agency relations affect heritage management on the Coconino NF. Particularly, I consider the role of the Supreme Court decision in *Hopi v. Block*, pertaining to the expansion of the Arizona Snowbowl ski area, in shaping the relationship between the Coconino NF and local tribes. How did the Snowbowl decision affect the willingness of surrounding tribes to work collaboratively in the management of heritage resources on the Forest? The collaboration of multiple stakeholders is essential to the management of heritage resources, and it is equally

important to critically consider the relationships between these various stakeholder groups in all stages of management.

Heritage Resource Legislation

The management of heritage resources is a complex task which must successfully comply with both legislative and agency-specific mandates while also taking into account the varying values of heritage resources in different contexts and to various communities (Sebastian and Lipe 2009:41). Consideration of the protection and preservation of archaeological resources arose out of legislation prohibiting the excavation of archaeological resources by non-qualified archaeologists (King 2013:16). The Antiquities Act of 1906 was the first time the United States government took initiative in protecting "archaeological resources." The passing of the Antiquities Act represents shifts in the social environment of the early 1900s, such as increased interests in unique and worldly artifacts, the rise of large museum institutions, and the American "right and duty" to promote and preserve the heritage of this nation for future generations (NPS 2016). Fundamentally, however, the legislation surrounding the Antiquities Act was insufficient in actually protecting "archaeological resources" and prosecuting violators of antiquity law. In 1974, the Supreme Court case *U.S. vs. Diaz* ruled that the use of the term "archaeological resources" was unconstitutionally vague, dismantling the legislative legitimacy of the Antiquities Act (King 2013:24).

The Archaeological Resources Protection Act (ARPA) of 1979 was a response to the shortcomings of the Antiquities Act, clearly defining the term archaeological resources and establishing procedures for the notification and consultation of Native American tribes regarding potential harm to archaeological sites of potential cultural or sacred significance located on public lands (Moss 2005:584). The National Historic Preservation Act (NHPA) of 1966 set forth

procedures for the consideration of the potential effects of federal undertakings on archaeological sites or historic properties, weighing archaeological values against other socially desirable ends, and protecting site integrity when feasible (Lipe 1996:23). Additionally, the National Historic Preservation Act established the National Register of Historic Places, the Advisory Council on Historic Preservation (ACHP), and State, Tribal, and Federal Historic Preservation Offices (King 2013:19).

Section 106 of the National Historic Preservation Act "requires Federal agencies to take into account the effects of their undertakings on historic properties and to provide the Advisory Council on Historic Preservation with a reasonable opportunity to comment," as well as requiring Federal agencies to consult on the Section 106 process with State Historic Preservation Offices (SHPO), Tribal Historic Preservation Offices (THPO), Indian Tribes (including Alaska Natives), and Native Hawaiian Organizations (NHO) (NPS 2012). The Section 106 process is set forth in 36 CFR Part 800, which states that "the Section 106 process seeks to accommodate historic preservation concerns with the needs of Federal undertakings through consultation," with the goal of identifying historic properties potentially affected by the undertaking, assessing its effects, and seeking ways to avoid, minimize or mitigate the adverse effects on historic properties.

The assessment and criterion of adverse effects is described in 36 CFR Part 800.5, which states that "an adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association." Adverse effects are not limited to time or scope, as they may include reasonably foreseeable effects "…that may occur later in time, be

farther removed in distance or be cumulative" (36 CFR 800.5). In the case of Juniper Terrace, I would argue that the Coconino NF is in violation of 36 CFR Part 800.5 (2)(vi) which states that the "neglect of a property which causes its deterioration" is considered to be an adverse effect. Although the Coconino NF did not conduct the excavations at Juniper Terrace, which accelerated the deterioration of the site, the Coconino National Forest is now the agency responsible for the active and on-going management of the site. The neglect of active management at Juniper Terrace has resulted in accelerated deterioration of the sites' integrity, particularly the architectural and structural condition of the features at Juniper Terrace.

Added to the National Historic Preservation Act during its 1980 amendments, Section 110 requires all Federal agencies to establish their own historic preservation programs, in concurrence with the Secretary of the Interior (SOI) Standards and Guidelines, for the identification, evaluation, and protection of historic properties (NPS 2013:1). By establishing the historic preservation responsibilities of Federal agencies, Section 110 of the National Historic Preservation Act ensures that historic preservation is fully integrated into ongoing programs of all Federal agencies (NPS 2013:1). In addition, Section 110 declares that preservation-related activities and costs are eligible project costs in all Federal undertakings, and that Federal agencies should actively seek historic preservation projects and programs (NPS 2013:1). Unlike Section 106 which simply establishes a procedure for Federal agencies to follow, Section 110 of NHPA goes beyond basic legal compliance and requires Federal agencies to pro-actively manage heritage as a recognized and valued resource in all agency related programs and activities.

Sections 106 and 110 of the National Historic Preservation Act encumber Federal agencies with procedural and executive requirements regarding the management of heritage resources, and "The Secretary of the Interior's (SOI) Standards and Guidelines for Archaeology

and Historic Preservation" is a non-regulatory document which provides Federal agencies with technical advice about archaeological and historic preservation activities and methods (NPS 1983:1). The SOI Standards for Historic Preservation provides Federal agencies with detailed guidelines and methodological approaches to managing and preserving heritage resources successfully and in accordance with the requirements of the National Historic Preservation Act. These Standards and Guidelines also discuss the integration of archaeology and historic preservation into the management frameworks of Federal agencies, stating that "preservation goals and priorities are adapted to land units through integration with other planning concerns. This integration must involve the resolution of conflicts that arise when competing resources occupy the same land base" (NPS 1983:11). Although the SOI Standards and Guidelines have no regulatory authority, it advises Federal agencies and heritage managers to include heritage resources into agency management frameworks and to critically consider heritage resources among other competing resources. This is the first step in recognizing heritage resources as a valued agency resource deserving of consideration and integration into general land management plans, rather than simply relegating heritage to the niche of heritage managers and archaeologists.

Despite the acceleration of legislation regarding the protection of archaeological resources throughout the 1960s and 1970s, the protection of Native Americans' most valuable objects, places, and knowledge continued to be ignored and undervalued. For example, according to ARPA legislation human remains are categorized as an "archaeological resource," and thus receive no special protection or consideration despite the fact that Native Americans consider these remains to be their ancestors whom are deserving of respect and protection above that of other museum specimens. NHPA legislation and the National Register of Historic Places were

designed to more adequately meet the needs of historic properties rather than the needs of archaeological sites, traditional cultural places, and the ancestors who Native people believe continue to inhabit them.

Fortunately in 1990, new legislation was put forth to expand the protection and consideration of Indigenous human remains, sacred objects, traditional knowledge, and sacred places. National Register Bulletin 38 provided guidelines for establishing and documenting a new kind of eligible historic property, referred to as Traditional Cultural Properties (TCPs). A traditional cultural property is defined as a property "that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community" (Parker and King 1998:1). Recognition of TCPs opened an entirely new range of properties eligible for protection under NHPA and the National Register. The Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) established legislative protection and authority over the collection, destruction, exchange, and repatriation of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony (NPS 2000). Both Bulletin 38 and NAGPRA represent social and legislative shifts in the attitudes toward the consideration of Native American cultural, traditional, and sacred values of heritage in the past as well as in the present.

Above, I presented a brief and concise summary of the development of legislation regarding heritage resource protection as it echoes the trajectory of the larger social and political contexts in which heritage management theory and practice emerged. The trajectory of heritage legislation throughout the United States is also fundamental to critical studies on the practice of heritage management and research, and the development of collaborative and Indigenous

approaches as a force to challenge the oppressive and colonial legacies of archaeological law, theory, and practice.
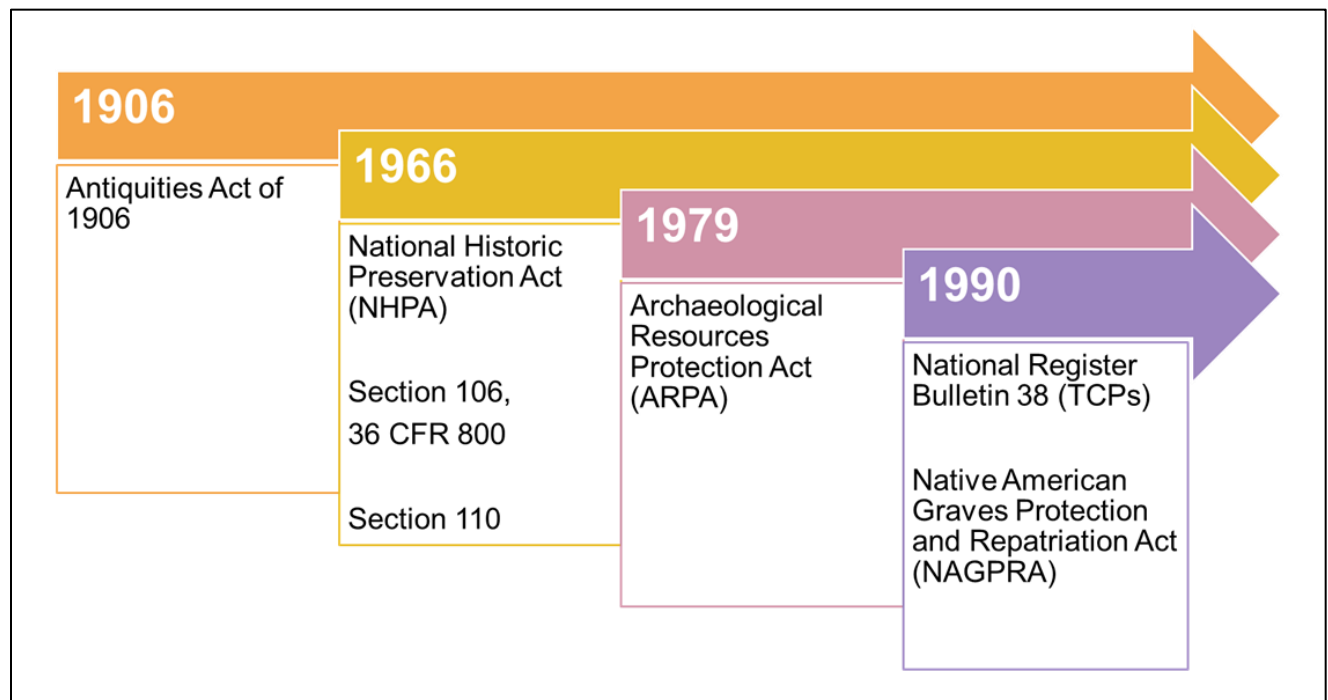
Figure 3.1. Image depicting the development of heritage resource legislation over time in the United States.

The United States Forest Service

The U.S. Forest Service is a federal agency operating within the United States Department of Agriculture (USDA) which is tasked with the sustainable management of the nations' forests and grasslands, referred to as the National Forest System (NFS) (National Trust for Historic Preservation 2008:5). Today, the National Forest System consists of 154 national forests and 20 designated grasslands across 43 states and Puerto Rico, totaling to nearly 2 million acres of land and 8.5 percent of the total land area in the nation (https://www.fs.fed.us/about-agency/organization). The Forest Service employs approximately 35,000 individuals with wide-ranging professional specializations. The mission of the Forest Service is "to sustain the health,

diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations" (https://www.fs.fed.us/about-agency). The Forest Service aims to achieve quality land management under the concept of multiple-use management to meet the diverse needs of people, following their agency motto "caring for the land and serving people" (https://www.fs.fed.us).

The Forest Service is divided into nine geographic regions (Figure 3.2), and each region is overseen by a regional office (https://www.fs.fed.us/about-agency). The agency is divided into four levels: headquarters, regions, national forests and grasslands, and ranger districts. The headquarters is located in Washington D.C. and houses the USDA Forest Service Chief and staff. The Chief is a federal employee and reports to the Under Secretary for Natural Resources and Environment within the U.S. Department of Agriculture. The Chief's staff is responsible for providing and managing the policy and direction of the agency, working with the President's Administration to develop a budget to submit to Congress, and informing Congress on the agencies accomplishments (https://www.fs.fed.us/about-agency/organization).

Approximately 325,000 heritage resource sites have been identified on National Forest lands, however it is estimated that up to two million heritage resource sites exist on the 80 percent of Forest Service lands which have not been surveyed for cultural resources (National Trust for Historic Preservation 2008:5). Of the 325,000 identified heritage resource sites, 56,000 of these sites were determined to be eligible for listing in the National Register of Historic Places, however only about 3,000 of these sites are actually listed in the National Register (NR) (U.S. Forest Service 2008a). Additionally, 27 National Historic Landmarks (NHLs) are located on Forest Service lands (National Trust for Historic Preservation 2008:5). The U.S. Forest Service consults with more than 400 American Indian tribes regarding the management of

heritage on forest lands, and it is estimated that heritage managers provide input on up to 10,000

undertakings each year (U.S. Forest Service 2016:3).
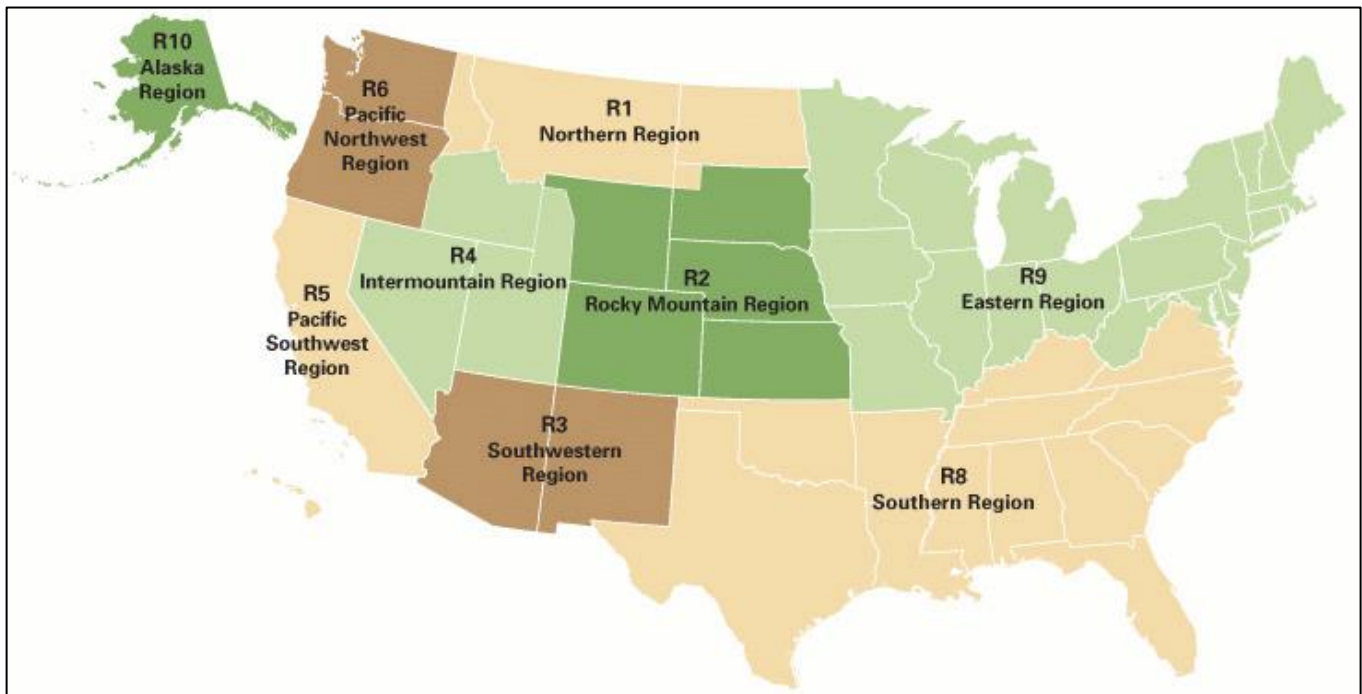
Figure 3.2. Map displaying the nine geographic regions of the USDA Forest Service. Map taken from U.S. Forest Service website, *https://www.fs.fed.us/objections/*. Accessed online on March 3, 2018.

The U.S. Forest Service: Historical Background

The management of forest lands by the Federal government dates back to 1891 when

Congress passed the Forest Reserve Act, authorizing the president to create and designate forest

reserves (https://www.fs.fed.us/learn/our-history). The first official forest reserve was created

under President Benjamin Harrison on March 30, 1891, named The Yellowstone Park Timber

Land Reserve and located in the state of Wyoming (U.S. Forest Service 1997:i). In 1896 the

National Forest Commission was created to evaluate and change the procedure used for

establishing Federal forest reserves (Williams 2005: 8-9). The National Forest Commission

consisted of influential members such as Gifford Pinchot, John Muir, and Henry L. Abbot, to

name a few, who traveled throughout the Western United States visiting existing and proposed forest reserves (Williams 2005: 8-9).

The Organic Administration Act of 1897, also referred to as the Organic Act, organized these forest reserves into the National Forest System (NFS) and established standards for the proper management, protection, and care of forest lands (National Trust for Historic Preservation 2008:6). The jurisdiction of forest reserves was transferred from the Department of the Interior's General Land Office (GLO) to the Department of Agriculture under the Transfer Act of 1905, and the Forest Service was established (National Trust for Historic Preservation 2008:6). The term forest reserve was officially replaced with National Forest under the Receipts Act of 1907. Gifford Pinchot, the father of American forestry, was appointed the first Chief of the United States Forest Service, serving from 1905 to 1910 (U.S. Forest Service 1997:i).

Eastward expansion of the Forest System began in 1931 under the Weeks Act, which authorized the Forest Service to purchase private lands in the Eastern United States. Another period of large-scale expansion in the Forest Service took place in 1980 under President Jimmy Carter who signed the Alaska National Interest Lands Conservation Act, adding several million acres of National Forest land in Alaska (National Trust for Historic Preservation 2008:7). Today, the National Forest System continually acquires new land, but growth is small-scale and primarily consists of private in-holdings.

Throughout the 20th century the Forest Service solidified as a federal institution, generating revenue from timber sales and grazing fees (National Trust for Historic Preservation 2008:7). The Forest System shifted away from Pinchot's utilitarian conservation ethic toward one favoring sustainable management practices, with the management of timber production serving as a central focus. The Multiple-Use-Sustained-Yield Act of 1960 redirected the Forest

Service to consider the uses of all natural resources, not just timber, and serves to promote the management of multiple resources and prevent the domination of one single use across the Forest System (National Trust for Historic Preservation 2008:7).

Forest Service Heritage Program

The U.S. Forest Service Heritage Program was established in 1980 as a response to Executive Order 11593 on the "Protection and Enhancement of the Cultural Environment" (U.S. Forest Service 2008a). Executive Order 11593 was enacted by President Richard M. Nixon on May 13, 1971 and directed all Federal agencies to identify, evaluate, and nominate all eligible historic properties to the National Register of Historic Places within the two year period between 1971 and 1973 (NPS 2011). Although this directive proved impossible for agencies to complete within the two-year window, Executive Order 11593 became the foundation of heritage resource management practice in the United States by 1) mandating the large-scale, comprehensive survey of national heritage and its significance, 2) establishing a system in which Federal agencies exercise leadership in the preservation of heritage, and 3) ensuring the continuous maintenance of the National Register of Historic Places (NPS 2011).

In the early years, the Forest Service Heritage Program focused on surveying heritage resources and improving the agency's inventory system (U.S. Forest Service 2008a). It was during this time that the systematic management and protection of heritage resources became a universal obligation across the USFS. In 2001, the focus of the Heritage Program was modified to comply with Executive Order 13287 "Preserve America," which established "Federal policy to provide leadership in preserving America's heritage by actively advancing the protection, enhancement, and contemporary use of historic properties owned by the Federal government"

and improving the Federal stewardship of historic properties through the promotion of long-term preservation and use of those properties in contribution to local community economies" (U.S. Forest Service 2008b:10). In response, the Forest Service Heritage Program was adjusted to "…make cultural resources available to the public by improving accountability for managing heritage assets, promoting heritage tourism and building partnerships" (U.S. Forest Service 2008a).

Today, the Heritage Program is laid out in chapter 2360 of the Forest Service Manual and articulates the role of the Heritage Program within the context of achieving the overall mission and vision of the U.S. Forest Service (U.S. Forest Service 2016:1). The purpose of the Heritage Program is "to protect significant heritage resources, to share their values with the American people, and to contribute relevant information and perspectives to natural resource management" (U.S. Forest Service 2016:1). The three key components of the Heritage Program are stewardship, public service, and a context for natural resource management (U.S. Forest Service 2016:1), which expands upon the earlier mandates of Executive Order 11593 and Executive Order 13287. In regard to the overall mission and vision of the Forest Service, the value of heritage resources is embedded in their ability to "offer crucial information and insights into the past that have a bearing on sustainability" (U.S. Forest Service 2016:1), and the current Heritage Program is designed to reflect this notion.
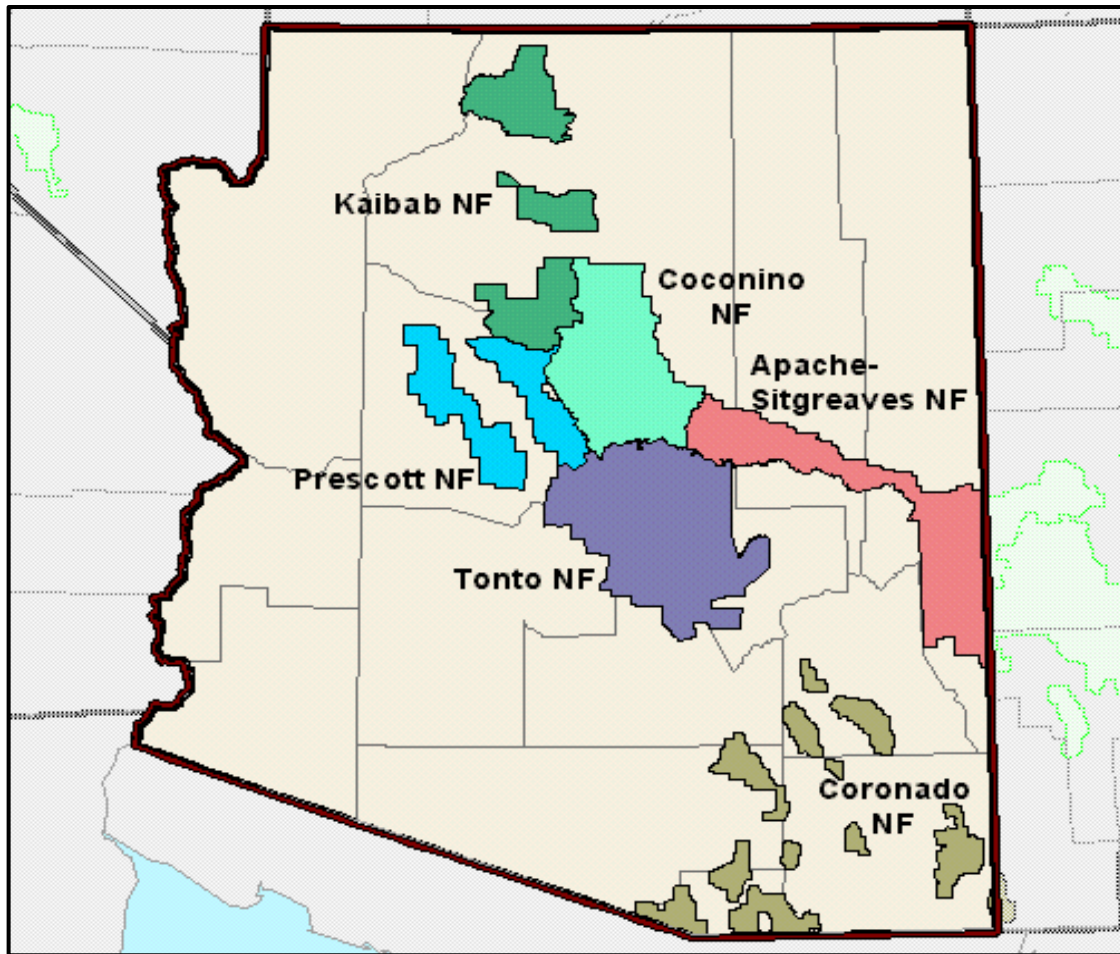
Figure 3.3. Map displaying the six National Forests located within the state of Arizona. Map obtained from the U.S. Forest Service website, https://www.fs.fed.us/sopa/state-level.php?az. Accessed online on March 3. 2018.

Coconino National Forest

The Coconino National Forest (Coconino NF) is one of six National Forests located in Arizona and is "one of the most diverse National Forests in the country with landscapes ranging from the famous Redrocks of Sedona, to Ponderosa pine forests, from Southwest desert to alpine tundra" (https://www.fs.usda.gov/main/coconino/home). The Coconino National Forest was created on July 2, 1908 after President Theodore Roosevelt signed a proclamation which consolidated all of San Francisco Peaks National Forest, parts of Black Mesa and Tonto National

Forests, and all of Grand Canyon National Forest south and east of the Colorado river into what

is today Coconino NF (https://www.fs.usda.gov/main/coconino/about-forest). The Coconino

National Forest is located in geographic Region 3, referred to as the Southwestern Region. The

Coconino National Forest is divided into three districts, the Flagstaff District, the Red Rock

District, and the Mogollon Rim District. The Coconino National Forest has a total acreage of

1,842,959 acres and the elevation within Coconino NF ranges from 2,600 to 12,633 feet,

producing a wide range of ecosystems and cultural environments

(https://www.fs.usda.gov/main/coconino/about-forest). There are over 10,000 heritage resource

sites identified within the Coconino NF, and the management of these abundant heritage

resources is a challenging task.

The Coconino NF and Tribal Relations

The Coconino National Forest consults regularly with 13 Federally recognized American

Indian tribes, including: Fort McDowell Yavapai Nation, Hopi Tribe, Hualapai Tribe, Havasupai

Tribe, Navajo Nation, Pueblo of Acoma, Pueblo of Zuni, San Carlos Apache Tribe, San Juan

Southern Paiute Tribe, Tonto Apache Tribe, Yavapai-Apache Nation, Yavapai-Prescott Tribe,

and the White Mountain Apache Tribe (Coconino National Forest 2017:94). The decision to

consult with these tribes is based on their connection with the San Francisco Peaks. Due to the

high number of heritage sites located on the Coconino NF, and the presence of numerous

American Indian tribes with ancestral ties to the land now encompassed by the Forest,

memorandums of understanding (MOUs) are developed between the Forest and the consulting

tribes to "guide consultation processes and reflect the tribes' particular perspectives and

interests" (Coconino National Forest 2017:95). By establishing a written agreement between the

Forest and the tribes regarding what types of projects or undertakings require direct consultation with the tribes and what types of activities do not need tribal approval, these MOUs help streamline the consultation process, while also alleviating the over burden of project proposals for understaffed THPOs and Tribal Offices.

For the purpose of my internship and the proposed management of Juniper Terrace, it was the decision of the Coconino NF to consult only and directly with the Hopi Tribe. As mentioned earlier, the tribal consultation process was out of my hands and all communication between the Coconino NF and the Hopi tribal government was conducted by the Coconino NF Tribal Relations Specialist. Craig Johnson, the Tribal Relations Specialist for the Coconino NF describes how tribes are selected for consultation with the Coconino NF:

> Deciding which tribes to consult with is based [first] on their aboriginal territory and then [on their] cultural affiliation to the archaeological site(s). The Forest Service has determined that the Hopi and Zuni tribes are the primary tribes to consult with regarding prehistoric sites on the Coconino National Forest. This is based on culturally identifiable artifacts recognized by present day tribal members [Craig Johnson, personal communication 2018].

In the case of the management project at Juniper Terrace, Craig Johnson continues to explain why and how the Coconino NF selected the Hopi Tribe as the sole tribe to consult with:

Hopi was the tribe selected for the Juniper Terrace project because of cultural

affiliation to the prehistoric sites in the Flagstaff area. The Hopi have place names

for many of our archaeological sites and can explain who (clans) and why these

places were built. That does not mean other tribes cannot claim cultural

affiliation, because most of the tribes are genetically related through recent

interaction, as well as more distant connections such as some Athabascan people

intermixed with pueblo people hundreds of years ago. We are basing our

determination on material culture. Zuni usually defers to Hopi and is satisfied

with just getting the information [Craig Johnson, personal communication 2018].

Although the ancestral connection between the Hopi people and the area surrounding the

San Francisco Peaks has been firmly established, it occurred to me that perhaps the Hopi are not

the only tribe or tribes who believe they have an ancestral connection to the site. Although this

issue was not directly addressed during my internship, I would argue that it is essential for

heritage managers to identify all tribes and communities with possible connections to the

heritage resource(s) and provide written justification for the inclusion or exclusion of each

considered stakeholder, prior to beginning the management process. I believe that this would not

only help ensure that the management process is inclusive and balanced, but it would also aid in

promoting the accountability of the Forest Service in regard to consultation, while also

establishing a documented consultation record which can be referenced for future consultative

and management related decisions.

Arizona Snowbowl

Due to a series of development-related decisions and lawsuits surrounding the expansion of the Arizona Snowbowl Ski Resort over the past three decades, the relationship between the Coconino NF and the surrounding tribes has been adversely compromised. The Snowbowl is a recreational ski area located on the western face of Humphrey's Peak, the tallest peak of the San Francisco Mountains (Figure 3.4.), and has been in operation since 1937 when the Coconino NF first built access roads and lodging on the 777 acre parcel (Glowacka et al. 2009:547). Today, the San Francisco Peaks are considered a landmark of northern Arizona, however Native Americans have recognized the Peaks as sacred for a variety of reasons since long before white settlers moved into the area. In Hopi belief, for example, the San Francisco Peaks are a source for the collection of ceremonial and religious objects, as well as the home of their ancestor deities, the *katsinam*, and thus are central to Hopi ritual ceremonies and everyday prayer (Glowacka et al. 2009:549).

According to the Multiple-Use Sustained-Yield Act of 1960, the Forest Service is required to consider and administer the use of multiple resources on national forests in a way that best meets the needs of the American people (U.S. Forest Service 1960). In July of 1977, shortly after the Snowbowl permit was transferred to a new private contractor, the Forest Service received a proposal to expand the Snowbowl property by 120 acres which included the construction of additional parking, new ski lifts, and a new lodge facility (Glowacka et al. 2009:547). Despite strong tribal opposition to the expansion of the Snowbowl, the Coconino NF went forward with the proposal and began the National Environmental Protection Act (NEPA) compliance process, which included public participation and the evaluation of alternatives to the proposed development (U.S. Forest Service 2005:21). In 1979, after a two year period, the forest

supervisor permitted the moderate development of 50 acres of the ski area (U.S. Forest Service 2005:21). This decision was immediately overruled by the regional forester, and in turn the Chief of the Forest Service reversed the regional foresters' decision and reinstated the original decision permitted by the forest supervisor (U.S. Forest Service 2005:21). Despite clear disagreement within the agency pertaining to the development of the Snowbowl ski area, the Coconino NF sustained their approval for the moderate development of the Snowbowl for recreational use.

Figure 3.4. Photo of the San Francisco Peaks. This photo was taken by the author while at the Juniper Terrace site.

In 1981 the Navajo Medicinemen's Association, later consolidated with a similar suit by the Hopi Tribe, filed a law suit in the District Court of the District of Columbia against the expansion of the Snowbowl ski area, naming the Secretary of Agriculture and the Chief of the U.S. Forest Service as defendants (Glowacka et al. 2009:547). This case is known as *Hopi v. Block* or *Wilson v. Block*. The Hopi and Navajo tribes argued that "the development [of Snowbowl] would impair their ability to pray and conduct ceremonies on the peaks, and to collect various sacred objects from the peaks that are essential to the performance of their religious practices" (Glowacka et al. 2009:547). The official complaints listed in the law suit included 1) the violation of the tribe's first amendment right of the free exercise of religion, 2) violation of the American Indian Religious Freedom Act (AIRFA), and 3) violation of the National Historic Preservation Act (NHPA) (U.S. Forest Service 2005:21). The American Indian Religious Freedom Act (AIRFA) was passed by Congress in 1978 and requires Federal agencies to "evaluate their policies and procedures to identify appropriate changes needed to protect and preserve Native American religious cultural rights and practices," for the purpose of ensuring that agencies are aware of Native American religious rights when carrying out agency projects and missions (U.S. Forest Service 2005:20).

Following the 1981 hearings, the District Court granted summary judgement to the Forest Service on all issues except for the tribes claim under the National Historic Preservation Act (US. Forest Service 2005:21). Although the Forest Service did fulfill the NEPA process requirements for the proposed Snowbowl expansion, they failed to document their consultation with the Arizona SHPO (U.S. Forest Service 2005:21). The Forest Service determined that the Snowbowl proposal would have "no effect" on the two documented historic properties within the area of potential effect (APE), and that the San Francisco Peaks did not qualify for the National

Register because 1) their significance is founded in religion and 2) the Peaks are a natural feature rather than a historic property (U.S. Forest Service 2005:21). After consulting with the Arizona SHPO, as ordered by the court, the SHPO concurred with the findings of the Forest Service and the district court judge entered the final judgement for the Forest Service on all issues (U.S. Forest Service 2005:21).

The tribes appealed the ruling of the district court to the Eleventh Circuit Appeals Court, however on May 20, 1983 the appeals court affirmed the decision of the district court, calling particular attention to the complaints that the Forest Service was in violation of AIRFA (U.S. Forest Service 2005:21). The appeals court concluded that AIRFA only requires Federal agencies to consult with Native American tribes, evaluate their own agency policies, and avoid unnecessary interference with traditional Native American religious practices, it does not however "declare the protection of Indian religions to be an overriding Federal policy, or grant Indian religious practitioners a veto on agency action" (U.S. Forest Service 2005:21). As stated in the Senate report, "the clear intent [of AIRFA] is to insure for traditional native religions the same rights of free exercise enjoyed by more powerful religions. However, it is in no way intended to provide Indian religions with a more favorable status than other religions, only to insure that the U.S. Government treats them equally" (Wilson v. Block, 708 F. 2d 735:747).

In October of 1983 as a final attempt of legal action, the tribes appealed their case to the Supreme Court, however the Supreme Court declined to hear the case (U.S. Forest Service 2005:21). Ultimately, the courts ruled that AIRFA does not supersede the laws under which Federal lands are managed for the public good. Prejudice against Native American cultural and religious rights is deeply rooted in the American legal and judicial system, and the rulings of *Hopi v. Block* and the preceding cases strongly reflect those notions. These cases demonstrate

that in the eyes of the court and the U.S. Forest Service, Native American religion holds no

sacred or distinct value among other "uses" on the Forest, such as recreation or mining, and that

other more economically viable "uses" actually have precedence over Native American religion.

Legal action against the Forest Service was initiated again in 2005 by the Hopi Tribe,

Navajo Nation, 11 other southwestern tribes and tribal members, and environmental advocacy

groups in *Navajo Nation v. U.S. Forest*. This lawsuit was prompted by a new proposal for the

further expansion of Snowbowl which included new ski lifts, relocation of ski runs, new

recreation and lodging facilities, and most notably, the addition of artificial snowmaking

capacities using reclaimed wastewater (Glowacka et al. 2009:548). The Arizona Snowbowl

Resort, LP (ASR) proposed the construction of a 14.8 mile-long pipeline between Flagstaff,

Arizona and the Snowbowl which would transport up to 1.5 million gallons of reclaimed

wastewater per day between the months of November and February for the purpose of artificial

snow making (Glowacka et al. 2009:548). The Forest Service justified the approval of the

proposed snowmaking with reclaimed water due to the fact that "winter precipitation in the high-

desert area is erratic, making it difficult, in dry years, for the Snowbowl to have enough skiing

days to be economically viable" (Glowacka et al. 2009:548). After a two-year period of fulfilling

the NEPA process and exploring alternatives to the proposal, the Forest Service determined that

"reclaimed-water snowmaking was the most viable option for meeting its management needs"

(Glowacka et al. 2009:548).

In response to the findings of the Forest Service, the tribes argued that the Forest Service

failed to comply with the Religious Freedom Restoration Act (RFRA) and that the decision to

use reclaimed wastewater not only "substantially burdened their free exercise of religion," but

also that the spraying of sewage-treated water would desecrate the sacred Peaks (Glowacka

2009:549). The Religious Freedom Restoration Act was enacted by Congress in 1993, forbidding Federal agencies and the government from "'substantially burdening' anyone's practice of religion unless there is a compelling government interest in doing so" (King 2013:29-30). Unlike AIRFA, which only applied to Native American religion, perhaps RFRA could supply Native American tribes with more substantial rights and protection pertaining to their religious practices. Unfortunately however, on January 11, 2006 the district court ruled again in favor of the Forest Service, finding that the tribes "have not demonstrated a substantial burden to any exercise of religion" (Navajo Nation v. US Forest Service, 408 F. Supp. 2d 866:906).

In the following year, the tribes appealed the decision of the district court to a three-judge panel of the U.S. Ninth Circuit Court of Appeals. Surprisingly, the appeals court reversed the decision of the district court on the grounds of 1) finding the Forest Service in violation of RFRA, and 2) failure to justify the making of reclaimed wastewater snow in order to satisfy government mandates to manage the Forest for multiple uses (Glowacka et al. 2009:549). In regard to RFRA, the three-judge panel ruled that the use of treated sewage water would impose a substantial burden on the religious practices of tribes because they believed it would contaminate and make unusable ceremonial objects collected from the Peaks and ultimately "undermine their entire system of belief and the associated practices of song, worship, and prayer that depend on the purity of the Peaks" (Navajo Nation v. US Forest Service, 479 F.3d at 1043). In regard to managing the forest for multiple uses, the appeals court ruled that they were "unwilling to hold that authorizing the use of artificial snow at an already functioning commercial ski area in order to expand and improve its facilities, as well as to extend its ski season in dry years, is a 'governmental interest of the highest order'" (Navajo Nation v. US Forest Service, 479 F.3d at 1045). Further, the three-judge panel concluded that "In this case we cannot conclude that

authorizing the proposed use of treated sewage effluent is justified by a compelling government

interest in providing public recreation" (Navajo Nation v. US Forest Service, 479 F.3d at 1045).

Despite the encouraging conclusions of the three-judge panel, the Arizona Snowbowl

Resort and the U.S. Department of Justice petitioned the ninth circuit court to rehear the case en

banc, on behalf of the Forest Service (Glowacka et al. 2009:550). On December 11, 2007 eleven

judges of the ninth circuit court reheard the case and ultimately rejected the findings of the three-

judge panel, affirming the original district court judgement and finding the Forest Service not in

violation of RFRA (Glowacka et al. 2009:550). Citing similar cases such as *Wisconsin v. Yoder*

and *Sherbert v. Verner*, the court held that "a 'substantial burden' is imposed only when

individuals are forced to choose between following the tenets of their religion and receiving a

governmental benefit or coerced to act contrary to their religious beliefs by the threat of civil or

criminal sanction." To further support this statement, the court pointed out that the Forest Service

had never fined or otherwise penalized tribes and tribal members in any way for practicing their

religion anywhere on the peaks (Glowacka et al. 2009:550). Ultimately, the ninth circuit court

ruling to reverse the finding of the three-judge panel was found on the basis that "the

diminishment of spiritual fulfillment—serious though it may be—is not a 'substantial burden' on

the free exercise of religion" (Navajo Nation v. US Forest Service, 479 F.3d at 1070).

Despite the persistence and vigor of the tribes, the proposed expansion of the Snowbowl

was ultimately approved and the western face of Humphrey's Peak is now covered each winter

season with artificial snow made of treated sewage effluent. The failure of the Forest Service in

recognizing, respecting, and supporting the religious rights of the Hopi, Navajo, and other

southwestern tribes has undoubtedly impacted the relationship between the Coconino NF and

surrounding tribes. The relationship between the Coconino NF and surrounding tribes has even

been described as "a bad marriage, we are not talking right now" (Tribal member cited in Russell and Adams-Russell 2006:12). The Snowbowl decisions resulted in inhibited communication and disrupted working relationships between tribes and the Coconino NF, and some tribes even expressed a need to withdraw from working relationships with the Coconino NF resulting from interactions surrounding the Snowbowl decision (Russell and Adams-Russell 2006:12).

Over the last decade, the Coconino NF has made efforts to help restore their relations with surrounding tribes, however the impacts of the Snowbowl decision will not be easily forgiven or forgotten by tribal members. My internship with the Coconino NF served as a reflection of the Forest's efforts to restore a positive and fruitful relationship with the Hopi Tribe. As an intern, I provided the necessary resources to the Coconino NF to initiate the active management of the Juniper Terrace site in collaboration with the members of the Hopi Tribe. The archaeologists at Coconino NF are tasked with an overwhelming amount of work, mostly related to compliance with Section 106 of NHPA, and projects such as my internship at Juniper Terrace are often not able to be carried out due to lack of time, funding, humanpower, and other resources. The management project at Juniper Terrace was a type of olive branch extended out to the Hopi Tribe, going beyond minimal compliance and impersonal written consultation letters, and working directly with and on-the-ground with Hopi consultants to manage one of their ancestral locations. Conducting on-site consultation trips with tribal consultants is a crucial part of the management process, and I was exultant that the Hopi Cultural Preservation Office (CPO) was so willing to consult directly with the Coconino NF and myself on the management project at Juniper Terrace. By moving beyond consultation and written correspondence, I was able to approach the management of Juniper Terrace through a framework of collaboration and inclusion and promote the involvement of Hopi members in the management of their ancestral heritage.

Although the Coconino NF still has a long road ahead of them in restoring tribal relations, projects such as my internship at Juniper Terrace exemplify how pro-active, collaborative, and civically-engaged management projects can benefit both the agency and the tribes, while also aiding in the restoration of tribal trust and respect for the Coconino NF.

Chapter 4:
Theoretical Approaches to Heritage Management

Heritage management theory provides a starting point for thinking about how to manage heritage sites and resources. I approached the development, implementation, and interpretation of my site management plan at Juniper Terrace through the framework of heritage management theory, and informed by both multivocality and Indigenous theories. I critically consider the social and political contexts in which heritage management has evolved and continues to be practiced in the United States. I incorporate Indigenous theories and approaches of community-based archaeology to examine the colonial, social, and political legacies of archaeological practice, particularly within the structure of the United States Forest Service (USFS), and to promote increased collaboration of Indigenous knowledge, perspectives, and recommendations in all aspects of heritage management and archaeological practice.

Salvage Archaeology vs. the Conservation Model

The intensification of the preservation and management of heritage resources was concurrent with similar global shifts in social and political attitudes toward the value of national heritage and the consideration of Indigenous perspectives. Theoretical discourse and justification regarding the value of archaeological preservation began with William Lipe (1974), who proposed a "conservation model' for the management and preservation of archaeological resources. Lipe, aligned with a background in the framework of processual archaeology, called for the discipline to abandon salvage archaeology as the primary methodology of archaeological recovery and move toward a systematic and preservation-oriented approach. Lipe identified a

crisis in American archaeology resulting from human activities that destroy archaeological sites and resources, which are inherently *non-renewable* (1974:213). Although destruction of archaeological resources is also attributed to forces outside of archaeology, such as construction, looting, and vandalism, Lipe argued that archaeological methods should be refocused toward sampling strategies with the primary goal of site conservation.

Techniques of salvage archaeology originated early in the discipline as Franz Boas, the father of American anthropology, urgently called for anthropologists and archaeologists to "salvage" the rapidly dwindling ethnographic and archaeological information of the Indigenous populations of North America. Throughout most of the 1900s, salvage methods continued to be practiced in archaeological inquiry as the result of various social and political factors. First, antiquity legislation promoted the notion that archaeologists have a "right" and "duty" to collect archaeological resources. Second, government programs implemented during the Great Depression under New Deal policy, such as the Works Progress Administration (WPA) and the Civilian Conservation Corps (CCC), resulted in a sudden expansion of archaeological employment through rapid (salvage) excavation techniques conducted by mostly inexperienced or unqualified individuals. In the midst of the Great Depression, preservation efforts bifurcated into two intrinsically different entities of historic preservation and salvage archaeology. In opposition to the premise of salvage archaeology, which holds that historic properties must be sacrificed in the attempt to obtain and preserve information about resources before they are destroyed, historic preservation emphasizes the physical permanent preservation of historic properties (King and Lyneis 1978:874). The purpose of salvage archaeology is to collect as much useful data in as many problem-oriented approaches as possible, thus it is the nature of salvage archaeology to stop short of contributing to archaeological knowledge and being hindered by

excessive and stagnant data (Lipe 1974:232-235).

The conservation model set forth by Lipe argues that salvage archaeology should be a last resort, and that data desired for investigation should be sought from sites threatened by destruction (1974:242). Additionally, a conservation archaeology contains direct conservation measures such as public education, involvement of archaeologists in land-use planning, avoiding site destruction, protecting and managing archaeological resources for their maximum longevity, and making data accessible and useful (Lipe 1974:213-15). Methods of data collection within the conservation model are based on sampling theory, or the collection of representative samples out of a total population. The sampling of archaeological resources should follow two objectives, 1) materials should be collected in ways that obtain data that are useful to other researchers, and 2) the remaining archaeological record at the site should be distorted as minimally as possible (Lipe 1974: 226). Archaeological excavation inherently destroys the archaeological record, and it is the scientific and ethical responsibility of archaeologists to conserve portions of the record for future researchers.

Archaeological Preservation and Value

The concept of *value* is essential in the management of heritage resources. The trajectory of archaeological legislation in the United States directly reflects changes in society, as well as the discipline, regarding the increasing value of heritage resources over time. Lipe recognizes the importance of value within heritage management, however the way in which he promotes value within his framework evolves over time. Lipe's conservation model considers the value of heritage resources, particularly arguing that the discipline must establish an increased societal value of archaeological resources (1974:261). A major component of the conservation model is

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public education and increasing the public understanding and respect of heritage values. The success of archaeology programs is contingent on public support, as the public plays a critical role in promoting and justifying expenditure on archaeology programs by Federal agencies and funding institutions (Lipe 1974:216).

Cultural resource management (CRM) and preservation programs were still early in their inception when Lipe set out his conservation model (1974), which explains why Lipe strongly emphasized the vitality of the discipline to capitalize on public interest and to advocate for the increased value of heritage resources and their management. Lipe proposes a "positive approach" to public education, which aims at convincing the public that heritage conservation is ultimately a value to society and that sites should be preserved for future generations (1974:217). It is crucial that heritage managers consider why people visit heritage sites and what visitors like or want to see when experiencing heritage. Considering the experience and needs of the public are essential in the development of archaeology and heritage programs.

Under his positivist approach, Lipe also maintains that archaeological findings are of potentially great value to a particular segment of society, Native Americans (1974:218). Recognizing the role that archaeology plays in establishing group identity, Lipe emphasizes the importance of incorporating Indigenous needs, presenting Indigenous prehistory and history accurately, and recruiting more Indigenous students into the discipline. Additionally, Lipe calls attention to the lack of communication and cooperation between archaeologists and Native Americans, suggesting that heritage conservation and management holds the key to bridging that gap (1974:218). Despite Lipe's expression of the importance of Indigenous input and involvement in cultural resource management, Indigenous communities remain mostly excluded from the development and implementation of heritage programs, although the passing of

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NAGPRA and National Register Bulletin 38 in 1990 did increase the involvement of Indigenous communities and their perceptions of value to some extent, but mostly in the realm of legally mandated consultation and the borrowing of Indigenous knowledge for use in the programs rather than directly involving Indigenous communities in the planning, development, and implementation of such programs.

As heritage legislation and management develops over time, so does Lipe's perspective on the topic, particularly the way in which he articulates archaeological conservation. By 1996, Lipe replaces the language of conservation archaeology with "archaeological preservation." Public education, involvement, and support continue to be fundamental factors in Lipe's vision of successful archeological preservation, however by the 1990s, Lipe delineates specific types of values of archaeological preservation and further explores problems in the way archaeological preservation is being carried out in the United States.

Lipe (1996:23) identifies three types of value pertaining to heritage preservation: associative, educational, and research values. I argue that there is a fourth, and perhaps the most important value, which is the Indigenous value. The value of heritage resources to Indigenous and descendant communities is undoubtedly a necessary factor that should be included in heritage management programs, and inform all stages of planning. Interpretation, and implementation. It is essential that each of these values are equally considered and maximally utilized in the development of heritage programs. Heritage preservation programs should also take into account how they can contribute to public understanding and appreciation of the past. According to Lipe (1996:24), archaeologists must consider the *means*, or the physical preservation, as well as the *ends*, or the increased public understanding, when developing and implementing a heritage program. Heritage programs require evaluation of both the value of

public benefits and the indirect benefits of physical preservation, including integrity. Value is a dynamic concept with varying dimensions and effects across time and across different communities. Thus, it is essential as archaeologists and heritage managers that we holistically consider the complex dynamics of value, and conduct heritage preservation in a way that maximizes the potential benefits of value to the public, Indigenous communities, canon of archaeological knowledge, and the overall heritage of our nation.

More recently, Lipe has adopted a model of "value-based archaeological management," which considers a variety of resource values in all stages of decision making (2009:42). Lipe critically examines the use of "significance" as language in heritage management, arguing that it is too general and limited by Federal policy and regulation, leading him to adopt a value-based model of management. A values-based approach emphasizes how heritage is valued, formulated into statements of significance and used to manage, use and conserve it appropriately (Freidham and Khalaf 2016:466). A values-based model still maintains that programs should take steps to ensure the delivery of public benefits, however it subsequently considers the values of cultural heritage and economics. The values-based approach has been widely adopted among heritage managers, and is broadly defined as "one that seeks to identify, sustain and enhance significance, where significance is understood as the overall value of heritage, or the sum of its constituent 'heritage values'" (Freidham and Khalaf 2016:466).

A central tenet of the values-based approach is that "the meanings and values attached to objects…provide the very reason for conservation" (Pye 2001:57). Value is essential in selecting which sites are selected for preservation and protection, and guiding the way in which these sites are managed. Resource value is not an inherent characteristic of heritage sites, and assignment of value depends on particular socially and historically developed contexts (Lipe 1984:2). The

recognition of value is bilateral, as it depends on a culturally constructed context as well as on characteristics specific to the property itself. All management decisions are the product of a series of value judgements, understood through efforts to maintain and enhance significance (Freidham and Khalaf 2016:467). Heritage managers must be cognizant that resource values associated with heritage sites are largely defined by various stakeholder groups, and these varying values will affect how management is implemented.
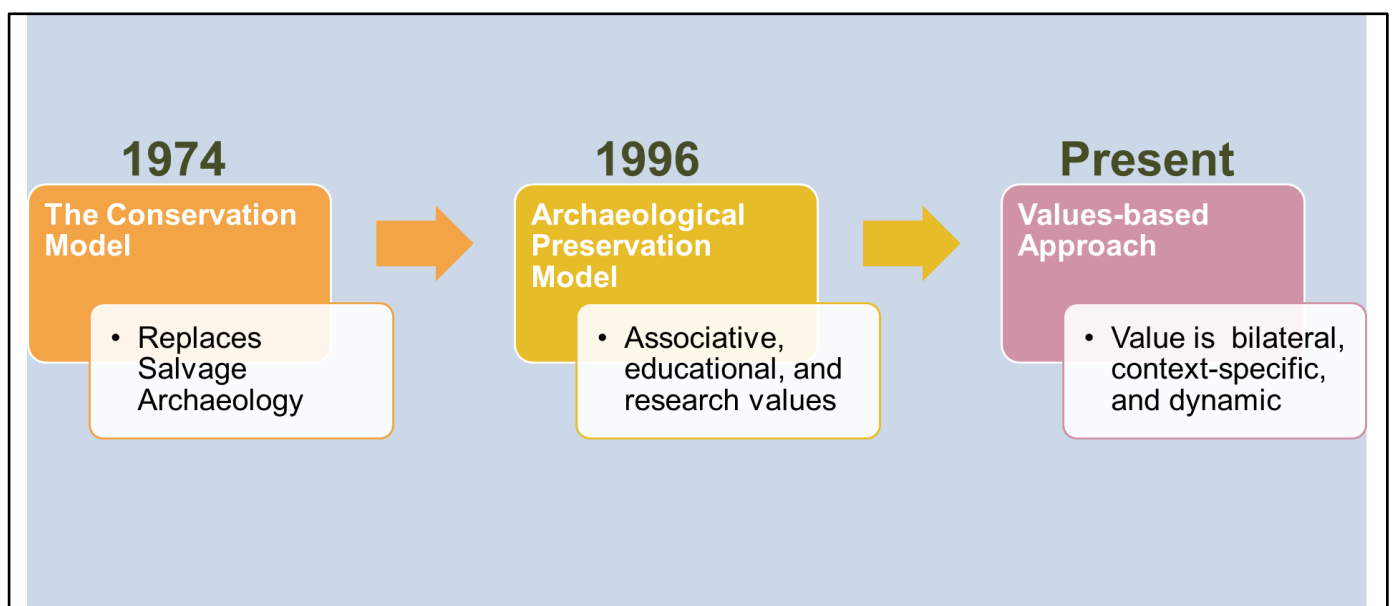
Figure 4.1. Image depicting the development of heritage resource theory in the United States from the conception of William Lipe's Conservation Model in 1974 to the present.

Although I admire that the values-based approach recognizes the importance of Indigenous involvement in heritage programs, I argue that the way in which Indigenous involvement is presented remains trapped in a colonialist framework which presents archaeologists and Native Americans as dichotomous rather than as equal and reciprocal entities. It appears that archaeological and Indigenous contributions are not valued equally, such that the involvement and knowledge of the archaeologist is privileged over that of the Native American.

The involvement of Indigenous communities, knowledge, and recommendations is only supplemental, and thus essentially inferior to, the overarching intentions of the archaeologists directing the heritage programs. CRM and other heritage programs tend to supplement Indigenous input into their already developed management plans or plans of action, which endorses the notion that the contributions of the archaeologist are primary and Indigenous input is only supplemental and incorporated into the already developed plan. As a result, Indigenous communities remain mostly excluded from CRM and other heritage programs, particularly at the levels of development, planning, implementation, and long-term management.

One promising aspect of this debate is the growing number of Indigenous archaeologists and heritage managers entering the profession, which can help dismantle the dichotomy between archaeologists and Indigenous communities as two completely separate and unrelated entities. Although Indigenous archaeologists and heritage managers are few and far between, I believe that we as non-Native heritage managers have much to learn from Indigenous archaeologists and professionals practicing in the United States and around the globe, and should continue to encourage more Indigenous individuals to join the profession. Additionally, I do not dismiss the validity of Lipe and other's contributions to preservation theory, however they do fall short of considering and actively including Indigenous perspectives in all stages of heritage management. In response to these shortcomings, I utilize critical and Indigenous theories to investigate the reasons behind the absence of an Indigenous voice and consider solutions for improving Indigenous involvement in heritage management.

Critical Theory

Critical theory claims that all knowledge is historically biased, and urges scholars to explore the relationship between knowledge of the past and the context in which it was produced. Critical theory is essentially an effort to explore and add Marxist insights into the nature of knowledge. Leone et al. (1987) introduced a critique on the discipline of archaeology and called for the discipline to move toward a critical archaeology. In recognition that archaeology is inherently used to serve political ends, Leone et al. (1987:283) claim that the interrelation between archaeology and politics hinders the discipline and results in the production of contingent knowledge. The application of critical theory allows for epistemological enlightenment, enabling archaeologists to reconsider where their true interests lie and to continuously question the authority of knowledge which guides their work.

The goal of critical theory is emancipation from coercion (Leone et al. 1987:284). Critically questioning the nature of knowledge promotes more reflexive and holistic approaches toward the production of new knowledge. Leone and others promote the application of critical theory in archaeology because, 1) archaeological interpretations presented to the public may acquire unintended meaning, and 2) there is a need to explore the epistemological foundations behind the growing controversies surrounding control over the past. I believe that this is the area in which critical theory can be supplemented within heritage management theory. Rather than only considering the role of value in the public interpretation of the past, a heritage manager must also consider the unintended outcomes resulting from which values are presented and how they could be misinterpreted by a variety of communities.

The concept of ideology, or the unnoticed givens of everyday life, is fundamental in critical theory. Ideology serves to reproduce society intact, using means to reproduce inequality,

bondage, frustration, etc., as acceptable, rationalized, or hidden (Leone et al. 1987:284). Ideology hides exploitation and naturalizes it as a rationalization. Relations of class stratification, wealth holding, and power are all encompassed within ideology, and it is in these areas that critical theory should be extended into heritage management. Archaeologists and heritage managers must consider the perspectives that conclusions are constructed from, and doing so will contribute to a higher degree of validity. I use the critique on ideology to critically examine the structure of the USFS, the legislation surrounding heritage management, and the way in which non-collaborative archaeological interpretation serves to reproduce a biased depiction of the past.

Integration of critical theory into heritage management is not only necessary, but beneficial to the validity and reliability of archaeological knowledge. By exploring the social and political contexts in which archaeological knowledge has been (and continues to be) produced, heritage managers can decipher a clearer and more accurate understanding of the development of heritage. Archaeologists and heritage managers must take a critical approach to understanding the role of positivism in the discipline, and the relationship between science and the production of narrow and irrelevant knowledge (Leone et al. 1987:285). I am interested in the unequal value of scientific knowledge and traditional knowledge, particularly in the language of legislation and the implementation of heritage projects, and how this directly affects the way in which heritage management is carried out and interpreted by the public. It is in this realm that I integrate Indigenous theories, aiming to identify holistic, collaborative, and inclusive approaches to heritage management.

Indigenous Theories and Multivocality

Indigenous archaeology is an archaeology done with, for, and by Indigenous people. As a theoretical and methodological approach Indigenous archaeology does not fall under one single framework, but is rather influenced and employed by "many different experiences and approaches that have manifested themselves in a range of different practices" (Atalay 2008:29). There is not one indigenous theory, but rather many indigenous theories (Colwell et al. 2010:229). Indigenous theories contain an array of practices conducted by, for, and in collaboration with Indigenous communities to challenge the colonial underpinnings and inherent political economy of the discipline. Indigenous inclusion in all aspects and levels of archaeological practice and theory is fundamental in recognizing the legacies of colonialism and the socio-political context of scientific inquiry within the discipline. Thus, Indigenous theories expand on critical theory by not only calling the underpinnings of colonialism into question, but by also recognizing the necessity of such questioning being done by non-colonial individuals and communities. Indigenous communities can provide insight into the critique of our discipline that as archaeologists indoctrinated within Western epistemology, we are not capable of fully conceiving.

A central tenet of Indigenous theories is the integration of multivocality. Multivocality promotes objectivity and dismantles the notion that information should be distributed under one authoritative (and assumed) truth. Multivocality requires scientific and historical "practice to be reconstructed so that it incorporates a requirement to assess knowledge claims from a range of standpoints, to discern their silences, limitations, and partialities" (Wylie 1995:271). Multivocality encourages the collaboration of various groups, allowing scholars and community members to work cooperatively and learn from each other during the process, while also

uncovering discrepancies and false representations of history and information from the past. Colwell (2007:27) interprets multivocality as a form of dialogue "that critically approaches varying versions of the past while continually aspiring to uncover the truth." In regard to the management of heritage across Forest Service lands, multivocality is an approach that would redistribute the ownership and interpretation of the past from the authoritative voice of the Forest Service, back to the descendant communities with the closest ancestral ties to that history and heritage.

Indigenous archaeology is inherently rooted in collaborative and community-based methodologies that aim to incorporate multiple voices in the production of archaeological knowledge. Indigenous archaeology intersects the discipline with Indigenous values, knowledge, practices, ethics, and sensibilities through collaborative approaches and critical perspectives (Colwell et al. 2010:230). This approach promotes an archaeology that is more representative of, relevant for, and responsive to Indigenous communities. Heritage managers and archaeologists are essentially "gatekeepers" of the past, and we are ethically obliged to open up that gate to the descendant communities whose past we are retaining. Indigenous theories can help challenge hegemonic categories and dismantle binary frameworks, such as the dichotomy between archaeologists and Native Americans (Colwell et al. 2010:231). During my internship, I aimed to provide the descendant Hopi community with a collaborative and active role in determining the degree of management carried out at Juniper Terrace.

Indigenous theories are crucial in building upon heritage management theory, filling in the gaps where other frameworks fall short, that of the Indigenous voice. Indigenous approaches promote the interaction between heritage managers and outside communities, which ultimately improves the ways in which archaeological information is presented and interpreted by the

public. Indigenous theories expand on existing theories and practices within archaeology and heritage management, however they fundamentally alter the disciplines' political economy and intellectual breadth so that Indigenous values, ideas, expressions, and experiences can productively be incorporated into the discipline (Colwell et al. 2010:234). By incorporating Indigenous theories and approaches, heritage management can be carried out in ways that not only promote the values of the public, but also critically considers and prioritizes the needs and benefits of descendant communities.

Chapter 5:
Community-Based Heritage Management

Although I was working within the framework of government-to-government consultation, where direct communication and planning with the tribes was out of my control, I believe that a model of community-based and participatory heritage management is fundamental in sustaining the efficient and ongoing management of heritage on the Coconino NF. A community-based model would have enhanced my ability to manage Juniper Terrace, and I strive to provide a community-based framework for the future management of heritage resources on the Coconino NF. Due to limited time, money and humanpower across federal agencies responsible for managing heritage resources, I argue that a community-based approach to management is one way to alleviate the agencies' burden of maintaining sole responsibility for management activities, and encouraging an active role of descendant communities in the management of their own heritage.

Some forests, such as the Kaibab National Forest (KNF), have recently adopted a model of "shared stewardship." Shared stewardship takes place when "the Tribe and the U.S. Forest Service share traditional knowledge and technical expertise vital to the long-term management of natural and cultural resources on the forest. A shared stewardship approach to management allows both parties to leverage their knowledge, expertise, and resources to benefit tribal and Forest Service administered lands" (Kaibab National Forest 2015). By establishing a system of management in which descendant communities carry shared responsibility for the ongoing management of heritage resources, I believe that more heritage sites will be able to be actively and sustainably managed. Although heritage resources would remain under the jurisdiction of federal agencies, a collaborative approach to managing those resources would promote increased

working relationships between tribes and agencies, compensate for areas of heritage management in which agencies are falling short, and ultimately result in heritage management that satisfies the needs of all involved stakeholders.

Toward a Collaborative Archaeology

Indigenous and collaborative efforts in archaeology have greatly expanded and improved over recent years, taking the form of multiple approaches and theories that exist on what Colwell-Chanthaphonh and Ferguson (2008) have identified as the "continuum of collaboration" (Figure 5.1). Collaborative efforts in archaeology range from minimal, legally-mandated consultation to the most recent forms of Community-based Participatory Research (CBPR), with various approaches and associated names in between. Collaborative approaches have taken many forms and names in archaeology, including public archaeology, Indigenous archaeology, cooperative archaeology, community archaeology, and collaborative archaeology, just to name a few. Although each of these approaches contain slightly differing methods and intended results, they are all united by their overarching purpose of promoting collaboration between various groups at different levels along the constantly evolving spectrum of collaborative archaeology. Sonya Atalay (2012:47) envisions the collaborative continuum as "a series of interconnected and overlapping practices, each with its own history and goals."

Collaboration provides a way for scholars to become involved with various publics through a range of strategies, and facilitates the flow of knowledge to communities outside of the discipline. In contemporary archaeological practice collaboration must extend beyond restricted consultation and public efforts, and rather consist of various communities, especially those outside of academia, working together cooperatively in all phases of project planning,

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implementation, interpretation, and knowledge production (Colwell-Chanthaphonh and Ferguson 2008:1-7). Gadsby and Chidester (2007:232) argue that "one of the key roles of scholars involved in community-based research is to place local problems, whether social, economic, or other kinds into a larger context." Community-based and inclusive collaboration in archaeology produces more accurate and ethically-sound results, compensating for the inadequacies of scientific investigation which often disregard the directly affected communities, and promotes benefits that extend to both descendant communities and science (Colwell-Chanthaphonh and Ferguson 2008:7). Collaboration must be reciprocal and consist of knowledge sharing and decision making that flows in both directions, ensuring that "community or individual involvement in the process of research, thus designed, becomes a condition for its success, not simply a fortuitous by-product of work with communities" (Fluehr-Lobban 2003:242).

Colonial Control	Resistance	Participation	Collaboration	Indigenous Control
Goals set solely by archaeologists	Goals develop in opposition	Goals developed independently	Goals developed jointly	Goals are set by tribe
Information is extracted and removed from community	Information is secreted	Information is disclosed	Information flows freely	Information is proprietary and controlled by tribe
Descendants involved as laborers	No stakeholder involvement	Limited stakeholder involvement	Full stakeholder involvement	Archaeologists are employees or consultants of tribe
No voice for descendants	Little voice for descendants	Some voice for descendants	Full voice for descendants	Full voice of descendants is privileged
Acquiescence is enforced by state	No support is given/obtained	Support is solicited	Support is tacit	Support is Authorized by tribe
Needs of science are optimized	Needs of others are not considered	Needs of most parties are mostly met	Needs of all parties are realized	Needs of all tribe are privileged

POWER AND CONTROL

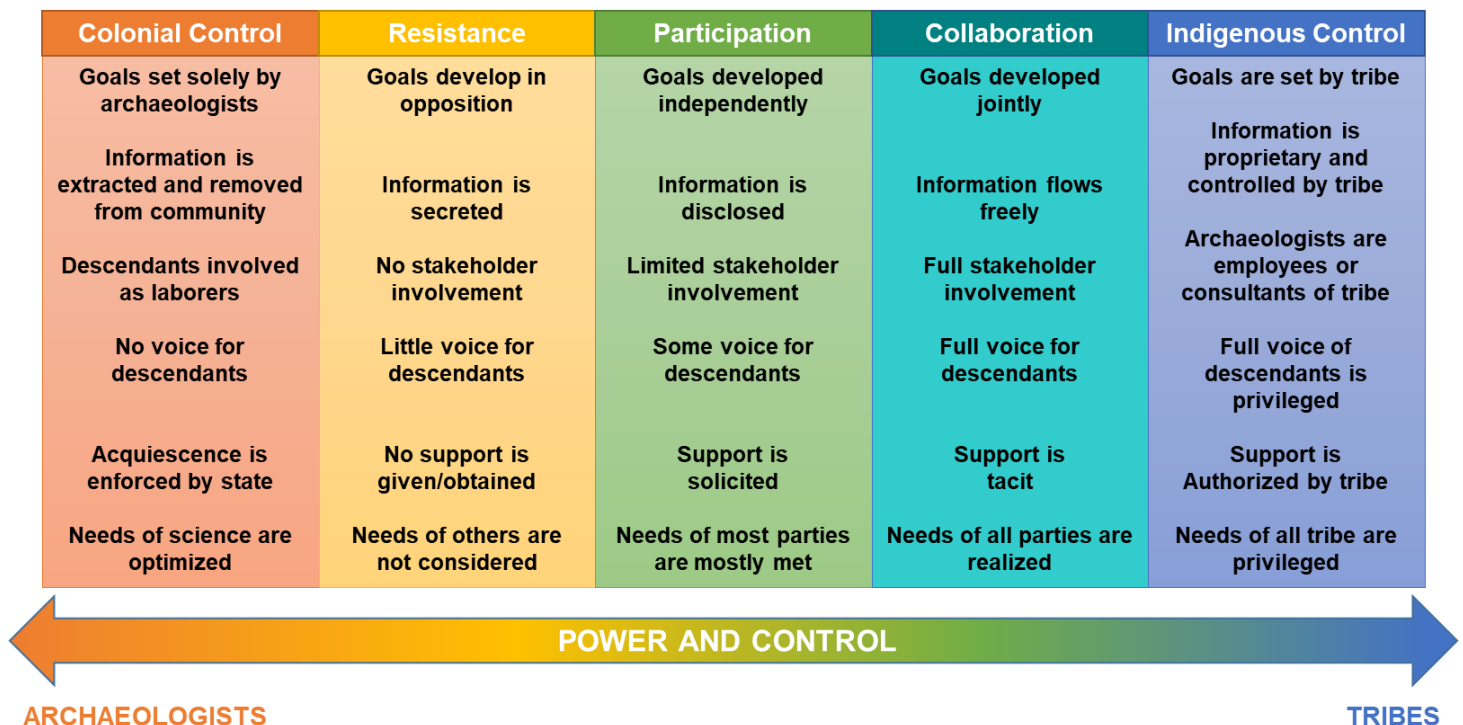ARCHAEOLOGISTS   TRIBES

Figure 5.1. The continuum of collaboration and five historical modes of interaction with tribes in the United States. Reprinted from Chip Colwell's (2016) article, "Collaborative Archaeologies and Descendant Communities."

Civic Engagement: Beyond a Values-based Approach

One way in which community-based approaches have been adopted into archaeological practice is through the use of archaeology as a tool of civic engagement (Little and Shackel 2007). The National Park Service describes civic engagement as the "long-term effort to build and sustain relationships with communities of stakeholders. It includes interpretive and educational programming as well as the planning process" (Little 2007:4). Civic engagement is inherently political, as it is founded on the promotion of social justice, and archaeology has a unique role to play in the reconciliation of injustices that have taken place throughout history. By raising consciousness about the past and connecting it with the present, heritage managers have the ability to "create a usable, broadly conceived past that is civically engaging" (Little 2007:1). It is important, however, that heritage managers are cautious in carrying out restorative justice and ensure to involve descendant communities in every step along the way as to avoid a top-down interpretation of the past by the archaeologist, which has been the common error of the discipline throughout history.

Civic engagement can be carried in various ways, however Ehrlich (2000:vi) recognizes civic engagement as "working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes." In heritage management, civic engagement is crucial to maintaining the relevance of heritage and heritage resources to the public by contextualizing history and culture in an inclusive manner such that contemporary populations can relate to the lives and histories of others (Little 2007:5). Civic engagement requires the building of long-lasting and sustained relationships with communities, and even more importantly, it requires the sharing of power

(Little 2007:5). Heritage managers are challenged with managing the heritage resources of

numerous communities in such a way that complies with both Federal legislation and agency

directives, aims to meet the needs of the descendant communities tied to that heritage resource,

and also conveys the relevance and significance of the heritage resources to the general

American public. As a tool, civic engagement can provide heritage mangers with a "socially

useful heritage" that "can stimulate and empower both local community members and visitors to

make historically informed judgements about heritage and the ways that we use it in the present"

(Little 2007:2).

Community-Based Participatory Research

Community-based Participatory Research (CBPR) is an approach that has recently been

integrated into archaeological practice and is proving to be extremely effective in decolonizing

power relations and the dissemination of knowledge by promoting the increased involvement and

decision-making authority of descendant communities and individuals in the representation,

interpretation, and management of their heritage. CBPR is one form of collaboration that exists

on the continuum of collaboration. As an approach in heritage management, CBPR exists toward

the most equitable end of the continuum, as it shifts the power and control over the management

of heritage from archaeologists and land managers into the hands of local and descendant

communities. Atalay (2012) interprets CBPR as existing at the top of the interconnected and

overlapping practices within the "collaborative continuum" (Figure 5.2).

Minkler and Wallerstein (2008:7) define CBPR as "a collaborative approach to research

that equitably involves all partners in the research process and recognizes the unique strengths

that each brings. CBPR begins with a research topic of importance to the community with the

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aim of combining knowledge and action for social change." This "needs-led" approach is driven by the needs of the community in all stages of development, implementation, analysis, and dissemination. The benefits of CBPR should be reciprocal and promote capacity building among and between communities. CBPR is founded on the integration of diverse knowledge systems and ways of knowing that result from different traditions and lived experiences (Atalay 2012:4), thus promoting research that is multivocal and designed to meet the needs of more than one community or agency. In archaeology, a CBPR approach is crucial because it redistributes the control over the management of heritage and has the potential to reverse the disenfranchisement of descendant and local communities from their own past and the ways in which these communities understand, engage with, and preserve it (Atalay 2012:4).

A community-based and participatory heritage management is driven by the "continual loop of engagement between archaeologists and community members" (Colwell 2016:8.4), and provides a bridge toward ethnographically informed practice. Community-based and participatory heritage managment pushes practice beyond the realm of asymmetrical and legally mandated compliance between agencies and descendant communities, and toward an active, engaging, and equitable approach to heritage management that also considers the goals and needs of living descendant communities. By engaging communities in the interpretation and management of heritage, heritage managers can produce more accurate and authentic presentations of the past that go beyond archaeological interpretation and toward active and participatory interpretations of the past shared by heritage managers, the public, and local and descendant communities (Colwell 2016:8.3). This type of "critical multivocality" brings together numerous perspectives and values to expand our shared understandings of the past (Atalay et al. 2014:11-12).

The integration of methods of CBPR into heritage management promotes the execution of an archaeology that matters and that can make differences in the world while also benefitting multiple publics at various levels. Approaches of CBPR provide a vehicle in which heritage managers can actively help communities, descendant or local, solve real problems in the real world (Atalay 2012:5). Reciprocity is at the core of CBPR, and results in practice that benefits both heritage managers and communities through shared skill building and expanded knowledge that can be applicable to other areas of research or daily life. Atalay (2012:5) recognizes that "multiple knowledge systems and forms of data can contribute immensely to understanding the past and to managing and protecting archaeological sites and materials in a respectful way."
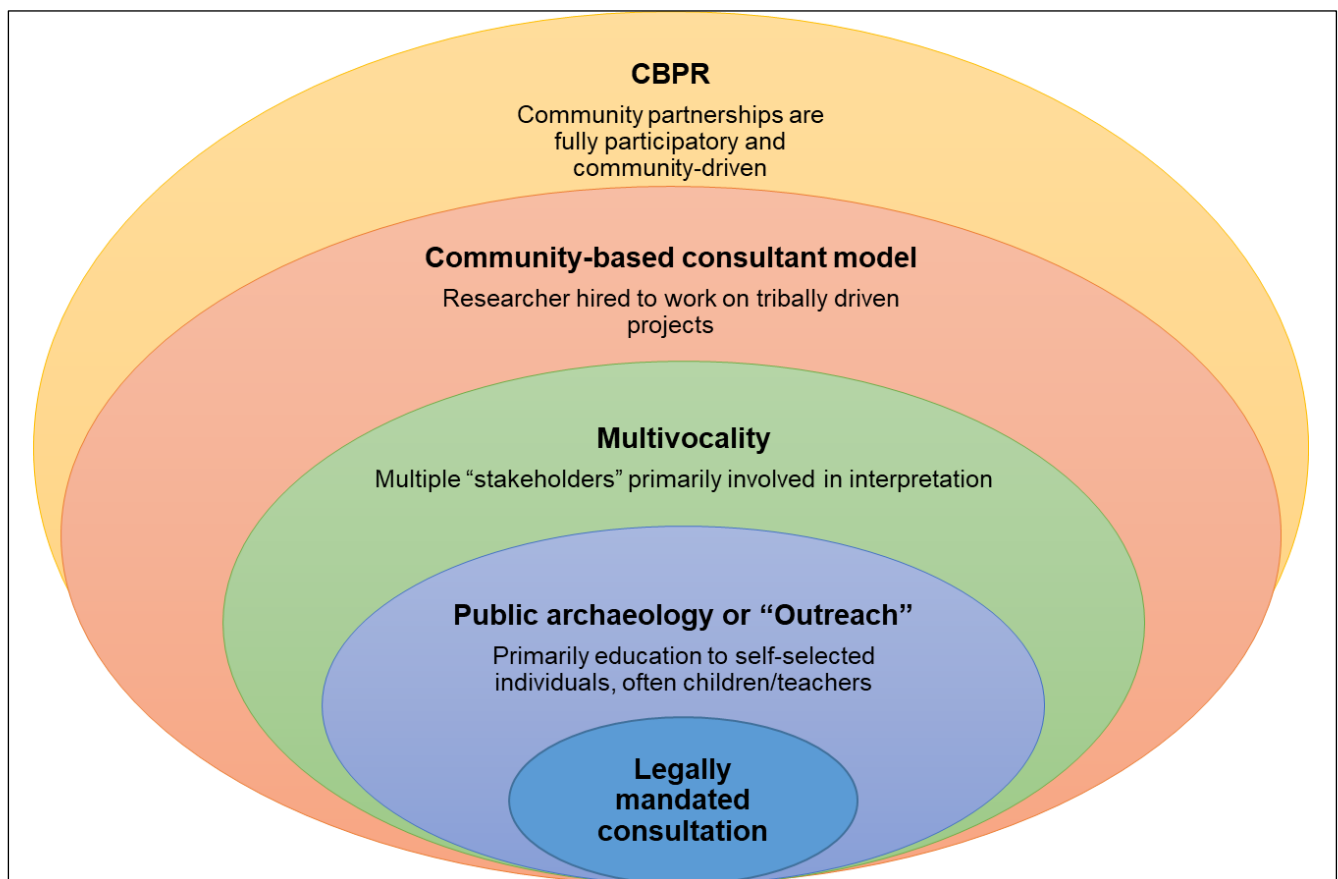

Figure 5.2. Interconnecting and overlapping practices within a collaborative continuum. Reprinted from Sonya Atalay's (2012) book *Community-based Archaeology: Research with, by, and for Indigenous and Local Communities.*

Implications of CBPR in Heritage Management

Across the globe, the management of heritage resources is hindered by a lack of funding, humanpower, time, and other resources. Increases in the popularity of heritage tourism have resulted in major impacts to both local and descendant communities worldwide. As resources and budgets for the management of heritage resources continue to tighten and the impacts of this tourism to various communities continues to increase, one promising solution that emerges is a community-based and participatory system of management that engages multiple communities in the management of heritage (Atalay 2012:6). The current stewardship model of management in the United States often promotes unilateral and hierarchical communication and decision-making practices that privilege Western systems of thought and places heritage managers as the sole stewards of the past (Hollowell and Nicholas 2009:142). Heritage management that is rooted in community-based practices will distribute the responsibility for the management of these resources among various stakeholders, alleviating the pressure placed on heritage managers and archaeologists, and establishing a system that is collaborative and sustainable. A community-based system of heritage management enables the active management of more heritage sites, and ultimately a better developed, more comprehensive, and increasingly relevant system of heritage management.

A community-based participatory heritage management is civically engaged, requiring a "fusion of law and ethics" (Soderland and Lilley 2015:3) that extends beyond local and descendant communities and into legal and legislative communities, popular media, and other developmental sectors. The relationship between these various stakeholders must be equitable and collaboration must be decolonized. Legislation is central to the management of heritage resources, and in order to develop a sustainable and engaged system of management, it is crucial

that productive and mulitvocal relationships are established between these various sectors. One positive outcome of CBPR is that this approach causes all involved stakeholders to look more critically at who is in power and who holds power in different ways, which can lead to the resolution of power imbalances and the redistribution of power among all stakeholder groups and individuals.

A truly community-based participatory heritage management must integrate ethnographic methods in a way that has not traditionally been used in archaeology. The focus of ethnography in archaeology must shift from being used to supplement our understandings or interpretations of the past, and instead be used to understand the needs of the local and descendant communities in the present. The application of ethnography shifts from "what it can do for archaeology" to "what it can do for descendant communities," or from the "emancipatory use of ethnography *for* Native groups and not *of* Native groups" (Hollowell and Nicholas 2009:142-153). CBPR extends beyond consultation or collaboration, utilizing ethnographic methods to allow communities to articulate their own conceptions of heritage management, and using that knowledge as the foundation of management. Hollowell and Nicholas (2009:142) acknowledge that there still remains a large "disconnection between the involvement of members of descendant communities in archaeology and their full participation in decisions about the management of their own heritage," and CBPR can help bridge this gap.

Hollowell and Nicholas (2009:144) envision a community-based participatory archaeology that "starts with the concerns and objectives of a particular group or community and will be designed and implemented by, with, and for them." Redistributing the control, representation, interpretation, and management of heritage resources to the descendant communities is essential to community-based heritage management. Additionally, this

decolonized redistribution of the control over heritage must extend into the realms of policy and decision-making to ensure equity and a community-based system of management is maintained. Although the integration of CBPR approaches into heritage management has the potential to alleviate Federal agencies of some of the burdens related to managing heritage resources in the long run, it is important to note that developing and implementing models of CBPR require a lot of hard work, communication, coordination, capacity-building, and power sharing in the early stages of getting such a program on-the-ground. Despite the energy and resources needed to develop, integrate, and implement models of CBPR in the forefront of beginning such programs, the results of these programs can be long-lasting, sustainable, and rewarding once the initial legwork is completed. Nonetheless, CBPR can improve power imbalances that are rooted in legislation, land ownership, and protocols of compliance, moving towards a system of co-management that prioritizes the knowledge, concerns, and objectives of local and descendant communities.

Chapter 6:
Reflections, Recommendations, and Conclusions

The management and protection of heritage resources is not recognized in the mission statement of the United States Forest Service, as the agency is obligated by law to manage National Forests for multiple uses and in such a way as to benefit the American public. Unlike some other resources, heritage resources are non-renewable, vulnerable to destruction, and warrant explicit management and protection. As Lipe (1996:23) points out, "authentic archaeological sites of any particular period can only be protected or lost, not created anew," which stresses the urgency and importance of managing heritage sites in the present. Although heritage programs within the U.S. Forest Service are expanding, there are still confines of time, resources, and funding for carrying out heritage programs that extend "beyond compliance" with legislation and enter into pro-active and positive management (King 2013:10). This is part of a broader problem found across various Federal agencies in the United States; limitations on funding and labor that in turn result in the allocation of energy to resources prioritized according to the agencies' mission, as well as the resources' ability to generate economic revenue. In the case of Juniper Terrace, management was able to take place due to a serendipitous combination of funding, opportunity and my own personal interest in investing my time and anthropological skills into the heritage management project.

Heritage managers working within Federal agencies are suspended in a web of legal compliance, agency directives, administrative guidelines, tribal needs, and public interest. As such, it is extremely challenging to carry out heritage management programs that go beyond checking the necessary boxes and satisfying jo-specific duties and requirements, especially when heritage managers have limited resources to do so. Despite the estimation of nearly two million

heritage sites being located on National Forest lands, heritage programs only account for approximately 0.4 percent of the Forest Service's $4.4 billion appropriated budget (National Trust for Historic Preservation 2008:9). Conversely, unlike other resources such as timber and recreation, which are renewable and can easily generate profit, it is much more difficult to sustainably manage heritage resources in such a way that respects Indigenous notions of sacredness and doesn't destroy the resource, especially when heritage programs only receive a sliver of agency funds. Heritage managers work extremely hard to maximize the management of heritage resources with the limited resources they receive, and it is important to note that the heritage managers are not fault but rather just "doing the best they can with what they've got," operating within the restrictions and mandates of a legal and Federal agency system that does not appropriately recognize the varying values of heritage resources to a range of communities outside of the "general American public.".

Reflections from my Internship

As an intern with the Coconino NF, I witnessed first-hand the perseverance and dedication of the forest archaeologists who, despite the substantial workload, displayed a genuine sense of stewardship over the many heritage resources located on the Forest. Not only do Forest archaeologists have to obtain an understanding of legislation related to heritage management, as well as knowledge of the history and heritage resources of that region, but they also have to understand the organization and workings of the agency, become acquainted with the surrounding tribes, gain a basic understanding of other resources on the Forest, work in collaboration with other departments and resource managers to solve problems and move projects forward, carry out public outreach and educational activities such as site tours, and work

with timber and fire crews to identify and mark heritage resources for protection from destruction. Although this is not even a complete list, it does begin to demonstrate the magnitude and diversity of job-related duties faced by Forest archaeologists.

As discussed in earlier chapters, heritage resources are far from the top of the list of priority resources within the Forest Service, and as a result heritage managers must work extremely hard to justify the allocation of funding and resources for heritage projects and promote the significance of heritage resources in relation to other resources on the Forest. Sometimes this means that heritage managers have to be opportune and take advantage of surplus funding from other undertakings on the Forest in order to secure appropriate funds for heritage projects, as was the case with my own internship. For example, at the onset of my internship I was made aware that I would be paid in-full and up-front for my internship, even before completing any of the work, because the funding available to compensate me would soon disappear due to the onset of fire season in the Southwest. Before receiving my payment in one lump sum, I had to create an invoice of my internship activities and deliverables to justify the transaction. Although this is not an ideal method for hiring and paying contractors, for obvious reasons that could result from paying someone before the work is complete, it goes to show the scarcity of available funding for heritage projects within the Forest Service, as well as some of the ways in which heritage managers have learned to make opportune decisions in order to maximize their management activities.

In addition to learning about the structure and workings of the Forest Service as an agency, I also gained unique experience in the tribal consultation process. Beginning with the drafting of the tribal offer letter, I had to go beyond my basic archaeological training and reimagine the Juniper Terrace site as more than just an archaeological resource, but as an

ancestral location connected to real, living people today. The continuity between an archaeological resource and the living descendant population is not something that many archaeologists get to experience first-hand in the United States. As Colwell (2007:29) points out, a "civically engaged archaeology essentially means bringing the past into the present," and I believe that the attendance of Hopi tribal members, along the side of Forest Service employees and professional archaeologists, for a collaborative on-site consultation visit to the Juniper Terrace site accomplished just that. Despite a long history of injustices between the Hopi Tribe and the Coconino NF, as well as the discipline of archaeology in general, these groups were able to come together and work cooperatively to make a difference at one Hopi ancestral location, Juniper Terrace.

The management of Juniper Terrace is just one component of larger efforts being made by archaeologists at Coconino NF toward restorative justice for the Hopi and other tribes. Restorative justice refers to the "healing of breaches, the redressing of imbalances, the restoration of broken relationships, a seeking to rehabilitate both the victim and the perpetrator" (Tutu 1999:54). Although the decisions made surrounding the Arizona Snowbowl cannot be reversed, actions such as conducting on-the-ground and face-to-face consultation with tribes and allowing them to voice their own management recommendations, is the first step in reconciliation and restorative justice. Heritage is the basis of restorative justice, and true restorative justice is multivocal, dialogical (as to cultivate the exchange of knowledge, experiences, and opinions), and historical (as to examine "change through time from the distant past to the social and political present") (Colwell 2007:32-39). At a personal level, I found the management of Juniper Terrace to also serve in restoring justice from the accelerated deterioration of the site resulting from the 1931 and 1932 excavations in which Juniper Terrace

was never backfilled and left an open wound on the landscape, vulnerable to natural processes and deterioration. Unlike Federal agencies today, which have legal and ethical obligations to minimize the amount of damage to heritage sites resulting from excavation or other related activities, the Museum of Northern Arizona was under no legal obligation in the 1930s to consider the effects of their excavations at Juniper Terrace and other sites. Nonetheless, because Juniper Terrace is now under the jurisdiction of the Coconino NF, the Forest is legally obligated to actively manage the site in accordance with Section 110 of the National Historic Preservation Act (NHPA) and to maintain the Secretary of the Interior's (SOI) Standards and Guidelines for Archaeology and Historic Preservation.

The in-field consultation visit to Juniper Terrace with members of the Hopi Tribe was undoubtedly the most notable experience of my internship. It was my first experience working with tribal members and the site visit proved to be extremely productive overall. As suggested by my preceptor Jeanne Schofer, I brought homemade oatmeal raisin cookies into the field as an offering of gratitude to the tribal members for taking the time to collaborate on this management project. In return, one of the Hopi consultants offered me fresh-picked peaches from one of the Hopi mesas, which the tribal member informed me had been introduced by the Spanish long ago and continue to be grown by the Hopi today. One observation I made during the site visit was the absence of any female Hopi members attending the visit. I was later informed by the Coconino NF Tribal Relations Specialist Craig Johnson that the Hopi associate death with these prehistoric sites and locations, and because women hold the role of childbearing and birth, it is not appropriate for them to visit these places. Although the Hopi individuals that attended were members of the Hopi Cultural Preservation Office and the Hopi Cultural Resource Advisory Task (CRATT) Team, which are the organizations that Coconino NF consults with, it still led me

to ponder questions about how tribal governments and offices select members for these types of site visits and activities, why or how they are selected, and what sub-groups within the tribe are represented or absent from the consultation process. Nonetheless, the Hopi site visit to Juniper Terrace was an unforgettable experience that resulted in obtaining crucial information related to the management of the site.

During the Hopi site visit to Juniper Terrace, I asked questions to the Hopi consultants pertaining to what types of management activities they would like carried out at Juniper Terrace. Below I summarize the Hopi responses and management requests obtained from Hopi consultants that attended the site visit on September 7, 2016:

- The Hopi interpret the Juniper Terrace site as an important area of the Hopi migration footprint, as their ancestors resided at Juniper Terrace before moving on to occupy the current Hopi mesas. The Hopi do not perceive the site as abandoned in anyway, and they still have connections to the site and surrounding area. One Hopi member stated "By remembering [the footprints of their ancestors] you still have that connection."

- The Hopi consultants requested photos of the artifacts obtained from Juniper Terrace, which are currently stored in the collections at the Museum of Northern Arizona. Particularly, the Hopi are interested in any photos of textiles or tools related to the production of textiles. The Hopi would prefer the photos in an electronic format, for easy viewing and sharing among Hopi tribal members.

- The Hopi consultants requested a high-resolution 3-D reconstruction of the Juniper Terrace site, for use in the Hopi Cultural Center and as an educational tool for Hopi youth.

- The Hopi consultants suggested installing fencing around the boundary of the Juniper Terrace site to serve as protection from vandalism, additional looting, and other destructive activities at the site.

- The Hopi consultants suggested the installation of signs reciting the Archaeological Resources Protection Act (ARPA) and Forest Service policy regarding legal prosecution and penalties for the removal, destruction, vandalism, or disturbance of heritage resources, as to deter visitors from damaging the site and its associated artifacts.

- The Hopi consultants suggested the installation of a register log at the site, where a record of visitors can be kept, and to serve to welcome visitors as well as providing a space for visitors to write down any questions or concerns.

- The Hopi consultants suggested establishing a lottery system for granting visitors access to the Juniper Terrace site, to limit the amount of destruction associated with tourism at the site. Additionally, revenue generated from the lottery could be used to help maintain the preservation of Juniper Terrace.

- The Hopi consultants requested some stabilization, and even minimal excavation work on subterranean structures at Juniper Terrace to expose subterranean masonry construction, rather than backfilling these structures and leaving an outline of the structure exposed on the surface. One Hopi member stated that archeological sites are the "Hopi classroom" and serve to educate Hopi youth, who are "visual learners," about the ways of life of their ancestors, and thus some exposure of ancient architecture could be used as a teaching tool.

- The Hopi consultants requested the installation of a sign/ informational board that

depicted a high resolution 3-D reconstructions of the Juniper Terrace site, to help

visitors visualize the layout, contents, and magnitude of the large site.

- Historically, the area surrounding Juniper Terrace was a rich hunting area for the

    hunting of deer and antelope.

- The Hopi consultants requested a plant survey and inventory of plants in the area

    surrounding Juniper Terrace.

- When asked about a place name for the Juniper Terrace site, the Hopi consultants

    stated they would have to confer with Hopi elders about a place name.

- The Hopi consultants suggested implementing Hopi youth groups in the

    stabilization work at Juniper Terrace, to help provide necessary labor and also

    promote connections between Hopi youth and ancestral locations such as Juniper

    Terrace.

Although the five Hopi consultants who attended the site visit cannot speak for the entire

Hopi Tribe, and do not wish to do so, the insight gained during this field visit was extremely

informative in guiding the management at Juniper Terrace. I was surprised at the extent of

management that the Hopi requested at Juniper Terrace, especially their willingness for

stabilization, minimal excavation, interpretive and educational signs, and increasing tourism at

the site. Prior to the site visit, I was under the assumption that the Hopi would want minimal

stabilization or interpretive work carried out at Juniper Terrace, and to allow the site to carry out

its natural deterioration. Had we not conducted the on-site Hopi consultation visit, the

management plan would not have reflected these Hopi perspectives, and the archeologists at

Coconino NF would have continued operating under the assumption that the Hopi were not

supportive of stabilization work. Heritage management is full of surprises, and the Hopi site visit to Juniper Terrace is a testament to what heritage managers can uncover when they work directly with, and particularly in the field with, tribal members.

Unfortunately, due to constraints of time, money and resources, I was not able to meet all the management requests of the Hopi. I was not able to obtain the artifact photos or the high resolution 3-D site reconstruction, as these tasks were beyond my training and the scope of my internship. I did include these requests in the management plan however, as recommendations for future management activities related to Hopi sites on the Coconino NF. Because my internship was limited to the development of the site management plan, and not the stabilization plan, I was not able to directly implement the Hopi requests for installation of fences and signs, or the requested stabilization activities, however these requests are included in and guided the development of the site management plan. By documenting these Hopi requests, it is my goal that when stabilization is carried out at Juniper Terrace, the Coconino NF can do so according the Hopi recommendations outlined in the site management plan.

Recommendations for Future Management

The heritage management program of the U.S Forest Service is far from perfect, and in this section I present recommendations for improving the management of heritage resources in the future. Although I was not able to carry out a truly community-based model of management at Juniper Terrace, I hope that the information presented in this thesis can guide the implementation of a community-based approach in future management endeavors on the Coconino NF, and even agency-wide. As a summer intern, I did not have the necessary resources or established relationships with various stakeholders to meet the requirements of a community-based model of

management. I believe, however, that motivated full-time Forest Service employees are entirely capable of integrating a community-based model of management which extends beyond compliance and stewardship, and works toward restoring justice to local and descendant tribes by sharing the responsibility for the management of heritage resources. The Forest Service culture is one of many competing resource values, and the integration of community members in heritage related activities can serve to further justify the public value of heritage resources. The integration of community members in management activities can also help alleviate the workload currently endured heritage managers on the Forest, and allow for an increase in pro-active heritage management to take place. Additionally, community-based approaches call for the integration of ethnographic methods of research, which is a technique severely lacking in archaeological work and has the potential to improve our understanding of Indigenous peoples as well as the relationships between tribes and archaeologists, resulting in more meaningful and informed archaeological work.

To aid in improving relations between the Coconino NF and surrounding tribes, I recommend that the Coconino NF establishes an interdisciplinary Tribal Relations Team (TRT) in place of the single Tribal Relations Specialist position. The Tribal Relations Team should be made up of a diverse group of Forest personnel such as archaeologists, district rangers, fire prevention officers, land surveyors, forestry specialists, biologists, and administrators (Cowie et al. 2009:5). Additionally, I would suggest that the Coconino NF hire at least one tribal member, or even one tribal member from each of the 13 tribes consulting with the Coconino NF, to serve on the TRT and bring tribal concerns, perspectives, and needs to the forefront of Forest planning activities. Ideally, by replacing the single tribal liaison position with a diverse team of personnel, the Coconino NF could expand their diversity of contacts among the many stakeholders and

interested tribes, increase opportunities to understand the concerns of all involved groups, and allow tribal members to interact and converse directly with Forest Service decision-makers and specialists (Cowie et al. 2009:5).

The Tribal Relations Team approach has been successfully implemented by the Coronado National Forest, located in southern Arizona, and can serve as a model to improve tribal relations on the Coconino NF. Cowie et al. (2009:9) describe the TRT approach on the Coronado NF, stating that it "focuses on building new relationships and strengthening existing relationships with tribes through cooperative, mutually beneficial partnerships and projects." This approach promotes multivocality and increased communication between a range of stakeholders that goes beyond the exchanging of informal consultation letters and responses. By increasing lines of communication, the TRT approach can "lead to a new depth of understanding between people with different worldviews and land management practices," particularly by bringing tribal concerns directly to decision-makers in the Forest Service, such as the Forest Supervisor, the Deputy Forest Supervisor, and District Rangers (Cowie et al. 2009:9). In the case of my internship, Coconino NF Flagstaff District Ranger Mike Elson attended the on-site Hopi consultation visit to Juniper Terrace and was able to hear first-hand the concerns and management recommendations of the Hopi consultants.

The ultimate goal of the TRT approach is to redefine what constitutes effective consultation by increasing intrapersonal communication, face-to-face contact between tribal members and Forest personnel, and on-the-ground field trips to project areas in the early planning stages (Cowie et al. 2009:9). On the Coronado NF the TRT has implemented activities such as hosting tribal youth and elder camps and facilitating native resource collection by tribes on Forest land, with the mission of "making tribes feel welcome on their traditional lands by facilitating tribal-

sponsored visits and events" (Cowie et al. 2009:10). I believe that both the Coconino NF and the surrounding tribes could benefit greatly from a similar TRT approach which promotes in-person communication and consultation among a variety of stakeholders and tribal members, facilitates activities focused on making tribal members feel welcome on their traditional lands, and works on restoring and improving relationships that have been negatively impacted by past injustices, such as the Snowbowl decision. When managing heritage resources it is important to remember that "heritage is not a given inheritance but actively constructed by a range of stakeholders who often have different goals, values, and worldviews" (Colwell 2016:8.4), and the only way to ensure that the range of worldviews is sufficiently considered in heritage projects is by directly including these stakeholders in all stages of the process.

For future summer internships involving the management of heritage sites, I recommend that such an internship be divided into three separate and more manageable internships that can realistically be completed over the course of one summer. As a result, there would be three separate internships completed by three separate interns. I recommend that the first internship consist of the literature and records search, compiling a summary of previous work conducted at the site, documenting, photographing, and completing a condition assessment of the site, and a preliminary site visit with the associated tribe(s) to establish tribal concerns, interpretations and management recommendations for the site. I recommend that the second internship consist of completing the significance assessment of the site in terms of the National Register of Historic Places, nominating the site for the National Register if it is eligible, drafting the site management plan, consulting directly with tribal members to edit the site management plan, and completing any management related activities requested by the tribe, such as the artifact photographs and high resolution 3-D site reconstructions requested by the Hopi consultants in my own project. I

recommend that the third internship consist of completing pre-stabilization documentation, identification and allocation of access routes, procurement of stabilization materials, writing of the stabilization plan, and carrying out the stabilization activities at the site. Although these internships do not necessarily need to be completed in three immediately successive summers, they must be completed in the order presented above. The agency hosting the internships will responsible for curating documentation and information attained from each internship, so that each subsequent intern can fully access the work of previous interns and use that data to inform their own internship. Although I was unable to fulfill all the necessary management stages at Juniper Terrace, I believe that approach I presented above will be essential in solving many of the problems I faced in my own internship, and allow for the management of a site to be completed from start to finish, all while in direct collaboration with the descendant tribe(s). By dividing the management duties into three separate internships, each intern will be able to successfully fulfill their internship deliverables within one summer and complete each deliverable to the best of their ability.

Internship #1	Internship #2	Internship #3
• Literature and records search • Summary of previous work • Site documentation • Condition assessment • Preliminary tribal site visit	• Significance assessment • National Register nomination • Draft site management plan • Carry out tribal management requests	• Pre-stabilization documentation • Identify and allocate access routes • Procurement of stabilization materials • Draft stabilization plan • Carry out stabilization

Figure 6.1. Breakdown of the internship duties associated with each of the three separate internships recommended by the author.

Conclusions

Heritage managers are faced with a variety of challenges and ethical concerns, as they are tasked with balancing the demands of Federal legislation, agency missions and directives, the general public, and local or descendant communities, all while being inhibited by restricted funding, time, and resources. Although this task is extremely challenging, it is not impossible. The current heritage management framework in the United States is one that promotes fast-paced and hollow legal compliance that accelerates economically viable development projects and related activities, rather than recognizing and promoting the active identification, protection, interpretation, and ongoing management of heritage resources in such a way that is relevant and appreciated by descendant and local communities. Although heritage managers are not to blame, as they are simply fulfilling their job duties, I believe that heritage managers are the key to revolutionizing the industry of heritage management and pushing it toward a form of practice that righteously acknowledges, integrates, and promotes the values of Indigenous populations. Rather than containing to operate according to minimal legal compliance and the checking of administrative boxes, heritage managers must unite and advocate for change from within the agency or governing body. Heritage managers must make the need for Indigenous involvement in heritage related activities indisputable, and push for agency-wide change. Although individual Forests, such as the Coronado NF, are making distinguished efforts to integrate a more collaborative approach to heritage management in which descendant communities are valued, listened to, and hold some power at the decision-making level, these examples are too few and far in between for agency-wide change to take place.

Although I was not able to conduct a truly collaborative or community-based model of heritage management in my own internship, it is my hope that this thesis serves as an outline for

future heritage managers to demonstrate why a collaborative approach that extends beyond legally mandated compliance is not only necessary, but also beneficial to all involved stakeholders, as well as to provide the necessary tools for integrating and successfully implementing a truly collaborative approach to heritage programs in the future. By involving tribal members and descendant communities in all stages of planning, interpretation, and implementation, the resulting heritage program will be one that is more accurate, relevant, and meaningful to all involved groups. I believe that all Federal agencies or establishments that deal with the management of heritage should employ at least one, if not a team of, tribal or Indigenous members to ensure that the Indigenous voice, values, and needs do not continue to be overlooked and undervalued in management practices. A collaborative and community-based approach to heritage management is the solution to many of the problems faced within the industry, especially the problems related to the lack of funding, time, humanpower, and other necessary resources to carry out meaningful, inclusive, and reciprocal management of heritage resources.

As most heritage managers and archaeologists in the United States are non-Native, it is essential that the Indigenous population is directly involved in the protection, interpretation, and management of their own heritage. Heritage managers cannot continue to be the sole stewards of the Indigenous past, operating within the unilateral and hierarchical domain of Federal legislation and agency directives, thus resulting in management practices that are biased, untenable, and exclusive of the descendants whose heritage is being managed. By placing the management of Indigenous heritage more so into the hands of descendant communities, Federal agencies can be alleviated in many of the areas in which they are already falling short. Particularly, by placing some of the responsibilities of heritage management on the descendant

communities, agencies such as the USFS can actively conduct more management activities overall and in such a way that is more sustainable, driven by the needs of descendant communities, and results in reciprocal benefits. Heritage management that goes beyond legally mandated compliance is not only an ethical obligation, but results in heritage management that is pro-active, civically engaging, and equitable to a range of stakeholders. Heritage projects such as my own at Juniper Terrace are a testament to the real challenges of heritage management in the contemporary world, and it is my hope that future heritage managers can learn from the documentation of my own experience and progress toward a more sustainable, inclusive, and engaging model that moves beyond legal compliance and towards community-based and collaborative approaches of heritage management.

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Appendix A: List of Acronyms

ACHP – Advisory Council on Historic Preservation

AD – *Anno Domini* or year of the Lord

AIRFA – American Indian Religious Freedom Act (1978)

APE – Area of Potential Effect

ARPA – Archaeological Resources Protection Act (1979)

ASR – Arizona Snowbowl Resort, LP

CBPR – Community-based Participatory Research

CCC – Civilian Conservation Corps

CFR – Code of Federal Regulations

CHM – Cultural Heritage Management

CPO – Cultural Preservation Office

CRATT – Cultural Resource Advisory Task Team

CRM – Cultural Resource Management

EO – Executive Order

GIS – Geographic Information System

GLO – General Land Office

HRM – Heritage Resource Management

KNF – Kaibab National Forest

NAGPRA – Native American Graves Protection and Repatriation Act (1990)

NAU – Northern Arizona University

NEPA – National Environmental Policy Act (1970)

NF – National Forest

NFS – National Forest System

NHL – National Historic Landmark

NHO – Native Hawaiian Organizations

NHPA – National Historic Preservation Act (1966)

NPS – National Park Service

NR – National Register

NRHP – National Register of Historic Places

MNA – Museum of Northern Arizona

MOU – Memorandum of Understanding

RFRA – Religious Freedom Restoration Act (1993)

SHPO – State Historic Preservation Office

SOI – Secretary of the Interior

TCP – Traditional Cultural Property

THPO – Tribal Historic Preservation Office

TRT – Tribal Relations Team

USDA – United States Department of Agriculture

USFS - United States Forest Service

WPA – Works Progress Administration

Appendix B: Offer Letter to Hopi Cultural Preservation Office (CPO)

USDA United States   Forest   Coconino National Forest   1824 South Thompson Street
Department of   Service   Supervisor's Office   Flagstaff, AZ 86001
Agriculture   928-527-3600
                                                           FAX: 928-527-3620

File Code: 2360
Date: July 7, 2016

Mr. Leigh Kuwanwisiwma
Director
Hopi Cultural Preservation Office
P.O. Box 123
Kykotsmovi, AZ 86039

Dear Mr. Kuwanwisiwma,

The Flagstaff Ranger District on the Coconino National Forest (CNF) is considering a proposal to develop a site management plan for Juniper Terrace, a large and unique prehistoric site that was occupied following the eruption of Sunset Crater Volcano. Given your ancestral connections to this site and surrounding area, we are contacting you to seek your input and recommendations regarding a project proposal at this site. We would also like to extend an invitation for a group visit to Juniper Terrace to receive your input regarding the proposed management plan of this site. The proposed project seeks to expand on the recent work completed at Red House by establishing a partnership between the Forest and Northern Arizona University in the stabilization, management, and protection sites located within the Coconino National Forest. The intended purpose of this project is to backfill and stabilize the structures at Juniper Terrace, which have been left open and vulnerable to accelerated deterioration and looting since being excavated in 1931. Through management and stabilization of Juniper Terrace, we hope to improve the condition of this site.

Juniper Terrace is composed of eight structures, including over 20 pueblo rooms, masonry and timber pit houses, and a large masonry kiva, all partially enclosed by masonry walls. Additionally, Juniper Terrace contains a ball court located ¼ mile east of the site, which is aligned north-south and partially outlined with basalt rocks. Juniper Terrace is located approximately 23 miles northeast of Flagstaff (see attached map) and is about 1 ¾ miles East of Highway 89, in Township 25, Range 8 East, Sections 34 and 35. Based on ceramic data, the site dates to approximately A.D. 1,070-1,250.

Current threats to the integrity of Juniper Terrace include extensive and accelerated deterioration of the structures, including wall fall, mortar erosion, and cracking, resulting from the 1931 excavation efforts and absence of backfilling (see attached photo packet). In addition to accelerated deterioration, Juniper Terrace has been left vulnerable to looting. Examples of human disturbance at the site include the construction of a power line road, foot traffic and disturbance, and contemporary fire pits.

In addition to stabilization of the site, a component of the management plan for Juniper Terrace includes the application of photogrammetric technology and the creation of 3D reconstructions of the site and its structures. We hope that the reconstructions and interactive images produced through this technology can be of use to schools and the community, helping enhance the

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connection between living people and their ancestors. We would also like to invite all Hopi to participate in all stages of this management project, working collaboratively to stabilize the site and experience a connection with the history of this ancestral location.

Proposed stabilization work at Juniper Terrace is focused on preservation, including backfilling of the structures, repair of structures by filling of voids and cracks with mortar, and the removal of vegetation and fireproofing of the site. The project also intends to collect additional data and photo documentation to ensure that Juniper Terrace is adequately recorded for future generations. Soil used for backfilling and mortar used for the stabilization will be obtained locally from areas located outside of the site boundary. Management of this large site will require the use of heavy equipment to access the site with backfill, possibly utilizing several access locations. While we will likely need to operate equipment within the site area to transport backfill to the structures, there will be no adverse effect to the site. Access areas will be limited, and any necessary surveys will be completed before determining the best access locations. Work will likely be performed by Northern Arizona University student volunteers under the guidance of Coconino National Forest archaeologist, Jeanne Schofer, and Northern Arizona University professor, Dr. Chris Downum.

Pending feedback from you regarding the project, the Flagstaff Ranger District will finalize the project proposal and submit it to the Arizona SHPO for concurrence. This report will also be available for your review and comment should you request to receive a copy.

For project specific questions, comments, or recommendations please contact Coconino National Forest Tribal Relations Specialist Craig J. Johnson at 928-527-3475, cjjohnson@fs.fed.us or Jeanne Schofer at 928-527-8259, jsschofer@fs.fed.us.

Sincerely,

LAURA JO WEST
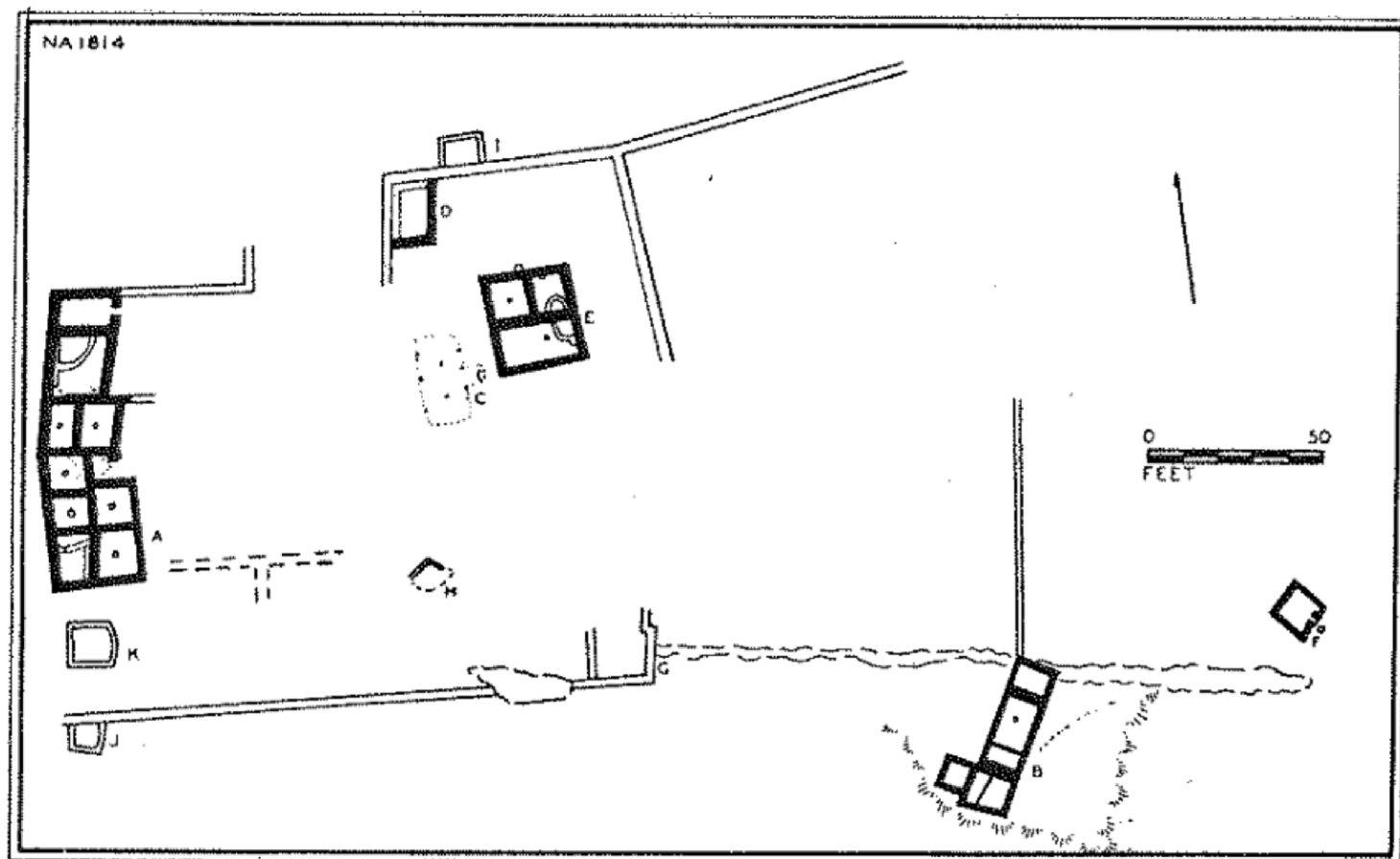Forest Supervisor

cc: Schofer, Jeanne

Figure 1. Site map of Juniper Terrace site. Adopted from Harold Colton's
The Sinagua **(1948).**

Figure 2. South wall of room 2 in pueblo A.

Figure 3. Overview of south end of pueblo A.

Figure 4. Rooms 2 and 5 of pueblo A.

Figure 5. Buttress located on the Southeast corner of room 3 in pueblo A.

Figure 6. Possible discard pile on East side of pueblo A.

Figure 7. Rooms 2a and 2b of Pueblo B.

Figure 8. Room 4 of pueblo B.

Figure 9. Overview of the masonry kiva (structure E)

Figure 10. Detailed photo of remaining masonry corner in structure E.

Figure 11. West wall of masonry kiva (structure E). Note the dividing wall in center of structure.

Figure 12. Overview of timber pithouse (Structure C).

Figure 13. Overview of Northeast wall of structure F (masonry pithouse or kiva).

Appendix C: Response Letter from Hopi Cultural Preservation Office (CPO)

THE **H**OPI TRIBE

Herman G. Honanie
CHAIRMAN

Alfred Lomahquahu Jr.
VICE-CHAIRMAN

July 14, 2016

Laura Jo West, Forest Supervisor
Attention: Craig Johnson, Tribal Relations Specialist
Coconino National Forest
1824 S. Thompson St.
Flagstaff, Arizona 86001-2529

Dear Supervisor West,

Thank you for your correspondence dated July 7, 2016, regarding the Flagstaff Ranger District considering a proposal in coordination with Northern Arizona University to develop a site management plan for Juniper Terrace, a large prehistoric site that was occupied following the eruption of Sunset Crater. The Hopi Tribe claims cultural affiliation to the Kayenta, Sinagua and Cohonina prehistoric cultural groups in the Coconino National Forest and greater Flagstaff area. The Hopi Cultural Preservation Office supports the identification and avoidance of prehistoric archaeological sites and we consider the prehistoric archaeological sites of our ancestors to be "footprints" and Traditional Cultural Properties. Therefore, we appreciate the Forest's continuing solicitation of our input and your efforts to address our concerns.

The Hopi Cultural Preservation Office understands the purpose of the project is to backfill and stabilize structures at Juniper Terrace which have been left exposed since excavations in 1931 and develop 3D reconstructions of the site and its structures. Juniper Terrace is described as being composed of eight structures, including over 20 rooms, pithouses, a kiva and ballcourt, dating to AD 1070-1250, located approximately 23 miles northeast of Flagstaff. Please provide us with a copy of the final project proposal for review and comment.

We appreciate and accept your invitation for a site visit with members of our Cultural Resources Advisory Task Team and participation in all stages of this management project, working collaboratively to stabilize the site and experience a connection with the history of this ancestral location. We will arrange a site visit with Tribal Relations Specialist Johnson. If you have any questions or need additional information, please contact Terry Morgart at 928-734-3619 or tmorgart@hopi.nsn.us. Thank you for your consideration.

Respectfully,

Leigh J. Kuwanwisiwma, Director
Hopi Cultural Preservation Office

xc: Dr. Chris Downum, NAU
    Arizona State Historic Preservation Office

P.O. Box 123   KYKOTSMOVI, AZ 86039   (928) 734-3000