Tuzigoot Administrative History
Dallett draft December 8, 2010
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Introduction

"You better go and see what they're doing up there," is what John Tavasci's father said to him one day in 1933 when the Tavascis spotted two strangers digging on the hill. The hill was on property the Tavascis leased from the local mining company. It turned out the two strangers were students from the University of Arizona and they were to excavate what we now know as Tuzigoot National Monument. Young John Tavasci, eight years old at the time, talked with the students, watched them dig over the next two years, and witnessed the unearthing of everything from small potsherds to large intact ollas.[1] The students went on to excavate other sites, but John Tavasci grew up, stayed in Clarkdale, and ran a dairy operation on nearby land alongside the Verde River for the next seven decades.[2] In 1991 the mining company terminated the lease and the Tavascis were forced to leave the land. One consolation to the family was that the marsh was formally named Tavasci Marsh. In March 2006, what we now know as the Tavasci Marsh became a part of the Tuzigoot National Monument. The story of the Tavascis and their marsh are intricately linked with the history of Tuzigoot. The connection begins with the young John Tavasci witnessing the unearthing of Tuzigoot, and extends to his perception of how the land and monument have developed. This is the story of the excavation, stewardship, and interpretation of an archaeological site; the consequences of its proximity to a large-scale mining operation; and the change over time in values that effected, and continue to effect, the use and flow of the Verde River through Clarkdale, Arizona.

This section to be completed after all chapters are final:

Chapter 1, "Constructing the Tuzigoot Phase of Sinagua Archaeology and Establishing the National Monument," explores the excavation history of an unusual Work Progress Administration (WPA) project in Yavapai County with three long lasting legacies. One legacy was the unearthing of the newest in Arizona's long line of records of the past, which led to the creation of an archaeological understanding of the Tuzigoot phase of Sinagua archaeology. The second was the creation of a museum near the Tuzigoot ruins, which was not replaced by Mission 66, and is now officially recognized as a historic structure. The third was the establishment of Tuzigoot National Monument in July 1939.

Chapter 2, "Copper's Patina," contextualizes Tuzigoot at the time of its establishment with copper mining in Jerome, and in Clarkdale, one of Arizona's largest, most complete company-controlled mining towns. While it may be picturesque to view the national monument as a hilltop ruin and museum that happen to abut an industrial working landscape, it is vital to see the relationship to this industrial operation. There is a long history of the impact of extracting minerals in the Verde Valley on human occupation and environmental change.

Chapter 3, "National Park Service Stewards Tuzigoot 1939-1967," reveals the beginning of what would become over half a century of repairs to the original restoration (or should this word be reconstruction, Matt?) It also chronicles the post-World War II ideas for the future, the mark of Mission 66 on Tuzigoot, the unsettling effects of the closing of the Clarkdale smelter, and the long struggle for access that culminates with a new access road and bridge.

Chapter 4, "National Park Service Stewards Tuzigoot 1968-2002," offers a series of changing perspectives on the values and use of the Verde River, Peck's Lake, the Tavasci Marsh, and the Phelps Dodge tailings. From the first recognition of Tavasci Marsh as a unique riparian area to the contested ideas about the tailings and terrain, Tuzigoot emerges as an actor in the continuing quest for environmental protection, recreational access, habitat restoration, and the documentation of these quests.

Chapter 5, "Twenty-first Century Tuzigoot," .....

Chapter 6, "The Archaeology of Knowledge," focuses on the changing needs, technologies, and ideas about ruins restoration, preservation, access, and interpretation played out from original excavation in the mid-1930s through the impact of the Vanishing Treasures Program as well as the professionalization of staff at Tuzigoot.

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[1] An olla is a large, earthenware pot or jar typically used for water storage, and occasionally other types of storage. These devices are most commonly associated with use by Native American tribes of the Southwest.
[2] John Tavasci, interview by Nancy Dallett, November 14, 2007.

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Born out of the Depression: The Foundation of Tuzigoot as a National Monument

Grace Sparkes and the Alphabet Soup of New Deal Programs in Yavapai County: RFC, CWA, FERA, WPA, CCC

The stock market crash that began in the spring of 1929 took until the following spring to be felt in Clarkdale, Arizona. On June 26, 1930, the United Verde Mining Company at Jerome and Clarkdale reduced its work force significantly, and by September hundreds of jobless men responded to a Yavapai County Chamber of Commerce announcement that temporary jobs as pea pickers would be available paying 1.5 cents per pound, buckets furnished. Grace Sparkes, the Chamber of Commerce Secretary, had to turn them away, though, because the weather was colder than usual and the peas were not ready to harvest. Sparkes could not change the weather, but she did what she could to provide men and women with work on federally funded projects and to stimulate recovery from the depression. Any time Sparkes was aware of a funding opportunity, she applied for money for improvement projects. It was her modus operandi during her service to the county. The first such funds were from the Reconstruction Finance Corporation Act (RFC), from which Arizona got a quarter of a million dollars. Sparkes initially raised a great deal for various cities in her region, including Prescott, whose share in this case was $50,000. The work projects involved small tasks such as washing walls at the Yavapai County Courthouse. Eventually Sparkes was able to tap into another federal government work relief program, the Civil Works Administration (CWA). The CWA, although only extant from November 1933 to March 1934, enabled Sparkes, the chairman for Yavapai County projects by that time,

to obtain funding for improving playgrounds, cleaning up the Citizen's Cemetery, building a community center and homes on the Yavapai-Apache Reservation, and several other projects. When funding for the CWA was threatened, Sparkes and others organized a tour and took photographs to commemorate the importance and success of these projects in an effort to try to stave off their demise. Her documentation efforts were not immediately successful, but when the CWA was replaced by Federal Emergency Relief Administration (FERA) and Work Projects Administration (WPA) she secured funding for Yavapai County projects. Some of those projects are woven into the cultural landscape and are still visible today, including improvements to Highway 89, work on the Pioneer Home, the Prescott Armory, and the Sharlot Hall Museum.[1]

While several CWA and FERA projects involved pick and shovel work, one project, the Smoki Museum (pronounced "smoke eye"), served as a precursor to the museum at Tuzigoot. It involved building a museum to house archaeological artifacts from the area. The partners in the Smoki project, including the Yavapai County Chamber of Commerce and its Archaeological Committee, the State Museum, and the Department of Archaeology at the University of Arizona, would then go on to partner in another federally funded project to conduct archaeological investigations at Tuzigoot and build a museum there to house the excavated materials.

The "Weird, Thrilling, Spectacular" Smoki Museum

In 1930 the Yavapai County Chamber of Commerce created its Archaeological Committee for the purpose of preserving the prehistoric treasures of the county. The chair was Charles Elrod, and it counted among its members historical figures such as Sharlot M. Hall, Kate T. Cory, A.H. Favour, Lester Ruffner, and Grace M. Sparkes. The

archaeology was to be directed by Byron Cummings, senior scholar in southwestern archaeology and dean of the University of Arizona's Department of Anthropology. The committee admitted its first archaeologist, J.W. Simmons, in 1931. His admittance was the result of correspondence between Dean Cummings and Simmons. The dean had written to Simmons to inquire whether Simmons could find potential sites for summer fieldwork for his students. Simmons identified several and the committee wrote letters of introduction to property owners. The committee asked the property owners to be kind enough to meet with Simmons and allow him to tell them about the potential prehistoric sites to be investigated on their properties. Cummings was to direct the work from afar, but his two graduate students, Louis R. Caywood and Edward H. Spicer, were to conduct and supervise the work on site.

The work for the first site was funded jointly by the Arizona Archaeological and Historical Society and by Dr. Cummings personally. In the summer of 1931, one family of property owners allowed access to the archaeologists. All three brothers of the King family, Charles, Tom, and Edward, extended rights and privileges to enter and excavate the prehistoric ruins located on the King's Ranch, approximately thirty-five miles northwest of Prescott, on the east bank of Chino Creek about 1.5 miles below the mouth of Walnut Creek.[2] The following summer of 1932, another property owner, G.S. Fitzmaurice permitted excavation on his property near Lynx Creek. The Delphian Society of Prescott and local individuals funded the work, which resulted in, "one of the first systematic investigations which has been carried on in the black-on-gray region."[3] The evidence of human occupation taken from the premises of these excavations were to go into, "the public museum which is being erected at Prescott, Arizona, by the Smoki

People, for the education and scientific uses of the residents and visitors of the City of Prescott and Yavapai County."[4]

The Smoki People referred to in the agreement was a group of businessmen who banded together to, "present and preserve the dances and chants of the Southwestern Indians, which are fast losing their place in Hogan and pueblo as young people are weaned away through boarding school or occupations off of the reservation."[5] They dressed as Hopi Indians in costumes designed and fabricated by a women's auxiliary and performed in a Way Out West program to raise funds to save Prescott's annual Frontier Days Rodeo, which ran into financial difficulties maintaining livestock after World War I. Ironically, the Smoki People were interpreting the Hopi Snake dance for enthusiastic audiences at the same time that federal law was prohibiting Indians from participating in their own religious ceremonies. Grace Sparkes described the Smoki events in promotional fliers as "weird, thrilling, and spectacular."[6] Over the years the Smoki members also assembled a collection of archaeological artifacts that they stored in the basement of the Palace Hotel. In the early 1930s the idea came about to create a Prescott museum as a repository for archaeological artifacts and as a meeting place for Smoki members. On January 5, 1931, the City of Prescott deeded several lots to the Smoki People. Several years later, with stone quarried from the nearby Granite and Pine Dells area, construction was completed. (need 1935 date of opening of Smoki museum). Can insert picture here.

Upon completion of the two summer excavations on the King and Fitzmaurice properties, the results were publicized in a series of articles written by archaeology graduates students Spicer and Caywood. This was an important part of the agreement

called for by the Yavapai County Chamber of Commerce Archaeological Committee, which considered it important to not only conduct investigations, but to make the results available to educate the people about the prehistory of Yavapai County. During the fall of 1933, the forty bowls and ollas that had been dug up during the excavation at the Fitzmaurice ruins were assembled in a public venue. Newspaper articles compared it with the material that was previously excavated on the Kings ranch and found it inferior, describing the Prescott Verde black-on-grey pottery as, "very crudely made and even more crudely decorated" and that its "astonishing crudity" would be familiar to all who saw the Smoki museum collection obtained from the King's Ranch ruin the previous summer.[7] While the article noted an unusual lack of quality workmanship in an artistic sense, it simultaneously presented the collection in a positive light by suggesting that the material held promise for further study of whether the prehistoric people of the area had distinguishing characteristics and were of a different race from the Pueblo people of the rest of the southwest.

Grace Sparkes, who as Yavapai County Chamber of Commerce Secretary had tried to secure employment for men and women during the Deression, now helped to secure funding to build an additional pueblo-like museum structure for the Smokis to house the artifacts from the King and Fitzmaurice ruins. Using CWA and FERA program funds, the 5,100 square foot museum opened on May 29, 1935.[8] With the success of the partners in obtaining funds for the construction of the Smoki museum in Prescott, the Archaeological Committee turned its attention to securing funds for an archaeological investigation in Clarkdale, Arizona, that would yield additional artifacts for the Smoki museum.

The Ruin at Curved Lake

While Spicer and Caywood were doing their fieldwork in the summer of 1933 near Prescott, they were asked to select a promising site in the Verde Valley for excavation the following summer. Earl Jackson, a fellow student archaeologist at the University of Arizona, suggested a site that J.W. Simmons had told him about that promised to represent a little-known phase of prehistoric occupation. They named the site "Tuzigoot" for the Tonto Apache word meaning "curved lake" or "crooked lake" which referred to the oxbow section of Peck's Lake on the Verde River.[9]

In October, performing as custodian of the Smoki Museum, Edward Spicer wrote to the Smithsonian's Chief of the Bureau of American Ethnology asking for permission to excavate the site. The Smithsonian's response to Spicer was that the bureau did not have jurisdiction and could only act in an advisory capacity. Spicer needed to direct the request to the property owner. The owner was the United Verde Copper Company.[10]

At the next meeting of the Archaeological Committee, held October 26, 1933 at the Smoki Museum (need to check: was this a meeting place before the museum was constructed or was the museum open in 1933?), the committee members reviewed a proposed agreement between the United Verde Copper Company, formerly the United Verde Mining Company, at Clarkdale, Arizona, and the Archaeological Committee of the Yavapai County Chamber of Commerce at Prescott, Arizona. The proposed agreement granted permission to Caywood and Spicer to excavate portions of a prehistoric pueblo ruin, the burial ground used by the former inhabitants of the ruin, and earlier structures in the immediate vicinity of the Vesoar's family-owned land known as Vesoar Ranch. The committee requested a quick approval so that Dean Cummings, Caywood, and

Spicer could begin work at once. The agreement stipulated that all archaeological work would be carried out along scientific principles; that maps, photographs, and drawings would be made of the ruin; that notes for a publication would be kept; and that the notes, photographs, maps and drawings would be the property of the Archaeological Committee. The artifacts from the ruin would be apportioned three ways between the United Verde Copper Company, the Smoki Museum, and the Arizona State Museum. It further stipulated that, "first choice of such artifacts shall go to the United Verde Copper Company and representative collections shall go, first to the Smoki Museum and second to the Arizona State Museum," with "all skeletal material and charcoal or wood specimens to the Smoki Museum and the Arizona State Museum for scientific research."[11]

Charles R. Kuzell of the United Verde Copper Company and Secretary Grace Sparkes, who was also acting now Immigration Commissioner for Yavapai County, communicated by letter during this period. Sparkes secured federal funding for a project to excavate, study, and investigate the Vesoar site. Kuzell supplied eight men from the copper mine company to the project. FERA funds provided from October to November 1933 enabled the two archaeologists and fifty laborers to begin the work while CWA funds allowed the work to continue from November 1933 to June 1934.

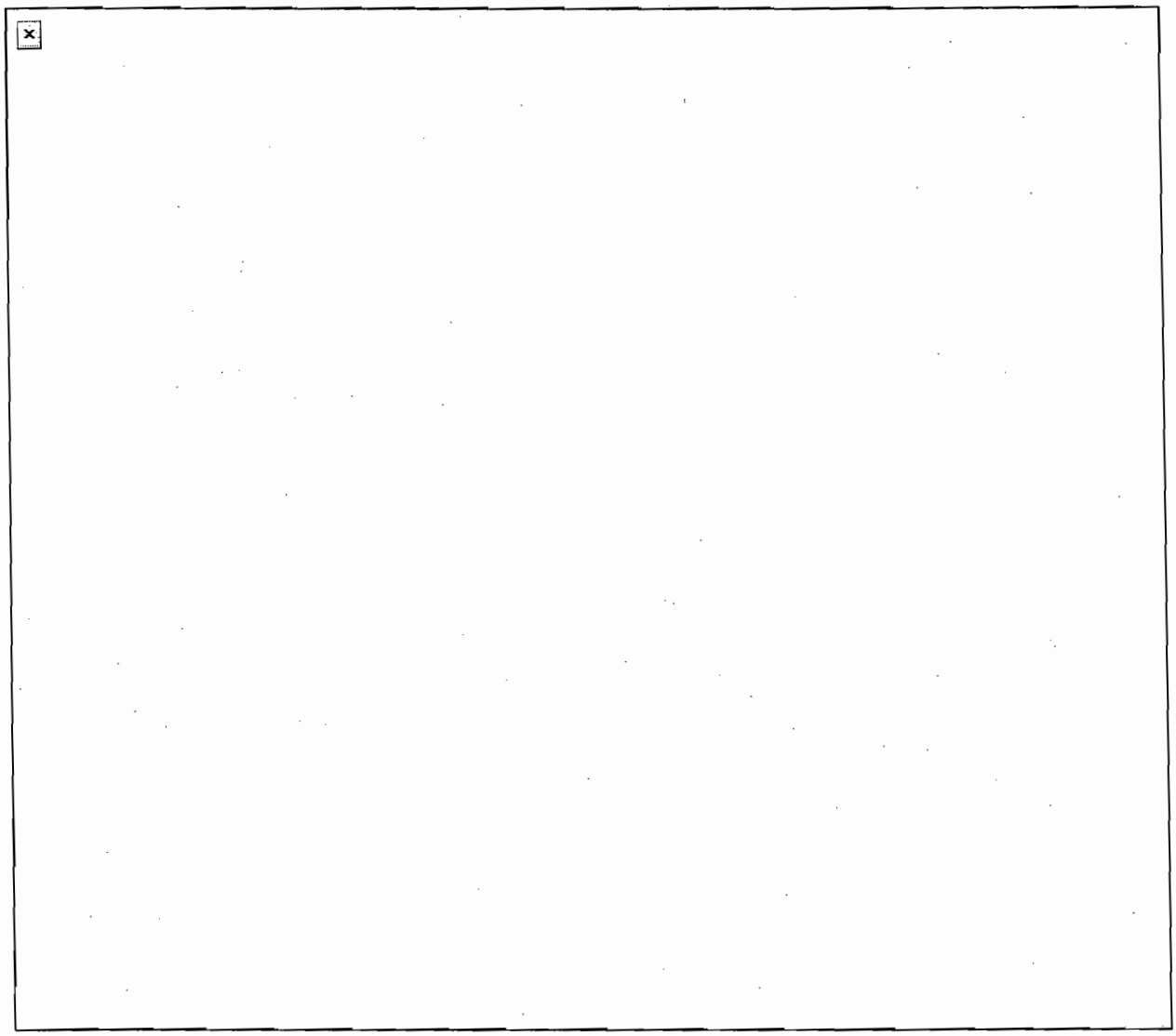
As people began to see the value of the area's history and ruins, one child witnessed very closely the changes brought about by what led up to the establishment of the national monument. As an eight-year-old boy, John Tavasci curiously looked on as two men explored and dug a site on a hilltop. Now in his eighties, Tavasci still recalls his initial encounter with two students from a university in Tucson, and therefore likely

Spicer and Caywood. To both the small child and his father, Paul Tavasci, Sr., the sight of people up on the hill was a curious one. The Tavascis considered that particular land to be of little use, describing it as an area that a grazing cow might get lost in for a day or two. The hill was all covered with dirt and rocks and mesquite trees and brush, just like all the other hills in the area, so the Tavascis could not imagine why the young men would be interested in that particular site. It was also a mystery as to how they got there because there were no roads, so the strangers had to have walked through the Tavasci ranch to get to the hill. Urged by his father to approach the men, John spoke with them and ultimately became a frequent observer of many archaeological unearthings: "And they said they'd come up and they heard that there was an Indian monument of some sort out here. So I watched 'em. And every day I'd go up and talk to them. And they finally dug up one of those big pots, clay pots. It was about this round, about that high, had a deal on top. It was cracked all through but it was still a nice pot. And as they dug through there they finally found the skeletons, if I remember right, and one of those that grinds corn."[12] The successful discoveries to which the young John was privy equaled success for the archaeologists, and their project began to expand. CONSIDER ADDING PICTURE OF hill before excavation.

The supervision of the excavation and the work with artifacts required additional personnel, and so two assistants from the Arizona State Museum, Harry Getty and Gordon Baldwin, helped for several months beginning in December 1933. In June 1934 the excavation was completed, the ruin was stabilized and partly reconstructed, and display cases were constructed by manual arts classes at the Clarkdale High School.

WPA funding became available along with additional FERA funds to construct the museum in 1936.[13]

The museum was patterned on the ruin itself and built to house the artifacts collected during the excavation. In December 1935 another CWA project began employing mostly Mexican women to assemble pottery pieces for display in the museum that was under construction next to the ruin. As a boy, Tavasci witnessed this process as well. He recalls that "There was a vacant building. They had long tables, I remember that, and women working there going through the dirt of whatever they were looking for."[14] The vacant Wingfield dry goods store in Clarkdale was used as a temporary workshop. Sherds would arrive from the dig by the truckload and would be spread out on the floor. They would be washed and the dirt would be removed and then the women would assemble the sherds like puzzle pieces: matching them, gluing them together, filling in the holes, and then finally sanding them. In this way, over one hundred and fifty bowls and ollas were reconstructed. In an oral history conducted in 2005 with one of the young women who worked on the project for two years to help pay for schooling at the University of Arizona, Mrs.Helen Mooney Letts Copsey, recalled that while most of the bowls were small, some of the ollas they reconstructed stood five or six feet across.[15]



Tuzigoot Ruins – Project P10 – Clarkdale AZ
Laboratory where pottery is restored and working crew 2/14/1934
Sharlot Hall IN-PR-1439 PM

Photograph of pottery removed from a Civil Works Administration archaeological project near Clarkdale, AZ, RG 89 Arizona Board of Public Welfare, History and Archives Division, AZ State Library, 1934.

Sharlot Hall Photo Box 114 F4
Tuzigoot staff during excavation
Left to right:
Edward H. Spicer, Louis R. Caywood, Chisolm, Paul Keefe, general director of C.W.A. projects at Clarkdale, Charlotote Martinez, pottery repair, Maxine Jernigen, Secretary for Laboratory, Keefe's Assistant, name unknown
Classification #658.1
Accession #58
Catalog #253
Negative # T-58-253

The Newest in Arizona's Long Line of Brilliant Records of the Past

In accordance with the agreement between the copper company and archaeological committee to publicize the excavation findings, several publications followed. From these publications, one gets a sense of the scope of the excavation, the significance of the findings, and the way the project was presented to the public and to the academic archaeologists. Newspapers including the *Prescott Evening Courier*, the *Prescott Journal Miner*, and the *Verde Copper News* reported on the excavation while it was under way. A series of articles in *Prescott Journal Miner* began after one week of excavation. It suggested that the gaze of an archaeologist on the landscape was necessary to read the potential to yield clues about the past. It said, "The hill on which these interesting ruins were uncovered, to the inexperienced person looked very little different than the many hills on either side of the Verde river, but to those experienced, two noticeable differences were apparent, the numerous pieces of broken pottery scattered about and the rocks from the fallen walls, but even archaeologists were not aware of the extent and the varied character of these prehistoric dwellings."[16] (This could be a quote for picture of rubble).

One of the most dramatic articles appeared in the *Arizona Republican*. Under the first page banner headline of, "Ancient Ruin of Tuzigoot is Unearthed" the May 18, 1934 article proclaimed that, "Alongside those notable names which have made Arizona famous for its revelations of the past – Casa Grande, Betatakin, Montezuma's Castle, Kinishba, and the whole grand array – write a new one: Tuzigoot."[17] The article portrayed Tuzigoot as a dual monument: a monument to the "ingenuity and high civilization of a people so complete [*sic*] forgotten that neither their names nor anything of their lives, save what is disclosed by the ruins of their homes, is known," as well as, "a monument to the wisdom of Civil Works Administration executives who had the courage and the vision to realize the cultural value which might be derived from putting men to work digging sand and sorting rocks," out of which came, "the newest in Arizona's long line of brilliant records of the past."

Spicer and Caywood published their work in March 1934 in *Museum Notes*, the newsletter of the Museum of Northern Arizona. They described the majority of the two hundred pottery vessels recovered from burials and rooms as identical to Jeddito black-on-yellow from the Hopi Pueblo IV and conjectured that the relative scarcity of pottery native to the region indicated a lack of interest in pottery decoration by the inhabitants at Tuzigoot. They raised the question whether the inhabitants specialized in some other product for trade, possibly textiles or salt from the mine at Camp Verde.[18] In May 1934, Harold Colton, the counterpart to Byron Cummings for northern Arizona archaeology, approved the designation of the pottery found on the site as "Tuzigoot" ware.[19]

The most extensive publications were written for both a public and an academic audience. The one for the public, "Tuzigoot Ruins, Near Clarkdale, Arizona, Home of

Early Arizonans" was published by the Archaeological Committee of the Chamber of Commerce and distributed, "without charge to those interested in the marvelous Tuzigoot Ruin, recently excavated under the Yavapai County CWA Board."[20] It characterized the site as having an inauspicious beginning before 1100, a rise to an important place in pueblo prehistory about 1300, and final and complete decline previous to 1400. It provided explanations and maps for how the ruin was divided into five groups constructed at different times and drew attention to the 86 ground floor rooms, "exposed to the sun again for the first time in 600 years," with walls in some places standing as high as 12 feet. It enumerated 415 burials, 178 pottery vessels, 318 bone and horn implements, 30 pieces of basketry and matting, 1,699 implements of stone, and a striking array of jewelry including seven elaborate turquoise mosaics.[21]

Several years later when Jack Cotter was the custodian at Tuzigoot, he wrote an article for Arizona Highways about the original excavation and described the work as follows. "First, tons upon tons of loose wall rubble and the debris of ancient roof and top stories were removed, then, as the rooms were cleared, the long forgotten storage ollas began to appear as clusters of sherd fragments beneath the ancient floors. In some of the rooms where evidence of fire was present, charred corncobs and kernels and even beans were discovered scattered among the sherds – perhaps suggestions of a holocaust in at least a portion of the pueblo at the end of the occupation. Here and there below the hard-packed floors were discovered the infant burials, to the number of 170." By 1935 he described the ruins as, "exposed with six of the rooms reconstructed to serve as examples of the original ancient aspect of the dwellings."[22]

Construction of a museum, parking spaces, and landscaping was under way throughout 1935. At the request of Frank Pinkley of the Southwestern National Monuments, planning technicians from the National Park Service headquarters in Berkeley visited Tuzigoot in December 1935 to study the situation and make suggestions about improving the arrangement of the administration building and the museum. The foundations for the building were already laid, and the suggestions were made in an attempt to avoid major structural changes and to improve functionality.

Controversy over Cement or Clay Mortar

In all public accounts, the excavation was characterized as successful; however, Dean Cummings was not satisfied with all of the choices his former students made on the excavation and reconstruction at Tuzigoot and he did not hesitate to register his displeasure. In January 1934 when Spicer submitted his report on the Tuzigoot Ruin, Cummings reviewed it immediately and responded with two letters, one each to Spicer and Sparkes.

In the letter to Spicer, Cummings made it clear that there was a lack of cooperation and frankness and noted that he disagreed with several specific tactics of restoration, repair, and protection that had been under taken at Tuzigoot. He referred to the position of authority and responsibility that was placed upon him by Mr. Kuzell of United Verde Copper Company and then to the disparity in perception of responsibility for the project, saying that he was the responsible party and yet, "it has been evident since my first visit to you at Clarkdale that you were not anxious to have my suggestions or to talk over frankly and freely plans of restoration of the ruin. You and your counsel, whoever they may be, seem to feel that you know far better than I how the work should

be done." He warned that the State Museum, "cannot be responsible unless there is complete cooperation and frankness."[23] There was a disagreement over the use of cement mortar, which Cummings saw as an unnatural feature that would have negative aesthetic impacts and lead to differential erosion patterns. He advised against the use of cement in favor of a clay mortar. He warned Spicer of the consequences of using a cement mortar capped over with a clay mortar, saying, "If you had laid up those double walls bedded in clay mortar, and then protected them by ceiling and roof as you are planning to do, you would have had quite as substantial a structure as you will have with the cement mortar fillings, and you would have kept true to type of the original." He warned that, "the clay pointings on the exterior which you propose to carry out necessarily will merely stick to the cement mortar and rock, and consequently will be more subject to erosion than if it were part of the regular fillings of the walls. Your ten percent cement in your cappings of the walls, I believe, will be no more enduring than the style of capping which I suggested, of a large rock laid across the top and bedded in adobe clay. The latter seems to me will be more in keeping with the wall structure and present a more natural appearance. I fear your clay and cement preparation will crack."[24]

The letter to Grace Sparkes echoed his comments and complaints. He noted how the work got off on the wrong foot from the beginning, that the role of the advisory committee was not heeded, and that the results were unfavorable for Tuzigoot. According to Cummings, Spicer and Caywood ignored the suggestions of the Advisory Committee and he could not be put in a position to have the Arizona State Museum bear the responsibility for the conduct for the project unless those in charge on site

respect the off-site authority. He said that he "cannot, and will not, be put in a position of merely approving what somebody else has planned, and what somebody else sees fit to carry out."[25]

Spicer replied in a letter, stating that he and Mr. Caywood had had, "no intention of shifting any blame for our mistakes on to you," and that, "from the start we have been under the impression that the responsibility for the excavation and restoration was directly on our shoulders," and that they had no idea that, "Mr. Kuzell or anyone else was considering you as the responsible party." He went on to say how he appreciated the generous cooperation Cummings offered at all points and that, "a number of those suggestions" were carried out, but that, "since you have not been on the ground at all times to make final decisions in regard to the many problems as they have arisen, we have not considered that you would be the responsible party for the work."[26] As to the disagreement about the use of cement or clay mortar, Spicer defended his position on the use of cement, and added that, "we believe that future repairs will fall to a minimum and that none of the walls that we reconstruct will have to be completely rebuilt, although it is entirely feasible that they may have to be repointed from time to time."[27]

The written correspondence about disagreements over chain of command and technical considerations ended at that point, but in retrospect we can see that Dean Byron's advice was prescient and should have been followed. It did not take many seasons to provide evidence of what he feared would happen. Extensive repairs were required and walls would have to be completely rebuilt. The consequences of the disagreement emerged when the walls that Spicer and Caywood reconstructed suffered

from erosion, deteriorated beyond repair, and the National Park Service, having just taken over the ruin, had to be rebuild them.

A Graceful Deed From Private to Public Land

The federally financed excavation at Tuzigoot took place on land belonging to the United Verde Copper Company, and when work on the museum to house the archaeological artifacts began the Copper Company took steps to deed the land to the local school district. In correspondence with the New York offices of the United Verde Copper Company, the reason for the deeding to the school district and then possibly to the state or the federal government was characterized as follows: "The reason for deeding it to the school district at this time is because the policy of the government is such that many of the articles recovered might be sent outside the state, and until a satisfactory and definite policy is agreed upon it should remain the property of the school district, which of course the Copper Company controls." The copper company executive went on to say that it did not seem fair for public money to be spent on private property and that it "would be a graceful thing to do to deed it."[28]

Dean Cummings had strong opinions about the visual and sustainable effects of archaeological restoration techniques, and he also had strong opinions about whether the state or federal government should be in the business of preserving ruins and running archaeological museums in Arizona. From correspondence to the United Verde Copper Company in late 1934 we can see his support for state versus federal control as well as a clearly articulated set of recommendations to proceed to put archaeological sites and museums in state control. He argued that the state was already spending

considerable money building up its resources and that the pre-historic ruins and museums were great attractions and destined to become principal resources for the state. He questioned why anyone would hesitate to invest in these expenditures and supported a proposed state law to place ruins under state direction. As to how the responsibility and authority should be delegated to protect ruins from vandalism and prevent removal of archaeological evidence from the state, he proposed that a trained graduate from the University of Arizona could handle the situation. He suggested five points that should be incorporated in a state law: that the purpose would be to conserve and protect resources and prevent trafficking in artifacts; that a board be created to identify parcels of land with important ruins that would become state monuments; that the board would have the authority to inspect and supervise excavations and to enforce the laws; that the expenses for maintaining the monuments would be carried by the board of supervisors in the various counties, and that the board would have the right to seize and confiscate any trafficking in prehistoric ruins and artifacts.[29]

Cummings doubted that the federal government was in a position to create new monuments and if they did he would discourage it, noting that control by the National Park Service was absolute and left no room for local voices in the conduct of the monuments. He was skeptical about the rapid expansion of the National Park Service and predicted that it would, "cause us about as much grief as the Indian commission has."[30] The officials at what was now the United Verde Branch of the Phelps Dodge Corporation proposed a bill in the state legislature that would put Tuzigoot in the class of a state monument, but by March of 1935 that bill was dying because of a conflict about funding mechanisms. The bill incorporated the suggestions of two of the

prominent archaeologists in Arizona, Dean Cummings and Dr. Harold Colton, but it was determined to be in conflict with the Hayden-Cartwright act. The Hayden-Cartwright Act created a mechanism for gasoline taxes to support the construction of public roads. The bill called for the maintenance of a state monument to have been derived in part from the county portion of gasoline taxes. For that reason, the bill died and efforts shifted to make Tuzigoot a unit of the National Park Service as a national monument.

To that end, negotiations began to deed the land with the ruins to School District 29. In what were otherwise unremarkable meeting minutes for the School District on September 25, 1935, one entry noted that the deed to the Tuzigoot ruins were received and filed in the safe at the High School.[31] Once the land was deeded, (including the ruins, administration and museum building, and parking area, all of which totaled approximately 8 acres) there was a series of maneuvers to put forward consideration of Tuzigoot becoming a national monument. Hugh Miller, who became Acting Director of the Southwestern Monuments in February 1937 when Frank Pinkley died, wrote a letter to the Director of the National Park Service that outlined the original interest and investment of United Verde, and then Phelps Dodge, in the archaeological site. Paul Keefe, President of the Arizona State Senate and an official of Phelps Dodge, was quoted as having made the offer that the site and all developments "could be turned over to the Park Service without reimbursement if it can be made a national monument." The administration of the site, according to Miller, could be accomplished with a single ranger under the supervision of the custodian at Montezuma Castle National Monument. Miller surmised that the future expenses to the federal government would be limited to administration and maintenance. He characterized the acceptance of

Tuzigoot as, "taking over a fully developed operating unit including a museum with a very good collection of prehistoric artifacts, well displayed in good cases."[32]

An Orphan with a Million Dollars Waiting for Someone to Adopt It

Miller's assessment was partly based on Frank Pinkley's hearty support for the inclusion of Tuzigoot in the National Park Service. As superintendent of the Southwestern Monuments from ____ to _____, Pinkley was partial to Tuzigoot becoming a national monument and had characterized it as, "one of the largest fortified hill-top communities in Central Arizona in prehistoric times," and "the only large excavated one in that district."[33] His understanding of conditions at Tuzigoot came from Earl Jackson's inspection in early February 1937. Jackson, then custodian of Montezuma Castle National Monument, was asked to assess the viability of annexing Tuzigoot to Montezuma Castle. He found the rooms well drained, the walls capped and covered with cement and rock exactly in conformity with the construction of the rest of the walls, plenty of walkways of cement and flagstones, six restored rooms, and a large administration building that he found attractive and accommodating. In his estimation the proposition was worth evaluating because the mining company wanted to cede the property to the Park Service with no strings and that it could be administered with a year-round ranger working out of Montezuma Castle. He said that it looked to him that, "an orphan with a million dollars can't find anyone to adopt it."[34]

The museum and pueblo ruins at Tuzigoot opened to the public in early 1937 and WPA funds supported its operation. In May, Acting Director Miller of Southwestern Monuments requested that Phelps Dodge deed additional lands to include, "the entire

length of the ridge or hogback on which the ruin and museum are located, permitting fencing of the entire area at the foot of the slope. This proposal involves approximately 15 acres additional." A photograph taken on May 8, 1937, presumably as part of the inspection by Miller, showed a portion of the Phelps Dodge tailings as well as smoke from the smelter, with a note saying "this unsightly basin cannot be eliminated and is beyond the boundary of the proposed extension."[35] In July, Phelps Dodge conveyed a quit claim deed for 42.665 acres to School District No. 29. Phelps Dodge also granted a scenic easement to Yavapai County to protect the right-of-way from undesirable developments, with the understanding that the County would own and maintain the approach road to Tuzigoot. In August at a special school district meeting the board approved the quit claim and appeared to be poised to convey the land to the United States for the establishment of Tuzigoot National Monument. The Superintendent of Schools, W.J. Uren, notified Frank Pinkley that the funds set aside by the governor the previous year for administering Tuzigoot, from which Miss Rosalind Svob was being paid for managing the museum, were almost exhausted. The school district, now owning title to Tuzigoot, was not in a position to expend funds on its operation. Facing the prospect of closing the ruin, he wondered whether the National Park Service might be able to assume responsibility before its official establishment as a national monument. Pinkley replied that, "until the proclamation has been signed by the President no federal funds can be expended in assuming protection of the Tuzigoot Museum."[36] At this point it looked like all the paperwork was in order, the politics were lined up for approval, and all that needed to be done was to have the monument

established and have the federal government take over responsibility for its management.

In February 1938 the school district, the county, and the mining company heard from the Department of Interior. It was not the simple good news they were expecting to hear. Frederick L. Kirgis, Acting Solicitor for the Department of Interior, was tasked with reviewing the deed and determining whether the donor could convey an acceptable title to the United States. His opinion was that the school district was not in a position of authority to donate the land in question, that title could not be accepted, and that it was necessary for a special act of the legislature to authorize the district to convey the lands as a donation. There was also a discrepancy of the names of the grantees and grantors in the chain of title and several other incidental things that needed to be cleared up.[37] Things moved rather slowly after that opinion, and it took until October for other conveyance methods to emerge, one of which was to for the school district to convey the land back to Phelps Dodge, who could then convey the land to the United States as a donation. During this period the county and the school district struggled to find a way to keep the museum open through extended WPA funds, but there was always a threat that these funds would expire and that the museum would close.

Various suggestions were made about how best to deed the land to the United States, including one inquiry from Senator Carl Hayden whether it would best be accomplished by deeding the school district property to Yavapai County, which could then transfer it to the United States. Another suggestion was for the school district to reconvey the lands to Phelps Dodge which, in turn, could give it to the United States. President of the Senate Paul Keefe moved Senate Bill 121 through the legislature in

January and February 1939, which declared an emergency in the case of authorizing the school district to deed Tuzigoot to the United States. Keefe worked the bill from introduction to amendments through passage. While the politics were serious and tedious throughout the process, there was one lighter moment on February 25, 1939, when Keefe and others "squirmed in their seats in the upper house of the Arizona legislature as a misplaced comma very nearly deeded half of their county to the United States government." The bill mistakenly read 42,665 acres instead of 42.665 acres. The mistake was quickly rectified.[38] Governor Robert Jones signed Senate Bill 121 into law on February 2, 1939. Since there was an emergency clause in the bill, it went into effect immediately.

The various discrepancies in grantors and grantees were cleared up in the paperwork, and everything was ready for the Department of Interior to reevaluate the situation. The reevaluation was positive, and Harold Ickes, Secretary of the Interior, submitted the report for consideration by President Roosevelt in July 1939. President Roosevelt signed a proclamation establishing Tuzigoot National Monument on July 25, 1939. Thirty five hundred dollars was appropriated to cover the administration and protection of the site during the balance of the 1940 fiscal year. Within a few years, young John Tavasci saw the transition from the first archeological artifacts being collected on the land to it becoming the 27th national monument. The era of National Park Service stewardship began.

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[1] Margaret Maxwell, "The Depression in Yavapai County," *The Journal of Arizona History* 23 no. 2, (1982): 209-227. Margaret Maxwell's journal article on the depression in Yavapai County uses information from the *Prescott*

Courier, Tucson Daily Citizen, and the *Arizona Republican* newspapers. For a book on the RFC, FERA, CWA, and WPA see William S. Collins, *The New Deal in Arizona* (Phoenix: Arizona State Parks Board, 1999). The CWA was in operation from 1933 to 1934, the FERA was in operation from 1933 to 1938, and the WPA was in operation from 1935 to 1939. For a book on the New Deal and arts in Arizona see Betsy Fahlman, *Federal Art Patronage in Arizona, 1929-1945: Artists and the New Deal* (Tucson: University of Arizona Press, 2009). For an overview of projects in Arizona see the map organized Joy Mehulka, *The New Deal in Arizona: Connections to Our Historic Landscape*, ed. JJ Lamb, Robin Pinto, Robert Jr Leighninger, Peter Booth, and Michael Smith (Phoenix: Arizona Humanities Council, 2009), map.

[2] Agreement permitting excavation rights to Yavapai County Chamber of Commerce, signed by Charles, Tom, and Edward King, November 5, 1931, (Arizona State Museum collections, location A50).
[3] Edward Holland Spicer, and Louis R. Caywood, "Two Pueblo Ruins in West Central Arizona," *Social Science Bulletin* (University of Arizona) 7, no. 1 (1936): 88.
[4] Agreement permitting excavation, November 5, 1931.
[5] Arizona Board of Public Welfare, "Erection of the Smoki Museum at Prescott, Arizona," *Outstanding Projects of Arizona: Works Division*, vol. 2, 1935: 52.
[6] Todd W. Bostwick, "Weird, Thrilling, Spectacular, Archaeology and Tourism in the Prescott and Verde River Regions 1931-1934," *Byron Cummings: Dean of Southwest Archaeology*, (Tucson: University of Arizona Press, 2006), 228-244, esp. 241. Bostwick draws on the Grace Sparkes Papers at the Arizona State University Special Collections.
[7] Edward Holland Spicer, and Louis R. Caywood. "Piece Together Indian Pottery," *Prescott Evening Courier*, August 29, 1933.
[8] Colaianni,Elynn, "And Then They Danced," *Talking Sun*, Smoki Museum Newsletter, 2006. This is a three-part series on the Smoki originally, but is no longer available online. On another note, the CWA funds also made possible the construction of a diorama of the preshistoric ruins at Montezuma Castle for the Smoki Museum. See Jennifer DeWitt, "'When They are Gone…' The Smoki People of Prescott and the Preservation of Indian Culture," *Journal of Arizona History*, 37 (Winter 1996); and Philip Joseph Deloria, *Indians in Unexpected Places*, ed. Karal A. Marling, and Erika Doss (Kansas: University of Kansas Press, 2004).
[9] Before agreeing to the name Tuzigoot, there was discussion about whether to name the ruin after the original Hopis who might have lived at the ruin. Since there was not enough evidence, it was decided to give a Hopi name to a smaller nearby ruin that Caywood and Spicer were also investigating. They named it "Hatalacva" for the Hopi expression for "crooked lake," "bent water," or "curved lake." See *A Study of Yavapai History* (Santa Fe: 1959) for correspondence from Albert H. Schroeder of November 5, 1959, which noted that Spicer and Caywood consulted local Yavapai and Apaches when naming the larger ruin and chose "Tuzigoot" because it was easier to pronounce than the Yavapai name, Haka-teker-akwa. This seems to indicate that both the Yavapai and Apache names for "crooked water" were used in naming the ruin.
[10] MW Stirling to Edward H. Spicer, The Smoki Museum, October 6, 1933, Arizona State Museum.
[11] Agreement between the United Verde Copper Company at Clarkdale, Arizona, and The Archeological Committee of the Yavapai County Chamber of Commerce at Prescott, Arizona, no date, Arizona State Museum.
[12] Dallett, 2007. *Oral History Transcript.*
[13]Fred R. Peck, *A History of the Tuzigoot National Monument, Arizona*, prepared for the United States Department of the Interior, National Park Service (Washington, DC, 1956): 38-39. The cost of the excavation and pottery reconstruction, as of November 29, 1934, was $27,575, representing 34,065 man hours. These figures include the E.R.A. Project No 13-F2-14 and the C.W.A. Project No. P-10 as noted in the document *Outstanding Projects of AZ*, CWA-ERA, State Archives (see note 5).
[14] Dallett, 2007. *Oral History Transcript.*
[15] Helen Mooney Letts Copsey, interview by Trudi Black, tape recording, November 16, 2005. Interview conducted between Trudi Black and her mother Helen to obtain an oral history.
[16] Eve M. Chism, "Indian History Recorded in Tuzigoot Excavations," *Journal-Miner.*
[17] *Arizona Republic*, May 18, 1934, p 1. See, for instance, *Verde Copper News* November 24, December 8, December 29, 1933; January 5, February 9, April 24, 1934. Also see *Prescott Evening Courier* January 1, January 8, and September 6, 1932.
[18] Spicer,Edward H., and Louis R. Caywood, "Tuzigoot, A Prehistoric Pueblo of the Upper Verde," *Museum Notes* (Museum of Northern Arizona) 6, no. 9 (1934): 43-46.

[19] Letter from Lyndon L. Hargraves to Edward Spicer, May 23, 1934.
[20] Spicer,E.H. and Caywood, Louis R, no date. Tuzigoot Ruins Near Clarkdale, Arizona, Home of Early Arizonans. Compiled for the Yavapai County Welfare Board by the Office of the Yavapai County Chamber of Commerce. Published through the Archaeological Committee of Yavapai County Chamber of Commerce, Prescott, AZ, no date. The formal excavation report was published as Tuzigoot, the Excavation and Repair of a Ruin on the Verde River Near Clarkdale, Arizona, July 1935.
[21] Spicer, E.H. and Caywood, Louis R., no date, pages 2-3.
[22] Cotter,Jack 1941; Arizona Highways 1941 Vol 17 No. 11 pg. 29.
[23] Letter from Byron Cummings to Edward Spicer, January 22, 1934. ASM Spicer papers.
[24] Ibid.
[25] Letter from Byron Cummings to Grace Sparks, January 22, 1934. ASM Spicer papers.
[26] Letter from Edward Spicer to Byron Cummints, no date. ASM Spicer papers.
[27] Ibid.
[28] Letter from Robert E. Tally to J.V.W. Reynders July 11, 1934. Bremser Collection
[29] Letter from Byron Cummings to Paul C. Keefe, November 20, 1934, ASM.
[30] Ibid.
[31] School District 29 meeting minute, September 25, 1935, 2.
[32] Letter from Hugh Miller to The Director, National Park Service, February 11, 1937.
[33] Letter from Pinkly to Miller, Western Archaeological Conservation Center.
[34]Letter from Earl Jackson to Frank Pinkley, February 4, 1937.
[35] Letter from High Miller to Frank Pinkley, May 12, 1937, photograph of May 8, 1937, Bremser Collection.
[36] Letter from W.J. Uren to Frank Pinkley, December 8, 1937 and response January 5, 1938.
[37] Letter from Frederic L. Kirgis to Secretary of the Interior, February 2, 1938.
[38] "Comma Error Nearly Costs Half of County," *Arizona Republican*, February 27, 1939, ASM bin A-185.

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Chapter 2

Copper's Patina

In 2004 when the superintendent at Tuzigoot posed questions about the Phelps Dodge industrial waste site that abutted the national monument, a consulting hydrogeologist responded that the tailing pile measured 3,300 feet long, 1,800 wide, had a surface area of 116 acres, and contained close to 5 million tons of mill tailings.[1] The industrial waste site was the accumulation of the Clarkdale smelter and concentrator tailings for the United Verde Mine from 1927-1953. This was one of the most obvious consequences of a national monument bordering an industrial operation. To understand the establishment and operation of Tuzigoot National Monument, it is necessary to understand several powerful effects of the United Verde Copper Company in Jerome and Clarkdale from the 1880s to the 1930s, the Phelps Dodge Corporation from the 1930s to 2000, and the Freeport McMoran to the present on the area's population, labor, economics, environment, and natural and built landscapes.[2]

Jerome is Copper Riveted to Prosperity

In 1916 the *Jerome News* reported on the hometown's biggest body of high grade copper ore in the world and enumerated the mineral belt's mining companies: the United Verde, Arkansas & Arizona, Three Medal, Green Monster, Dundee Arizona, Venture-Hill, and Grand Island. It was not possible to know, at that time, that 1916 would be in the middle of a 70-year span when "Jerome is copper riveted to prosperity," and mining determined the health and wealth of the land and people in the Verde Valley.[3] The ups and downs and general contrours of gold, silver, and copper mining in Jerome were many. In the 1880s several mining claims, including the Eureka, Sleeping Beauty, and Azure and Adventure combined to form the United

Verde Copper Company, with James McDonald as President and Eugene Jerome as secretary/treasurer. Although the telephone and electric streetcars and motors were fueling an international demand for copper, prices per pound were fluctuating and Arizona's remoteness and lack of a railroad connection thwarted major investments. With the construction of wagon routes to Ash Fork and Prescott there were glimmers of the future possibility. However, it wasn't until William A. Clark purchased the United Verde in 1888 and built a larger smelter and the United Verde and Pacific Railroad in 1893 (called the "crookedest railroad in the world" and "the corkscrew line" because of its 187 curves and 28 bridges in 14 of its 27 miles) that Jerome was really connected to the profitability of copper markets via the main line of the Santa Fe Railroad.[4] Several fires destroyed sections of the town in the late 1890s, which required a series of rebuilding to accommodate the growing number of residents. More important to the mining operation, a series of underground fires threatened the very feasibility of underground mining. Open pit mining replaced it, and the Jerome smelter began processing for the newly formed United Verde Extension Gold, Silver, and Copper Mining Company in 1899. In 1910 it became obvious to William Clark that it was necessary to move the smelting operations off the mountains and down into the valley below.

Clark's Copper Company Town: Clarkdale

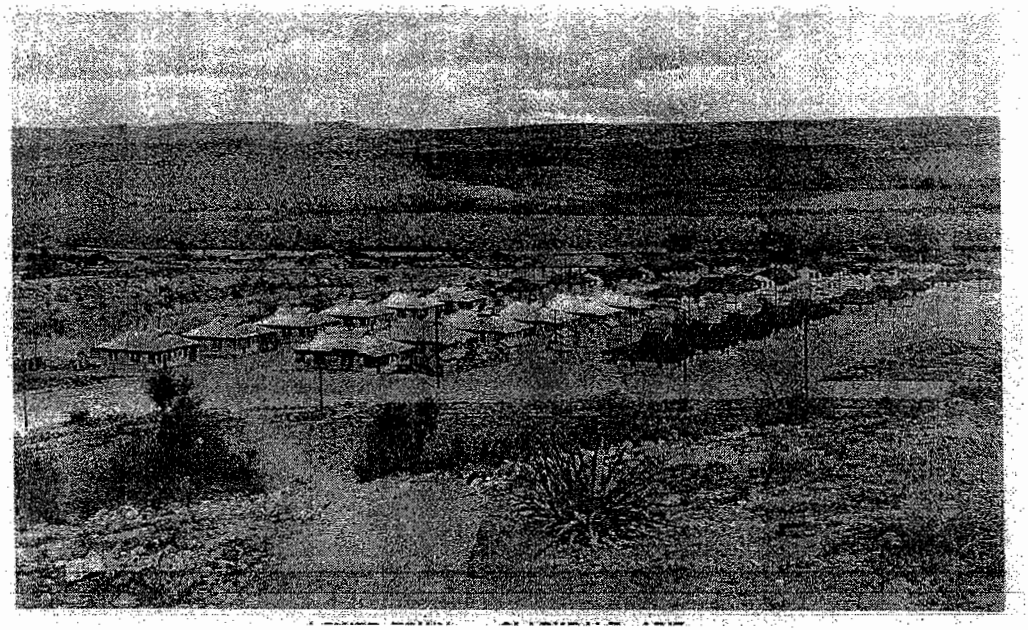
A new mining operation site required a whole host of amenities. They ranged from adequate water for potable and industrial uses, good drainage, plentiful sand and gravel for construction, clay for brick making, and easy access to railroad tracks, to enough land to accommodate a slag and tailing area, a power house, machine shop, foundry, blacksmith, carpenter and pattern shops, etc. It also required ample acreage for everything necessary to support the residential and community needs of the mine workers. United Verde began buying

land and water rights from Verde Valley farmers, transferred the acreage to the Clarkdale Improvement Company, and leased the land back to the farmers with smoke easement deeds. For instance, one of the farmers, W.A. Jordan, sold his orchards to United Verde and then Jordan ran what became called the Upper Verde Farm and Orchard Company. In addition to orchards there were several dairies to provide products for the work force. John Tavasci recalls that "There was five dairies, four dairies in Cottonwood area, and one American Dairy up at Tapico."[5] (insert here the Tavasci counterpart and mention the various Verde Valley dairies in Jerome, called Verde Valley, Clarkdale, Swiss, Mexican). Clarkdale Improvement Company began laying out a new smelter with the ability to handle low-grade ore, previously impractical to smelt in the Jerome works, as well as the ability to smelt high-grade ore at greater profits. A pipeline from Haskell Springs would provide water. Arizona Public Service agreed to provide electricity and built the Childs Power Plant on Fossil Creek with a direct transmission line to the new smelter and Clark's new town, Clarkdale.

The new company town was a wholly owned subsidiary of the United Verde Copper Company complete with housing, streets, lighting, policing, a sewage system, businesses, banks, and recreational facilities. The town was to become a "garden spot" of the new state and the mine operators promised the 400-foot stack would be high enough so that there would not be a danger to surrounding crops or vegetation. General stores, banks, drug stores, a post office, a moving-picture theater, bakeries, restaurants, lodging houses and office buildings were built to suit the merchant leases. The town was segregated by class and ethnicity: Upper Town for white collar workers, Lower Town for blue collar workers, and Patio Town for Mexican workers located outside the planned area on the banks of the Verde. It was thought that labor unrest and radicalism would be minimized by the provision of permanent workers living in good living

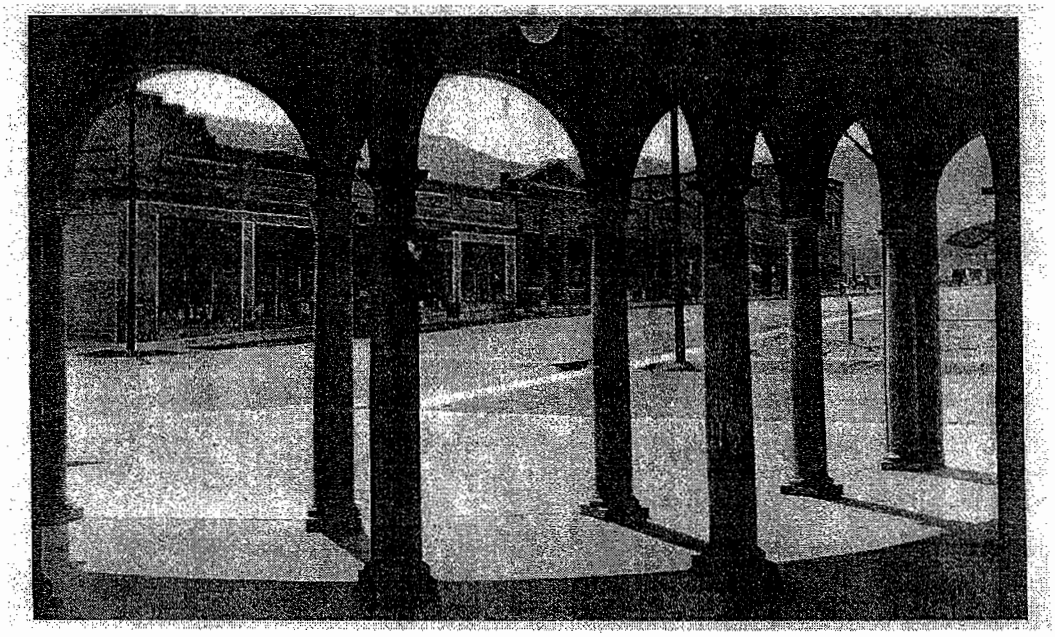
conditions. Town planners included a 9-hole golf course, churches, and schools. The town was laid out for 500 families. The smelter went into operation on May 26, 1915 and in addition to handling the ore for United Verde it handled the Commercial Mine ore from Copper Basin near Prescott (and Ludlow, CO??)[6]

Insert something about schools, 1914 construction of school for Indians?



Lower Town, Clarkdale postcard

#63 in Jerome photos from Jerome Historical Society



Street scene from Clarkdale post office postcard

#55 in Jerome photos from Jerome Historical Society

The Cycle of Three Verde Valley Smelters: Jerome, Clarkdale, and Clemenceau

For several years three smelters were in operation in the Verde Valley: Jerome, Clarkdale, and Clemenceau (constructed from 1917 to 1918). From 1923 to 1930, United Verde was the largest producer of silver in Arizona, the largest producer of gold except in 1923, and the largest producer of copper except in 1924 and 1930. Jerome's population peaked in 1929 with 15,000 people and then an enormous wall collapsed and in 1931 the Jerome mines closed.[1] The year 1925 marked the beginning of the end for mining in Jerome when 250 pounds of dynamite were used to blast the Black pit and the entire town began to shift. The mines in Jerome closed down in the early 1930s, by 1957 only 150 made Jerome home, in 1964 landslides made it the "town on the move," in 1967 tree of heaven was seeded from the air to prevent erosion and more landslides and it also became a National Historic Landmark. In the last 45 years it has

_____ (characterize it). Clarkdale's population peaked in ____ with _____ people. The year 1953 marked the beginning of the end for mining in Clarkdale when the mines ceased operations. In the last 45 years it has (characterize it.) Clemenceau's smelter operated until 1939. It became a part of Clarkdale upon incorporation in 196?

The impact of mining operations on the surrounding landscape was severe. Acid fumes killed the pines that weren't cut down for lumber to build Jerome and to fire the mining operations. The apple orchards that once flourished in the Clarkdale area were damaged by pollution and, in some cases, buried under slag piles. (note on water use, Verde, Fossil Creek, etc.) Clarkdale's milling, crushing of the ore, and separating of the copper-containing created industrial waste, which needed to be stored, somewhere. From 1927 to 1953 the milling and crushing of the ore was followed by a process to separate the copper-containing ore. A flotation process separated the copper-enriched ore, and the rest became slurry that was transported to a tailing impoundment in a nearby abandoned oxbow of the Verde River. The tailings grew over the years (insert note about it growing in size and shape) From the mid 1950s to the 1980s Phelps Dodge drew water from Peck's Lake to irrigate the surface of the tailings to keep the dust down. Beginning in the 1980s Phelps Dodge allowed the town of Clarkdale to pump its effluent from its wastewater treatment over the top of the tailings. Add here about superfund site, etc.

The impact of mining operations on mobility and labor was also severe. The capital investment required for a long-term mining enterprise required large numbers of Irish, Mexican, Italian, Chinese, and others to build a mining town and then grow into full industrialization.

While William A. Clark is credited with being a visionary capitalist and willing to pay high wages to buy hard work and loyalty, Jerome was the site of a little known labor strike that

preceded the much better known Bisbee deportation. In July 1917, 70 strikers were rounded up, put in two cattle cars provided by United Verde, and deported to California. After the California authorities refused to accept them they were sent back to Kingman, Arizona. While there were no deaths or serious injuries, this episod is evidence of seriously contested relationships. The control exerted over Clarkdale residents was exerted without brute force, and while more subtle, the mining company was owner of all property and arbiter of acceptable behavior.[8]

End of July 10, 2009 draft

ADD here about Phoenix Cement …

Phoenix Cement …

1956 – present

1959 Phoenix Cement Company's "fugitive dust"

To supply 3 million barrels of cement for Glen Canyon Dam on CO River near Page

Limestone, volcanic rock, dolomite

Kachina Block 1974 for concrete and cinder block

Attracts people to Clarkdale, buy homes

Supposed to go away after dam, but keeps going for highways, sprat of superhighway defense system

Salt River Materials Group, on reservation land, largest structure in AZ?

Has 6 of 7 materials needed in mountains

Go back in time …some evidence of people as far back as 2,000 BC

1125 Indians from north, Sinagua, moved south, joined others, created pueblo at Tuzi

Need to subdue Indians to open area to mining … Forts / Indian Wars …

1850 Ed Peck settled in swamp; harvests native grasses for hay at Fort Clark in Chino Valley

1850-1890 livestock peaked, cow trails, overgrazing, erosion

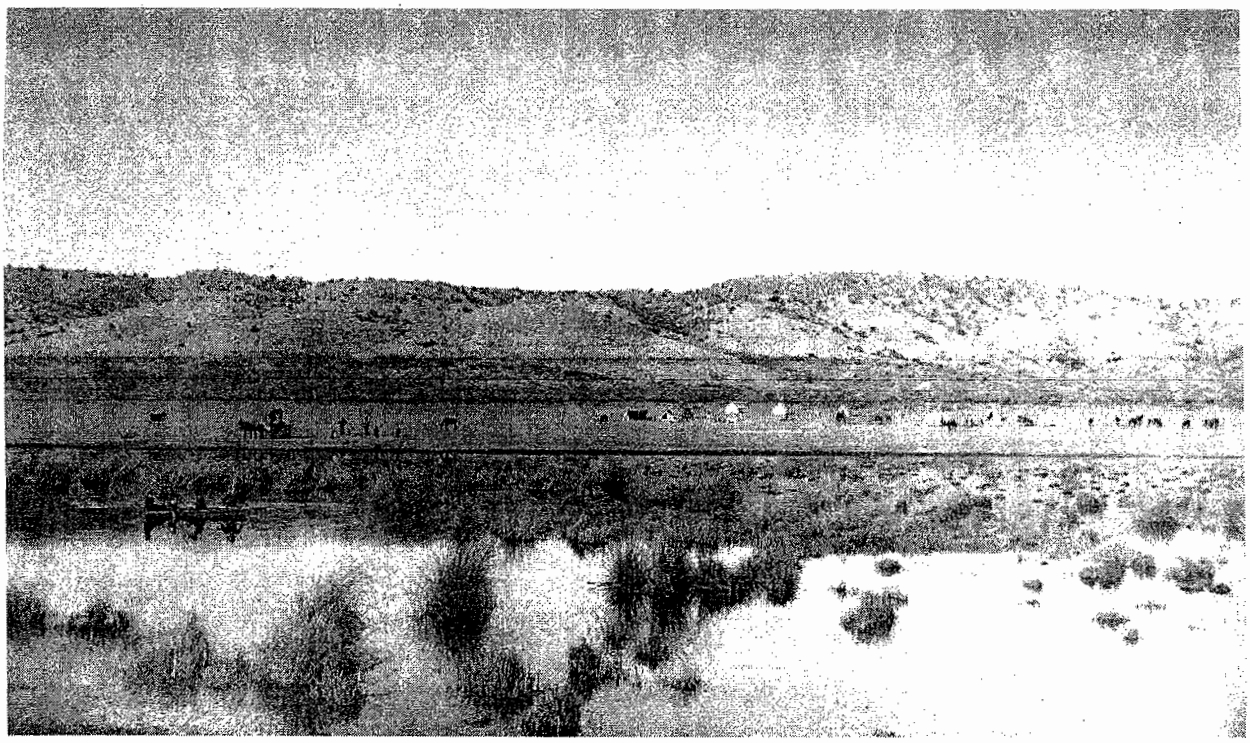
1875 Feb army rounds up 1,451 Yavapai and Apache and marched them to San Carlos Indian reservations

Forts/ Indian wars

Antonio de Espejo finding Jerome mines worthless, Farfan and other Spanish citings

Salt mines

Sinagua use of Jerome minerals? Copper as pigment for coloring Iron: brown; manganese: black; chrysocollar: water color: azurite:blue; malachite: green.



Mearns Peck Lake Hunting Trip Jan 1887

[1] For tailings dimensions, see correspondence from Karen Schwab, Senior Hydrogeologist and Patrick Forman, Project Manager of URS to Michael Leach, Senior Environmental Engineer, Phelps Dodge Corporation in response to U.S. Department of Interior NPS on Clarkdale Tailing Closure, June 3, 2004.

[2] For tailings dimensions, see correspondence from Karen Schwab, Senior Hydrogeologist and Patrick Forman, Project Manager of URS to Michael Leach, Senior Environmental Engineer, Phelps Dodge Corporation in response to U.S. Department of Interior NPS on Clarkdale Tailing Closure, June 3, 2004.
[3] *Jerome News*, April 21, 1916.
[4] Young, Herbert V. 1972; 17.
[5] John Tavasci, interview by Nancy Dallett, November 14, 2007.
[6] See Clarkdale Historic Resource Survey for a complete description of construction, architecture, and social life planned for Clarkdale.
[7] Betty Gee, Colleen Lieske, Mark Robson, and Marvin Ulrikson, *Jerome Arizona: A Study of Coherence, Relationships, Energy and Form.* (Tempe: Arizona State University, College of Architecture and Envoronmental Design, School of Architecture, 1988).
[8] For information on mining in Jerome and Clarkdale, see Berman, David R 2007; Brogdon, John Carl 1952; Byrkit, James W. 2003; Chabot, Nancy Jo, 1992; Cleland, Robert Glass, 1952; D'Arcy, Richard L, 1930; Douglas, Ernest 1916; McBride, James 2006; Obrien, Carole A. 1991; Prichard, Nancy Lee 1992; Rickard, Forrest R 1987; Schwantes, Carlos A 2000; Young, Herbert V 1972

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Chapter 3

National Park Service Stewards Tuzigoot 1939-1967

*INSERT SECTION: **Constructing the Tuzigoot Phase of Sinagua Archaeology and Establishing the National Monument**

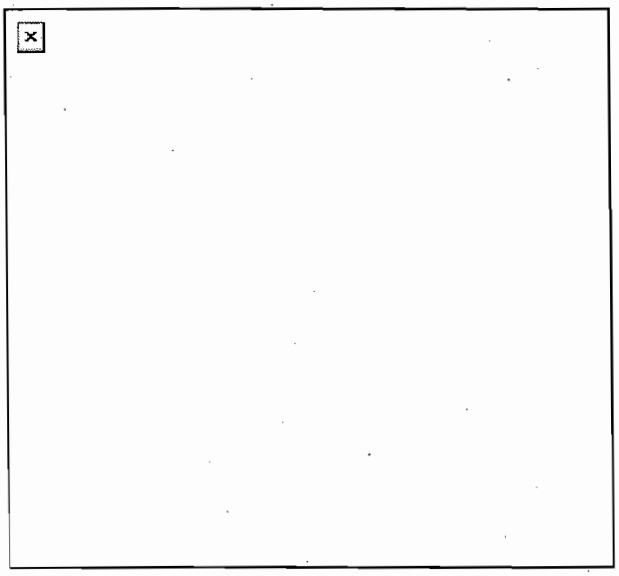
Name: Tuzigoot; Born: July 28, 1939; Size: 43 Acres, Parents: National Park Service, Southwestern Monuments #27

The first documentation of conditions at Tuzigoot for the National Park Service as it considered inheriting the site was supplied by Earl Jackson, superintendent at Montezuma Castle. In 1939 Frank Pinkley, Superintendent of the Southwestern National Monuments, requested Jackson to investigate Tuzigoot. Pinkley wanted to know whether Tuzigoot required an NPS caretaker or guide to protect the place and to provide visitor guidance. Jackson visited Tuzigoot on September 12, 1939, investigated the site, and then wrote a three-page letter to Pinkley. His letter provides a checklist of the issues that would dominate the work of NPS staff for the next 30 years.

Jackson first noted the effects of weathering on the excavation and the urgent need for repairing ruin walls, which he estimated required $500 for stabilization. The second issue Jackson addressed was the subject of vandalism and leaks, both of which required maintenance and preventive measures. The third problem Jackson noted was the combination museum and living quarters. He mentioned the termites and then turned to the much more serious problem that would plague the site for many years to come: the water line. Mr. and Mrs. Reed, who were the caretakers furnished by Phelps Dodge, toured Jackson around the facilities and explained that they hauled in city water. When Jackson asked why, in order to demonstrate, they simply poured him a glass of

water from the sink faucet, and then warned him not to drink it. Jackson smelled it and said "it was about as vile a smell as I ever encountered."[1] Mr. Reed explained that Phelps Dodge put in 1.3 miles of water line across the river by using material from its junkyard. The tubing was full of rust, lime, and corrosion, and made the water unfit to drink. Mr. Reed, a plumber, was unable to unclog the system and instead had installed a settlement basin on the main line. That water was only for cooking. The final topic addressed during Jackson's tour was visitor access. Mr. Reed kept the museum locked at all times and only officials of Phelps Dodge could gain access. Jackson's appraisal was that there was only a slight need for a caretaker or guide and suggested waiting until a salaried employee was available for the new monument. Jackson described the entrance road as being in good condition, but access to Tuzigoot became a major issue that would only be resolved with the construction of a new entry road in 1967.[2]

The inaugural entry for Tuzigoot in the Southwestern National Monuments monthly report was in July 1939. Mimicking a birth announcement for a child, the report depicted a card coming out of an open envelope with "Name: Tuzigoot; Born: July 28, 1939; Size: 43 acres, Parents: National Park Service, Southwestern Monuments #27."[3]



Southwestern National Monuments Monthly Report for July 1939

The first formal NPS ranger began work at Tuzigoot on October 5, 1939. Ranger E.C. Alberts began guiding trips for the first 360 visitors that month. He also started cleaning up in anticipation of the monument's first acting custodian. During this time, Alberts noted that the Clarkdale smelter tailings were extended that month and as a consequence would form a natural boundary to the entire Tuzigoot Ridge on the west. He suggested that the guides at Tuzigoot would need to include a "dash of metallurgy, chemistry, and economics" since, "on a clear day with the view of Jerome perched upon the slopes of Mingus Mountain it takes considerable forensic exertion to keep these non-local visitors from expressing their amazement at such a spectacle – even in the midst of a fairly coherent explanation of pueblo room construction."[4] He also made the first written comments on the industrial pollution that would plague the aesthetics at Tuzigoot. His comment on the issue was aptly foreboding: "Praise be that the wind is usually in the east to blow the smoke of the smelter away from us."[5]

Reconstructing, Interpreting, and Providing Access to the Ruins

The NPS would often have several monuments in an area share staff, but in this case decided to provide Tuzigoot with its own personnel rather than rely solely on the staff at nearby Montezuma Castle. Terah Smiley became the first acting custodian, and arrived at Tuzigoot in November 1939. Smiley came from Mesa Verde National Park and immediately began rearranging the exhibits, painting the inside of the museum, building a ruins trail, and clearing the tumbleweed that had covered the ruin walls. He noted the repair work necessary in Unit VI as well as the need for repair on the main structure at the top of the hill that was constructed on debris and was giving way under the weight of the walls. Smiley considered the reconstructed unit his biggest headache and he hoped it would either fall in or be condemned. Years later it would be documented that the original construction at Tuzigoot was so poorly completed that although the ruin appeared massive it was inherently weak. By 1939 many of the walls were in deplorable condition, by 1940 several were propped up with timbers, heavy rains crumbled large areas of wall, and through the 1940s small local crews were working to maintain the ruin.[6]

In a 1997 interview with the first permanent custodian of Tuzigoot, Jack Cotter[7] said he admired the work that Smiley had accomplished with the twenty-nine exhibit cases and his tasteful juxtaposition of artifacts and explanations. Beginning his Tuzigoot service in April 1940, Cotter's recollection of his arrival at Tuzigoot gives a quick sketch of changes that were occurring to employ staff at the newest Southwestern national monument. He had taken the civil service examination in Wyoming in 1936 and heard nothing at first. Then he received a letter from Frank Pinkley at Casa Grande, head of

the Southwestern National Monuments at the time, and whom he had written to regarding the monument. The letter invited him to Tuzigoot, of which he had never heard. He went to Casa Grande, "to discover that Frank Pinkley had just dropped dead a few days before."[8] He arrived at Tuzigoot in April 1940 in his 1937 Plymouth sedan filled with everything he owned, took over from Smiley, and began taking down the reconstructed Lower Ruins, which the Park Service did not want because it was not original. His bigger challenge was the furnace that blew up, leaving, "a gradiation [sic] of soot from half an inch near the furnace to approximately an eighth of an inch at the far end of the Museum." He seriously considered quitting, but there were two reasons that kept him in place: by that time he couldn't return to the University of Pennsylvania and he was engaged to be married. He got the furnace to function properly and stuck it out at Tuzigoot. When his fiancée came out west they married in Prescott and she set up a herbarium in cooperation with the Department of Biology at the University of Arizona. Mrs. Cotter pressed and preserved plants, recorded several new species, and made a bird count of some forty-odd species including migratory birds and pelicans. It was common at the time for wives to work, as Frank Pinkley described them, as "honorary custodians without pay."[9]

Cotter spent a great deal of his time repairing the facilities and the ruins. His stabilization work was aided by varying numbers of National Youth Association workers. They experimented with linseed oil and other materials to harden the adobe, "in a desperate effort to save the remaining sound portions of the walls."[10] Heavy rains caused cave-ins that revealed the bones of children, which were later arranged in situ, framed, and set below a heavy plate glass, which immediately began, "threatening to

become the most popular attraction."[11] Many years later in an interview Cotter remembered taking a thin rock and putting it over the glass to mask it. His recollection gives a vivid sense of how he manipulated visitors' experiences of the monument. He said:

> So my habit was when I took trips with *every* group that came to Tuzigoot, as soon as they drove up, came into the Museum, I greeted them, I gave them a little talk about what the Verde Valley was, how it was formed geologically, Lake Verde and so forth, mentioned the caves down near Camp Verde where they had mined salt. And then explained how the dam had broken and let the water out and you had the modern landscape evolved there. Then I put the Indians there, beginning whenever it was, 900 or 1100 AD., and then brought them up to the present. Well, in doing that I found that I had interested a good many people, because they would say, 'Well, we have Indians where *we* are.' And they would mention where they were from, and then because I knew something about the archaeology of practically every state in the union, I would talk to them about *their* archaeology. They would become *twice* as interested then, because I was talking about their own home. And by the time they were ready to go up into the ruins, we were fast friends. I escorted each group up on the ruins personally, because I didn't want anyone up there unless I was along. And then as a culminating experience, I would whisk the rock away and show them the baby burial. That was real gangbusters -- they loved it. Later on, after the guys were working on another part of the ruins, this time down toward the tailings pond which would have been toward the southwest side, we found another complete

adult burial. I uncovered that and put a large glass over it and a hinged door there. I put the door there so that it was practically invisible. We would take people up there, lift the door up, and much to their amazement, there was the burial. People absolutely loved that – it was very graphic stuff."[12]

The first mention of the road being an obstacle to access is noted in December 1940 when rainy weather washed out the .6 mile gravel approach road for three days. January rains forced a closure for two days, and so began the decades-long struggle to secure a suitable paved connection for Tuzigoot travelers. His reports also begin the documentation of the decades-long struggles ahead to maintain the road and untangle the complicated situation with regard to ownership. He noted in 1941 that over the last five months Tuzigoot had lost a half a month in visitation due to the impassable approach road and that the County Supervisor agreed to gravel the road pending easement to the government, state, or county. As an added insult, someone mistakenly cleared land for a road across the monument 300 yards north of the museum as part of a new road being completed for farmers during high water which then had to be relocated off the monument.

Tuzigoot in the 1940s was constrained by all the same issues as the other units in the Southwestern National Monuments. From the time of the National Park Service Act of August 25, 1916, there was a distinction made in funding and support for national park units versus national monuments. Throughout the 1930s, Frank Pinkley advocated for parity for the national monuments in his supervisory capacity of all the monuments in Arizona, New Mexico, southwest Colorado, and southern Utah. Grace Sparkes, who had done so much to secure federal funds in the 1930s, turned her attention in the

1940s to remedy the inadequate funding for national monuments in Yavapai County, and she was able to enlist Senator Carl Hayden in the efforts to attract the attention of NPS superintendent Albert Camerer. However, increased attention did not lead to increased budgets for the units. Construction of roads and residences, stabilization of ruins, and installation of trails and signage were constantly documented as necessary for each of the Southwestern units, and it was mostly due to Pinkley's pressure that even a fraction of the needs were filled. By the time Tuzigoot came into the park system, Pinkley's ability to rouse attention and funds had somewhat declined after a disagreement about how to reduce the effects of visitors at Montezuma Castle National Monument. Pinkley had proposed a tunnel behind the Castle ruins to enable visitors to see the original floors and ceilings, thereby improving accessibility without compromising preservation. NPS headquarters in Washington rejected the idea, and Pinkley was quite disturbed about this. Equally as important, Washington was developing new methods to integrate planning and development methods for NPS and Pinkley's methods were considered outdated. In 1937 NPS created five geographic regions for administration of all the parks and monuments. Tuzigoot fell into the jurisdiction of region three. The office for this region was established in Santa Fe in 1942, and this office oversaw the process for planning and development, which was conducted increasingly by professionals in various fields including landscape architects, engineers, planners, educational specialists, and interpretive designers. They addressed the building of the parks and monuments, as well as the infrastructure, interpretation, resources, transportation, and facility needs associated with specific monuments. This process of professionalization was ultimately another layer of

bureaucracy. At the time that Tuzigoot came into the NPS these transitions were taking place and at the beginning of NPS stewardship of Tuzigoot it was managed by the older, folksier Pinkley style for several years, in spite of the passing of Pinkley. Where Pinkley had been an avuncular character in the familial atmosphere of Tuzigoot, the new changes shepherded an era where Tuzigoot lost its regional champion and responded to procedures as they filtered down to all the monuments.[13]

Cotter's reports reveal big plans before the war interrupted all National Park Service units. In 1941 he submitted plans to headquarters for a sewer covering, to lay two miles of pipe for monument water supply from town, and to cover the approach road with gravel. He also became more vocal about the effects of the two large smelter chimneys that poured out smoke and occasionally came over to Tuzigoot as well as the tailings pond that attracted pelicans who were disappointed when they could found only arsenic in place of fish.[14] Just before Cotter left Tuzigoot for wartime service in April 1943 he managed to fence 1.34 miles of the monument perimeter. At that time he was on the verge of getting the submerged pipe to be replaced with open piping, and Acting Custodian Tod C. Sowers inherited that project for the duration of the war.[15]

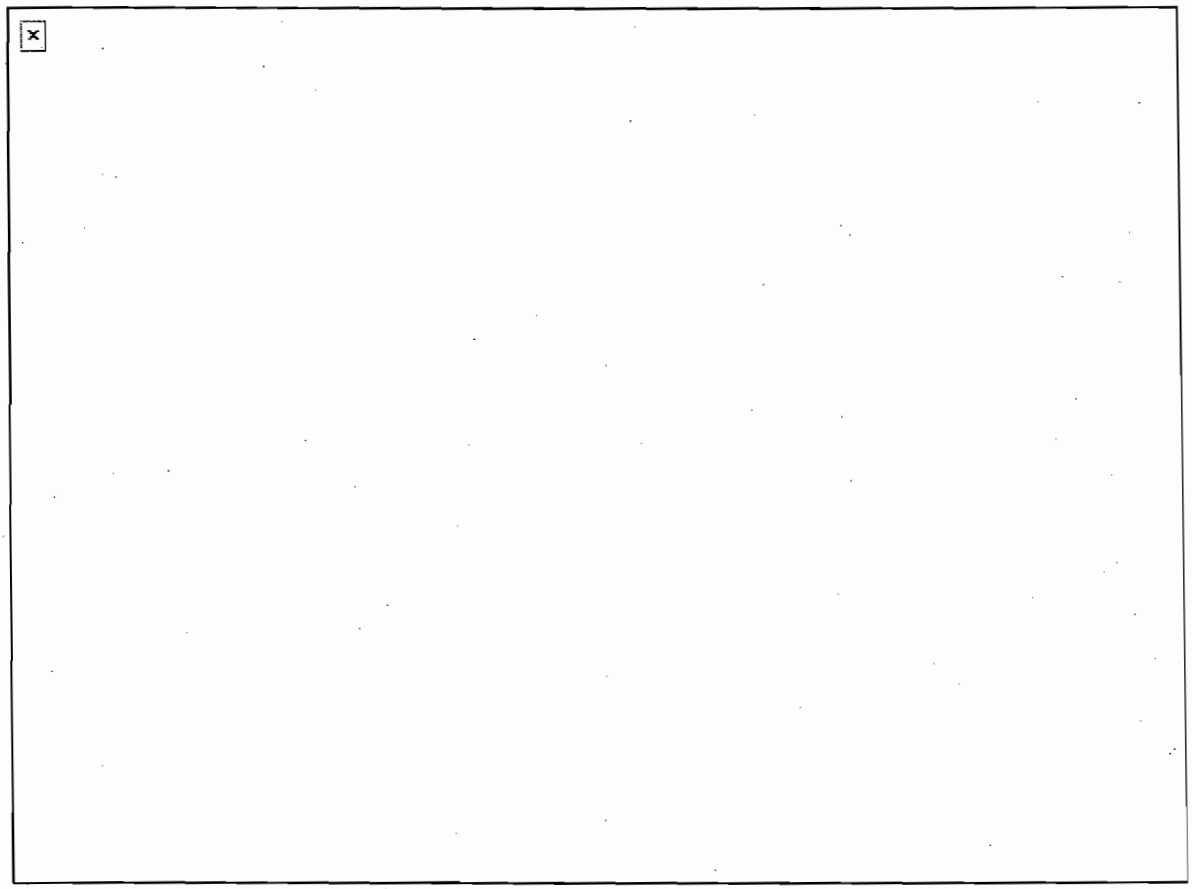
Post-World War II Plans and a Prospectus for the Future

After the war, Tuzigoot filed its first master plan complete with an archeological base map, a general development plan, and a developed area plan. The 1947 drawings and development outline is the best source of written documentation on the circulation system, buildings, and all the ideas for change at the national monument. On the road system, the report described the access route as following, "a devious course, leaving

U.S. Highway 89A at a hazardous intersection in Clarkdale, crossing the Verde River on a one-way wood truss bridge and following existing, low standard, county roads for a total of 1.9 miles. A portion of this road is impassable during rainy weather."[16] The proposed access road would follow the alignment of an existing county road, "giving a south approach to the monument, from which side the most outstanding view of the ruins is received." The plan called for obliterating the service road and reconstructing it opposite and away from the public side of the building as well as obliterating part of the ruin trail to encourage visitors to first visit the museum. In terms of buildings, the administration building and adjacent garage with public toilets built before the area became a national monument were considered unsatisfactory in planning and construction. The inclusion of the custodians quarters in the museum building was unsatisfactory in terms of monument administration and employee privacy. The remodeling of the administration-museum building would include an addition on the southeast. The existing residence would be converted to a small lobby enclosed only with glass as a waiting and resting place and collection point for conducted trips to the ruin. The garage with the public toilets would be removed, two structures including a 5.5 room residence and a 4.5 room residence with attached garages were proposed for the custodian and ranger. A utility court and building were also required. Finally, it was proposed that the old boiler pipe be replaced by wrapped galvanized pipe, that overhead power be replaced with underground cable to the administration-museum building, that the 6-inch vitrified pipe line from the administration-museum building to a cesspool be replaced with a concrete septic tank, and that the overhead telephone service be placed underground and extended to the new residential and utility areas.

These ambitious proposals would require another ten to twenty years to become a reality. Although there was hope that the post-World War II period would bring increased funding for maintenance and construction, the Korean War kept NPS budgets low. In a 1951 annual report for Tuzigoot, the general report described the monument as feeling, "the barest minimum in allotments. Prices of materials and supplies are again inflationary in trend as a result of the Korean Affair, and effect the larger than usual appropriations which our Director and his staff have, through excellent presentations before budgetary committees, enabled the National Park Service to function during the 1951 Fiscal Year."[17] A handwritten note on the cover page from Hugh Miller, Assistant Regional Director, urged his superiors to, "Read this for a delightfully typical statement of the very real trials of a small area."[18] One of the major accomplishments of that year was the completion of the self-guided trail with 19 stakes and accompanying leaflet. The only construction project that received even sporadic action was the water line. The year 1947 saw 400 feet of new pipe was laid in January; 1,200 feet was laid in August 1948; the well was drilled in March and April 1952; the pump house with a 1,000 gallon tank was installed in May; and in June 1952 Tuzigoot "enjoyed its first flagon of pure, untainted water."[19]

Insert Tuzigoot trail 1951 here



Ten Arizona Cyprus trees donated by Superintendent James W. Brewer were also planted in front of the museum, signifying an investment for the future of which we are beneficiaries today. Brewer's contribution to museums and archives beyond Tuzigoot left a legacy. He served on the board of the Museum of Northern Arizona and was a founding member of the Jerome Historical Society, which was formed when Jerome was beginning to be a ghost town. Brewer served as first Chairman of the Executive Council of the Society. Superintendent Brewer and Archaeologist Burroughs also helped neighbors. In 1952, when the Clarkdale Dairy milk house burned, they joined a fire-fighting group to help save it. This community involvement harkened back to the Pinkley days, where the monument staff worked in conjunction with the town. Their

efforts were in vain due to a lack of water, and this drew attention to the vulnerability of the monument.[20]

When Phelps Dodge shut down the smelter in 1953, the Verde Valley economy was poised for tremendous change. That same year Tuzigoot looked to the future and published its first museum prospectus. Roland Richert, Tuzigoot's archaeologist, wrote the report, which incorporated suggestions by Naturalist Dale King, Archaeologists Thomas Onstott, Erik Reed, Albert Schroeder, and Carroll Burroughs, as well as Superintendent James W. Brewer, Jr. The Museum Prospectus is worth quoting at length because it is a document that synthesizes considerable archaeological understanding as well as an assessment of visitor demographics and interests. It concluded with support for the 1947 museum addition proposal. Not only did it commend the efforts of the past, but the prospectus looked forward to the future with specific objectives in place. For the first time, there was a detailed proposal for museum exhibition topics.

The prospectus grew out of the NPS 1940 field manual for museums, noting that the two primary functions of the park service are preservation and interpretation. Richert characterized the exhibit space as relatively large, totaling 1850 feet, but hampered by lack of an entrance hall, inadequate toilet facilities, and unsatisfactory workspace. Richert considered the museum of primary importance to the interpretive program at Tuzigoot because, "The ruin, excavated and open to the elements, is almost without in-place exhibits; it is an architectural feature of limited comprehensibility unless seen in the context of Tuzigoot history and life. The interpretive function of the museum is to provide this context, to tell the story of the village and its people, and to prepare the

visitor for a full visualization of the ruin as a living pueblo."[21] He expressed confidence that, "Although the present exhibits fall far short of this ideal, the museum and the collections at Tuzigoot are capable of its realization." He argued with the presentation of archaeological materials from the site as collections of objects and urged their presentation as elements in a functional display, and to, "illustrate many facts of Tuzigoot life and to present, in comprehensive fashion, the Tuzigoot story."[22]

For the 24,090 visitors to Tuzigoot in 1952, the prospectus estimated that the average time spent in the museum was approximately twenty minutes. A sampling of 2,400 parties at Tuzigoot in June and July 1952 showed that seventy-three percent were from out of state, with a fifty-percent majority visiting from California, and more specifically southern California. Next in representation were travelers from southern Arizona, primarily transients headed north through Flagstaff, followed by a significant number of visitors from Phoenix sightseeing for the weekend with out-of-state guests. The prospectus was adamant that the visitors would have seen or would be planning to see nearby museums, including the Arizona State Museum at Tucson, Pueblo Grande at Phoenix, Casa Grande at Coolidge, Montezuma Castle and Well near Camp Verde, Museum of Northern Arizona at Flagstaff, Walnut Canyon and Wupatki near Flagstaff, and the Wayside Museum at Grand Canyon. The report positioned Tuzigoot as the "gateway" monument and urged that Tuzigoot displays be completely integrated with Montezuma Castle and Well and correlated with those of Walnut Canyon, Grand Canyon, and Casa Grande. It also advised that the important thing was to ensure "uniformity in chronological and cultural relationships [be] presented and to avoid unnecessary duplication."[23]

Visitor contact and experience at Tuzigoot at the time was characterized as follows in the Prospectus:

> The interpretive program at Tuzigoot employs full-time ranger contact in the museum, museum exhibits, a two-fold leaflet, and the ruins trail with its self-guiding trail pamphlet. The visitor is met in the museum, given a leaflet, a trail guide and such information as he desires; he goes through the museum, with the contact man always available to answer questions, and then follows the trail through the ruins with an excellent trail pamphlet as his guide. The trail returns him to the museum where he may ask additional questions. This program is basically sound for the monument, and seems adequate for the future. It will be considerably more effective, however, when physical and interpretive developments proposed in the Master Plan and in this prospectus have been initiated." The monument story was considered incomplete and inadequate because it lacked the ability to communicate neither the story of the chronological-cultural relationships nor the specific story of Tuzigoot. Because the exhibits presented a static collection of prehistoric items with too little functional integration, they hindered the visitor's ability to visualize the everyday life in the pueblo, and the museum was graded as the weakest link in the interpretive program. Proposed development supported the 1947 plan for an entrance hall. It went on to propose the elimination of the fireplace, the closure of all wall openings, replacing the viga-and-reed replica of prehistoric ceiling construction with a plaster ceiling, artificial light, and asphalt tile on the floor.[24]

The prospectus then ends with a series of 14 proposed exhibits to best meet visitor needs. These are specifically outlined in the *Museum Prospectus* as follows:

1. Early Americans, 13,000 B.C. to ---?

   (Double wall case; large map of the New World showing migration and spread, cultures or finds, and dates; these people were hungers, fishers and gatherers.)

2. New World Agriculture, 3,000 B.C. to ---?

   (Double wall case; large map of the New World showing culture areas, spread of agriculture, and dates.)

3. Southwestern Farmers on the Move, 1100-1400 A.D.

   (Wall cases; series of maps of the Southwest showing cultures and movement at different dates; best-known Southwestern ruins can here be placed in cultural context.)

4. Rise and Fall of Tuzigoot, a Farming Village, 1125-1400 A.D.

   (Wall case, models or drawings of Tuzigoot at 1125, 1200, 1350, as abandoned and falling into ruin, and as it appeared before excavation.)

   Note: Perhaps 3 and 4 should go together in a double wall case end & could lead directly into 5.

5. Excavation of Tuzigoot, 1933-1934 A.D.

   (Wall case; photographs or models of Tuzigoot before, during and after excavation; several stages.)

6. This is How they Built –

(Wall case; wall section showing detail or large rocks and mud, plaster with hand-prints; corner detail showing abutting walls; ceiling detail; axes, and beam-end out with stone axe.)

The exhibits and descriptions went on to include such topics as "Inside the House," "Tuzigoot, 1350 A.D.," "Pottery was Important," and finally, "Some Died and Were Buried Here."[25] The plan advised the presentation be about human activity and that the materials illustrate the human story. The completion of the museum prospectus in the early 1950s put Tuzigoot in a relatively good position to be ready to document its ideas and needs when the Mission 66 program came along and required detailed documentation for future construction.

Changes in the Wind

From the time that the National Park Service took over at Tuzigoot, superintendents noted the impacts when the wind shifted and the dust from the tailings operation at Phelps Dodge created soot, discomfort, distraction, and damage at the monument. However, the comments were generally descriptive in nature and there is no indication of any attempt to prevent or mitigate the consequence of being positioned so close to an industrial waste site. The power of Phelps Dodge to control the local economy was very well appreciated in Clarkdale and the nearby communities and there was a tradition of accepting the environmental consequences that came with a dependence on mining and smelting. Part of this tradition stemmed from the fact that Phelps Dodge owned much of the farmland and leased it to farmers who could not legally object to loss of crops due to pollution. John Tavasci leased land from Phelps

Dodge for his dairy operation, the Clarkdale Dairy, at the base of Tuzigoot. In an interview with him many years later John recalled the crop destruction that could be caused by a change in the wind as well as the arrangement Phelps Dodge had with farmers.

> The smelter had two smokestacks. They were roughly around five hundred feet tall. And the base of them, you could have put about six of these houses under it. Well, ninety percent of the smoke went towards Sycamore, blowing toward the north. Ninety percent usually. Once in a while the winds would turn, and I'll tell you how bad it was. We'd have alfalfa just like that (indicating a healthy height for an alfalfa crop), and if it'd come through it'd kill it to the roots, it just stunted it and you had to go in and cut it down. And all the way down the river from here, all the way to Camp Verde, there were ranches. Probably I'd sell through maybe 20, 25 small ranches, small pieces of ground. Senator Clark, I assume he was the one that started it, or maybe Phelps Dodge. They bought all those ranches from here to Camp Verde, bought them all out. And we were leasing so there was nothing we could do about it. They bought the ranches and gave them back to the people and said, 'Do whatever you want. Smoke ruins your crop you can't sue us.' Simple as that.[26]

In January 1947 Superintendent John Cotter had a conversation with the Superintendent of Operations at Phelps Dodge, Mr. J. B. Pullen. Notes from that conversation reveal that Phelps Dodge was planning to terminate operations unless further ore bodies were developed. If not, plans for disposal of obligations and properties would begin in January 1948 and the mining operations would close by July

1948. Pullen went on to say that Phelps Dodge would, "endeavor to leave no nuisances after abandonment of properties." As far as the tailings pond, Pullen said that once the material dried and was not disturbed there was a tendency for it to stabilize and form a crust or surface, that an oil seal coat was best, and that 75 acres of scraped top soil was a major costly project. In retrospect, no crust or surface formed on the tailings to prevent dust from polluting the air and nearby properties.[27] (INSERT HERE SPECIFIC DATE IT DID CLOSE SMELTER OPERATIONS)

In 1953 the dust from the tailings kicked up the first strong reaction from the Tuzigoot personnel. Superintendent Brewer considered the dust and air pollution a health hazard as well as an accident risk because of poor visibility. He began discussing the problem with the Superintendent of the Jerome Mining District, and they conjectured about methods to stabilize the tailings. In June, higher winds carried the conversation to a higher level. Mr. Hillory A. Tolson, Assistant Director of the National Park Service, corresponded with Mr. Charles R. Kuzell, General Manager of the Phelps Dodge Corporation, about the dust from the tailings and the effect it had on the public use of the monument. At that time, Kuzell remarked on the unusually windy nature of the spring of 1953. The Park Service was willing to accept that explanation and said it would continue to observe the situation. By the summer of 1955 they had an eyeful of dust and observations and wrote again to Phelps Dodge noting that the strong winds had continued through 1954 and 1955, that the dust from the tailings was increasing, and that seemingly light winds, "caused sufficient dust to be raised to drive visitors away from the national monument." The correspondence noted the appreciation and gratefulness owed the Phelps Dodge corporation for its past contributions, "which, along

with others, made possible the establishment of Tuzigoot." The letter was accompanied by a series of six photographs taken over a 30 to 35-minute period that show the effects of the wind. The letter ended with a plea to spread a coat of soil over the tailings in the hope that plants would then be able to take root.

Photographs attached to the letter show the following events in time lapse: a beautiful windless day; some wind not bothering the monument but heading for Cottonwood; a change in the wind causing dust to sift into the museum, office, and quarters; zero visibility on the approach road; visitors caught up in the ruin with difficulty breathing; and the final photograph shows visibility under sixty-five feet, visitors are depicted as having difficultly breathing, and ends with the caption, "We will have about three man-hours of janitorial work to clean up this mess." Phelps Dodge Vice President Kuzell responded with a comment that the first half of 1955 was the windiest he had ever experienced in the thirty-seven years he had been in the State, twenty-five of which were in Clarkdale. Kuzell believed that a crust over the tailings failed to materialize as they thought it would, that they never were hopeful that plants would take root on the tailings, and they were investigating alternative measures to correct the nuisance.[28]

The photographs are remarkable in documenting the quick nature of the dust storms and its powerful impact. Equally remarkable is the voice of the local community in the dialogue regarding the situation and its impact on tourism, which was going to have to replace the valley's prior dependence on mining. The *Verde Independent* ran an editorial on May 5, 1955, with the headline, "Tailings Menace Must be Stopped." The editorial said, "The tailings pond between Clarkdale and Tuzigoot National Monument is

ruining the Verde Valley climate. Dust blowing hundreds of feet into the sky and streaming out for miles on windy days is giving us a black eye. Tourists are turning away from Tuzigoot in droves and housewives as well as shopkeepers are keeping late hours cleaning up. The tailings pond nuisance is not getting better; it's getting worse, as spring winds dry out the surface of the dump still more. The pond, so-called, hasn't seen a drop of water since Phelps Dodge Corp. stopped concentrating ore nearly two years ago."[29] It went on to suggest that, "For all the complaints about the tailings probably no one has yet asked Phelps Dodge, the owner, to do something about it. They should be asked. If they don't care to do something they should be forced to with a court injunction. The tailings need to be held down under a covering of water piped over from the smelter. When Phelps Dodge sold the smelter they lost interest, of course."[30]

That same month Tuzigoot sent tailing samples to the University of Arizona, and the examination revealed fine sand, pyrite, heavy metals, and arsenic. They sent a copy of the report to the State Superintendent of Health and the results were reported in the *Verde Independent*. In addition to Tuzigoot corresponding about the problem, several community groups got involved, including the Cottonwood Progressive Association, the Verde Valley Chamber of Commerce, and the Kiwanis and Rotary Clubs. In 1956 Phelps Dodge engineers began staking out a dike to cover the dried tailings with water from Peck's Lake. While the project was not entirely successful because of difficulty in getting water to all parts of the dump area, the situation did improve.

Anaconda Gets the Mill, Clarkdale Gets the Shaft

At the time of these arguments over air quality, a bigger change in the wind was taking place at Phelps Dodge because their ore was running out. In 1954 the company made its first private sale of property to well-known Erle P. Halliburton, who promised big things that never developed. His death in 1957 threatened Clarkdale with being sold again, which led to a drive for incorporation of the town. In 1958 Superintendent of Tuzigoot Hugh Ebert, having caught wind of the possibility of a land exchange that could directly impact Tuzigoot, inquired of the Regional Director whether it would be worthwhile to consider protecting the monument by acquiring more land as a buffer zone if Phelps Dodge were to liquidate land. The response from Regional Director Hugh Miller was that it would be difficult to justify any considerable expansion of monument boundaries to preclude possible residential and industrial development because it could appear to interfere with the local economy and might be unwise for public relations.

Incorporation could not stave off another sale, this time in August 1959, William Zeckendorf of the Westfield Corporation of Ohio, one of the world's largest real estate development companies. Westfield promised to take the small played out copper mining company town and make it a profitable place. Profits would be generated by the Webb and Knapp Company when they established a fifteen million dollar steel plant on the old smelter site. This time the idea was for the plant to process the slagheap into iron. Zeckendorf told the Verde Independent that the new mill would turn Clarkdale into a boom town. Land prices around Clarkdale quickly doubled. Webb and Knapp needed a power supply to be offered at reasonable rates and the assurance that the slag would be lucrative. Neither developed. The steel mill was built in Anaconda, Montana, instead.

As the *Verde Independent* reported in 1974 when looking back on this difficult time in the late 1950s, "In December the bubble burst. Anaconda got the mill and Clarkdale got the shaft. No mention was made of the Clarkdale plant again." Clarkdale Realty Company began selling undeveloped land in 40 to 80 acre parcels, the town bought the sewer system from Halliburton, paid for a volunteer fire department and Valley View Cemetery, and the process of creating a private town from a company town began. [31]

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NPS on a Mission

During World War II, NPS funds—like most domestic resources—were limited. Maintenance was restricted to such an extent that, by war's end, many of the NPS's roads, buildings, and other facilities had seriously deteriorated. Nor did the financial picture immediately improve after the war. By 1950, funding was twenty-five percent lower than before the war, despite the fact that there were twice as many visitors to the parks and twenty-one new parks for them to visit. [32]

This was no secret to the American public. Bernard DeVoto, a prominent historian and journalist, captured the essence of the NPS dilemma in a 1953 *Harper's Magazine* article provocatively titled, "Let's Close the National Parks." DeVoto charged Congress with treating the Service like an, "impoverished stepchild," or like a widow who "scrapes and patches and ekes out," using "desperate expedients" in an effort to survive. The article popularized phrases such as "people loving the parks to death,"

and "patch on patch no longer possible," to describe the condition of the parks as overused and in need of maintenance and funding. It grimly detailed the challenge facing NPS: the necessary revitalization of overcrowded and deteriorating parks and monuments that were all suffering from long-term neglect. Clearly, it was time to act. [33]

Enter National Park Service Director Conrad Wirth. Beginning in 1952, Wirth developed an ambitious multi-year effort that would bring momentous changes to Tuzigoot National Monument and virtually all other park properties. Wirth proposed to repair, rebuild, and construct new buildings and housing, hire new employees, raise the parks to modern standards of comfort and efficiency—and at the same time conserve natural resources. He called the plan Mission 66, and estimated that NPS would be handling 80 million visits per year by 1966, the Park Service 50th anniversary. Wirth's proposed 10-year budget included a remarkable array of projects: park roads, trails, airport runways, parking areas, campgrounds, picnic areas, campfire circles and amphitheaters, utilities, administrative and service buildings, employee residences, comfort stations, interpretive roadside and trailside exhibits, and marina improvements. President Dwight Eisenhower approved plans for Mission 66 in January 1956.

One of the immediate impacts was the creation of eastern and western design and construction offices to oversee construction of the 109 visitor centers recommended to be built between 1956 and 1966. Horace Albright, who served as assistant to the first Superintendent of NPS and as Superintendent until 1933, ranked Mission 66 as one of the "noblest conceptions in the whole national park history," ranking in importance "with the creation of the National Park Service itself."[34]

Prior to Mission 66, NPS had only planned for a year in advance. Mission 66 was a novel approach not only in the breadth of its content but also in its forward-looking, long-term vision. It also introduced a significant change in the NPS philosophy of visitor management. Planners analyzed visitation needs for an entire park area and designated special zones for maintenance, employee housing, administration, and visitor services. The visitor center became the hub of a park's interpretive program. The hub was intended to draw visitors inside and provide them with information, maps, audio-visual programs, museum exhibits, and other necessary materials before sending them outside to the park's major attractions.[35]

These changes in visitor management practice also led to a change in park architecture. The rustic style used previously throughout the system was rooted in 19th century English landscape traditions, and called for designs that harmonized structures with their surrounding natural landforms. Materials native to the local area were used, and they usually gave the impression that they were constructed by craftsmen. After the war, however, with changes in both architectural trends and in the functions of the park buildings, rustic architecture was no longer thought to fit the parks' needs.

In its place, Mission 66 created a distinctive new type of NPS architecture that is now referred to as "Park Service Modern." Rather than designing buildings to be picturesque elements of the landscape, the new approach designed them to be as unobtrusive as possible, with low horizontal profiles and flat roofs. Composed of textured concrete and other cheap materials, the new buildings aimed for an image of modern efficiency, as they fostered visitor flow among exhibit areas, auditoriums, restrooms, and lobbies.[36]

Mission 66 launched nationally on July 1, 1956, and within three years, 342 miles of existing routes were rehabilitated and 67 miles of new roads were added to the NPS units. Additionally, thirty-four new visitor centers were in operation and another twenty under construction and housing facilities increased by over 480 permanent and seasonal units for NPS employees and families who had been living in substandard housing. However, Mission 66 planning and implementation activities hardly seemed to penetrate Tuzigoot in the 1950s. While some preparation was undertaken for new exhibits and changes to the administrative museum building, the intermediate effect of Mission 66 was felt most directly when the residences were constructed and utilities were implemented in 1964, and the full effect of Mission 66 would not be felt until the opening of the new access road, after the Mission 66 decade ended, in 1967. The following section chronicles Tuzigoot's Mission 66 experience, not only because it results in physical and interpretive changes at that time, but also because these changes set the physical structure and framed the visitor experience at Tuzigoot until the first decade of the 21st century.[37]

Mission 66 Makes its Mark on Tuzigoot

In 1956 Tuzigoot was notified by the Mission 66 program that it needed to submit a proposal for twenty new exhibits by December 31, 1959. The museum prospectus from 1952 put the national monument in a fairly good position to reach that goal because it had been a thoroughly prepared document, and in the intervening several years no major changes were anticipated. The first specific documentation for Mission 66 planning noted that visitation was light because the area was little known outside of

Arizona and that a small staff consisting of a superintendent and park ranger was adequate. It went on to add, however, that with the completion of the Black Canyon highway from metropolitan Phoenix heavy automobile travel would increase visitation. It was also noted that the Black Canyon highway would bring Salt River Valley residents to the resort areas in the winter, the low visitation season. Tuzigoot alone expected 50,000 visitors in 1966, a traffic increase that required more protection and consideration.

It is interesting to note that there was never a proposal for a new Visitor Center, even in the initial planning stages. Whereas Montezuma Castle and other Central Arizona national monuments were positioned as needing visitor centers and received them during Mission 66, there is no written evidence that Tuzigoot ever requested or was considered for one. To the contrary, documentation shows only a need for expansion of the existing museum-administration building to accommodate storage, workshop facilities, a lobby, and visitor facilities. In retrospect it is fortunate that the Mission 66 mania for new visitor centers did not manifest at Tuzigoot. The Tuzigoot National Monument Archeological District nomination for the National Register in 1987 excluded the then fifty-year-old monument museum from the prehistoric district nomination but recognized its potential as a historic site, noting its significance should be evaluated by Western Region historians.[38] Today it is one of the only 1930s ..... Need to characterize this ... one of the only visitor centers built in the 1930s that remains unaffected by the architectural style characteristic of Mission 66, Therefore, it is ...

The museum required alterations, including replacing the flat-top to upright display cases, the addition of toilets, and a glassed-in lobby at the south end of the building . The exhibits needed to be revised for self-guided touring because it was not possible to have explanations from a guide and the ruins needed further stabilization not only because of natural deterioration but because visitation was up. Proposed changes to the interpretation of the ruins included a tabletop exhibit under a shelter at the highest point of the Tuzigoot ruin to address geology and ethnobotany. Residential construction was considered essential in the earliest planning documents, which called for construction of two three-bedroom houses and one two-bedroom house for permanent employees. In 1952 the monument no longer considered Clarkdale to be depended upon for housing for staff because the new cement plant would provide an influx of employees, and as a result housing costs would increase. However, in 1956 planning there was also mention of a desire to completely eliminate housing within the monument and to convert the superintendent housing into a workshop and storage facilities. After considering the situation further, it was deemed necessary and advisable to construct three new residences. The archaeologist surveyed the sites for the three residences, a water tank, an access road, and the utilities system for archaeological evidence. Finding none, the construction proceeded.

MORE HERE ON THE RESIDENTIAL CONSTRUCTION PROCESS?

Correspondence of July 1955 reveals a variety of proposals for administration of Tuzigoot. In one scenario Montezuma Castle was to become headquarters for the

Castle, Montezuma Well, and Tuzigoot. All were to be overseen and operated by a district ranger, and the staff archaeologist and administrative assistant would perform duties for all three units. New staffing requirements were for a superintendent or district ranger (existing); archeologist (existing); museum attendant (new); seasonal archeologist (new); seasonal archaeologist (existing), and janitor-caretaker (new).[39] Correspondence of August 1955 countered the proposal that Montezuma Castle become headquarters and one proposal suggested that Tuzigoot be the administrative headquarters. Counter proposals were issued both for and against a Verde Valley sub-headquarters at both Montezuma Well and Tuzigoot. One suggestion was that a district office in Flagstaff would serve the three monuments in that vicinity as well as the Verde Valley facilities and possibly Navajo and Rainbow Bridge. No substantial changes in administration occurred, however, and Tuzigoot continued to be operated independently.

Even with Higher Authorities: The Twelve-Year Quest for a New Bridge and Road

The final pressing needs were the upgrade of the inadequate dirt approach road and substandard bridge over the Verde River and the elimination of a farm to market road. The report also noted that there would be a major problem with reorienting the approach road because it would then cross private land, which required a change in legislation.

The approach road had to be replaced. Up until this time the county graded after heavy rains prevented passage. February 1958 marks the first time the monthly reports reflect a field study on two proposed approach roads, both of which would require

boundary adjustments to cover the right-of-way. Several months later the Yavapai County Engineer, County Supervisor, County Road Foreman, Phelps Dodge agent, and the Town Clerk of Clarkdale visited with Tuzigoot Superintendent Hugh Ebert to express concern regarding the bridge across the Verde River and to inquire about plans NPS had in light of dwindling county resources. The condition must have been dangerous enough to capture the attention of persons of even higher authority to act on behalf of Tuzigoot, because in August, Arizona Representative Stewart Udall, his administrative assistant, and the Mayor of Clarkdale inspected the approach road and the Verde River bridge. In September, Udall wrote to Conrad Wirth, Director of NPS to request that he consider the urgency of the situation, revise the ordering of his plans, and speed up the needed improvements at Tuzigoot. Clarkdale Mayor M.O. Lindner corresponded with Senator Carl Hayden about the possibility of having to condemn the bridge, the inability to accommodate tour buses, and the fact that the replacement for the bridge was not expected until 1966. Lindner requested that Hayden tour the bridge when he was next in the state. Acting Director of NPS Hillory Tolson responded to both Hayden and Udall with bad news. The federal government was not in a position to expend funds for the bridge because it was a Yavapai County road system, beyond NPS boundaries, and no legislation was yet drafted to transfer the land to the state. [40]

Udall's visit to the bridge convinced him of the immediate urgency of the situation and he wrote again to Wirth in November bringing him up to date on what he had seen and learned about the bridge. The situation was more complicated than anyone had realized and required immediate intervention. First, Yavapai County had no intention of improving the road or the bridge. Second, the road was over Phelps Dodge property

from the bridge to the monument boundary and there was a concern that if questions about the access road were raised it might lead to Phelps Dodge rescinding rights to the road. Third, the main bridge beams were cracked and the city of Clarkdale, which had jurisdiction over the western approach to the bridge, was contemplating action to limit the size load, meaning that buses of school children, Boy Scouts, and other groups of citizens would be unable to visit unless they walked the mile and a half from the bridge to the monument. Udall suggested that Senator Carl Hayden might be counted on for supplemental appropriation to meet the pressing need.[41]

Acting Director of NPS, E.T. Scoyen, had explored the possibility of making the road and bridge an approach road but the only authority they had for this was the 1931 Approach Road Act, which required that ninety percent of the land be federally owned. Tuzigoot did not meet this requirement which left no legal means to aid the county unless special legislation was enacted for that authority. It was also suggested that the county could request inclusion in the federal aid Secondary System through the State Highway Department and the Bureau of Public Roads. In April 1959 the Board of Supervisors of Yavapai County met with State and U.S. Bureau of Public Road officials and decided on a new two-mile road called the Road to Tuzigoot Indian Ruins. The matter passed to Senator Barry Goldwater, who requested Roger Ernst, Assistant Secretary to the Interior, to check to see what plans NPS had for improving the bridge. The Cottonwood Progressive Association joined the correspondence, noting that thirty-five thousand tourists drive over the bridge to get to Tuzigoot, with three thousand in 750 cars on the Fourth of July alone.[42]

In 1960 the Town of Clarkdale closed the bridge over the Verde River because of deterioration, and a new temporary dirt road was graded. The road added about four miles to a round-trip drive from Clarkdale to the monument. The action to close the bridge was taken as a result of a report by a county engineer who warned that the 1923 bridge, originally constructed by the United Verde Copper Company, had been replaced in 1937 by WPA labor, who found dry rot. The new 1937 lumber was also not treated to prevent dry rot. The original 1923 timbers had served fourteen years and the 1937 timbers had served twenty-three years. The engineer was not able to estimate the strength of the partially rotted timber but found the council justified in limiting loads to six tons and ten miles per hour.

In 1961 the situation became even more complicated when two potential alignments proved problematic. They required the Clarkdale Realty Company and Phelps Dodge to give a right-of-way, and in the intervening months and years since the study of the situation began, a gravel plant and sewage disposal leaching field was within the proposed road alignment.[43] In 1964 Yavapai County surveyed the road and the Bureau of Public Roads surveyed the bridge site. Phelps Dodge and the Clarkdale Realty, Inc. donated nine acres to the monument as a right-of-way for construction of the new approach road.

It would take until July 1966 for a contract to be awarded for the new Tuzigoot approach road. In the meantime visitors registered their displeasure with the road conditions. Buses were unable to cross the bridge and needed to dislodge riders who then walked up to the museum and ruins. Road construction suffered several delays due to storms and a lack of steel. In May of 1967, Stewart Udall and his family

inspected the approach road and bridge. Mission 66 improvements at Tuzigoot reached their end when the new paved road and new bridge were accepted by the National Park Service on August 7, 1967. Visitation increased from 68,873 in 1967 to 103,576 in 1969.[44]

Notes: to be determined how this information fits in:

(ADD NOTE ABOUT BEING PLACED ON NATIONAL REGISTER OF HISTORIC PLACES HERE WITH PASSAGE OF NHPA OF 1966, 15.1 ACRES ADDED TO MONUMENT BOUNDARIES. VESTING POWER WAS APPROACH ROADS ACT OF JANUARY 31, 1931 (?) ... donations of acreage for the entrance road included a provision requiring ownership of the lands to revert to the original owner should the entrance road ever be abandoned and maintenance was covered by an agreement with Yavapai County. Clarkdale annexed the road ... and PD property proposed for development ... so then Clarkdale responsible for maintenance).

[1] Letter from Earl Jackson to Frank Pinkley, September 17, 1939. In the Tuzigoot fact file an entry on annexation and administration states that 6,000 feet of piping was started by Phelps Dodge to bring water to Tuzigoot, the piping being used boiler pipe from the smelter. The first permanent custodian, John Cotter, recalled that water supply was a problem when he got to Tuzigoot in 1940. He said, "Water only leaked quite often, but it had rust permanently in it. The water that arrived at the monument was a rich brown in color, and you had to put a detergent into a bathtub full of water to precipitate the stuff down to the bottom of it, and then see if you could tease that down the drain, and then have reasonably clean cup of water. But that often broke, and I devised a way of locating the breaks. I'd have a supply of clamps on hand, and it was buried a couple of feet underground, so I would put a rod down where the pipe was and a tin can on the end of the rod, and listen carefully, and I could hear the break. I could hear the water tracing again, closer and closer to it, until I found it. And then I would dig it up, put a clamp on it, and so forth. It was an exciting – I should say challenging – place to be." Protas, Joshua M. 1997;, pages 14-15. Correspondence in the early 1940s between Tuzigoot and Phelps Dodge and the Utility Company revealed that the pipe was presumably owned by the School District, which was not liable for repairs, and that it was necessary to have the pipe line transferred from the School District to the Park Service by way of Phelps Dodge.

[2] Ibid.
[3] Southwestern National Monuments Monthly Report for July 1939 pg. 40. The entry noted that with Tuzigoot Arizona had 16 national monuments, more than any other state. With the addition of Tuzigoot's 43 acres, Superintendent Pinkley now had 760,950 or 1,188.06 square miles under his jurisdiction.
[4] Southwestern National Monuments Monthly Report for October 1939, pg. 264 and November 1939 pg. 375.
[5] Ibid.
[6] Southwestern National Monuments Monthly Report for November 1939, pg. 376 and December 1939, pg. 414 and January 1940 pg. 19. For comments on 1940s maintenance see Ruins Stabilization Report, Tuzigoot National Monument, 1956-1966.
[7]

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Tuzigoot Administrative History
Dallett draft December 8, 2010
Chapter 4

National Park Service Stewards Tuzigoot 1968-2002

Changing Perspectives and Values on the River, Lake, Marsh, and Tailings

If the Mission 66 program impact on Tuzigoot is measured in terms of building facilities and access to the national monument, the next phase in park service history held promise for gathering university-based and professional scientific research about its environment and ecology. As Mission 66 drew to a close in the mid 1960s, critics claimed that the program had urbanized the parks, valued engineering more than preservation, and that it was time to replace and undo the work of the bulldozer with a new focus on preservation and management based on good science. The National Park Service had improved roads, trails, and park facilities, and limited the impact to specified areas of parks, but in retrospect people recognized a paradox: the park had protected the parks by developing them. If the bulldozer was the icon for Mission 66, people pleaded for a Mission76 to undo the effects of Mission 66.

The conflicting notions of the National Park Service's creating "zones of civilization" in wilderness settings was part of what gave rise to support for a national Wilderness Act. Secretary of the Interior Stuart Udall called for the study of wildlife management policies and practices.[1] Aldo Leopold reported on the need for an infusion of science into National Park Service management. A 1961 publication "Get the Facts and Put Them to Work" put out by the National Park Service urged the parks to increase the knowledge of their area and make an effort to apply that knowledge for conservation purposes. The establishment of a Division of Natural Science Studies in 1964 and a

Cooperative Park Studies Unit in 1970 were all part of a movement to reinvigorate the understanding of the effects of use on the parks, the threat posed by park development, and the need for resource management plans. By the 1980s a report to Congress estimated that seventy-five percent of the threats to the parks were inadequately documented and very few parks had baseline information. In response, the park service adopted a plan to increase staffing and training, conduct research, document conditions, monitor changes in ecology, and take action based on research and knowledge.

Tuzigoot staff mainly concentrated on the monument's archeological resources and produced scant documentation on its ecology. It may have relied on Earl Jackson's 1933 documentation of the physical attributes of the Verde River which he wrote as part of his thesis at the University of Arizona. He set the scene for the Verde as follows:

> The drainage of the Verde River if lifted from a map of Arizona would appear in the shape of a skillet, with the handle toward the south. The bowl would cover a roughly circular area, extending from the Mogollon Rim on the east to the western limits of the Chino Valley on the west, and from Bill Williams Mountain on the north to the convergence at the handle about fifteen miles south of Camp Verde, at a point where the Verde enters a box canyon. The handle extends from there south to the Salt River at the mouth of the Verde about twenty-five miles east of Phoenix. In some places along this southern area the valley is less than twelve miles across between crests, while the bed of the stream lies four thousand feet below the Rim.[2]

NPS did not have the staff or expertise to document the monument's physical landscape or natural resources in any significant way during its first decade of stewardship. In 1951 a publication published by the Southwestern Monument Association called *Birds of Montezuma and Tuzigoot*, by Henry H. Collins, Jr. with illustrations by Roger Tory Peterson, offered a view of the Verde from the bird's eye perspective.[3] The pamphlet recommended bird watchers position themselves around the museum and along the trail to and through the ruins as well as at the pond along the road from Clarkdale and along the Verde River and its banks. The pamphlet described the national monuments as a paradise for 150 different species of birds that even the casual could observe.

Recognizing the Tavasci Marsh as a Unique Riparian Area

The pace for studying the ecology of Tuzigoot picked up in the 1970s. The environmental movement that brought together an interest in both the Verde River and its riparian habitat came shortly after the passage of the National Wild and Scenic Rivers Act of 1968, which focused on protecting rivers and the ecosystems they supported. As Jay Price chronicles in his book on the Arizona state parks, by the time people recognized the unique importance of the Verde River, ninety percent of the riparian areas in Arizona were gone due to either development or flooding from dam construction.[4]

A special report from October 1972 by Richard L. Todd, wildlife biologist of the Arizona Game and Fish Department, documented the biology of the Tavasci Marsh. It is an important document in that it is the first to focus specifically on the marsh. In a short introduction Todd established the location of the site in relation to the Verde:

> "The Verde River flows through a flood plain, which fluctuates in width up to a mile, but which usually is little more than 0.5 mile wide. The terrain immediately adjacent to the Verde is hilly. To the west, and within seven miles of the Verde River, the elevation rises abruptly over 2,500 feet. The upslope to the east is more gradual, except for a rather steep, crumbly limestone slope, which raises approximately 250 feet near the marsh. Erosion and soil movement following a heavy summer rain is considerable – as witnessed on August 12, 1972 following such a rain. Surface elevation at the marsh itself is approximately 3,330 feet above sea level."[5]

His short introduction also claimed that the marsh was important to a number of bird species in Arizona and he estimated ten acres in cattails and twenty-five in grass. He reported mature willow trees at the south end of the marsh as well as a stand of cottonwood trees that offered nest and solitude for great blue herons and large raptors. He predicted that if the Tavasci Marsh habitat was destroyed that two bird species, the Virginia and the Sora rails, would disappear. While the effects of livestock on the marsh were generally reported as negative, the presence of cattails was reported as positive in that it kept the marsh more open and attractive to ducks. In summary, Todd characterized the riparian habitat from Peck's Lake to the Tavasci Marsh as well as the cottonwood trees near Cottonwood as one of the richest birdlife areas in Arizona, on a par with the Nature Conservancy's Sanctuary at Patagonia, except for Patagonia's proximity to wandering Mexican birds. Based on his observation of wildlife, he recommended that protection of the marsh be given priority, and he called for fencing five or more acres to exclude livestock at the southern end.[6]

The Tavasci Marsh as an Arizona State Proposed Natural Area

Federal environmental legislation of the 1960s and 1970s gave rise to new regulations, standards, and practices that filtered down to many everyday procedures that would have an effect on the environmental quality of the Verde River. Some of this legislation includes the 1963 Clean Air Act, the 1964 Wilderness Act, the 1967 Air Quality Act, the 1970 National Environmental Policy Act and the Environmental Quality Improvement Act, the 1973 Endangered Species Act, the 1977 Clean Water Act, and culminated in 1980 with the Fish and Wildlife Conservation Act as well as the Comprehensive Environmental Response, Compensation, and Liability Act which created the Superfund Program.

With partial financing provided through a planning grant from the United States Department of Housing and Urban Development, the Arizona Academy of Science prepared a series of reports on proposed natural areas for the Planning Division of the Department of Economic Planning and Development for the Governor's Office. The principal authors, E. Linwood Smith and Gordon L. Bender, both professors from Arizona State University, recommended that Tavasci Marsh be given educational or scientific natural area status. This was the first formal endorsement from outside the National Park Service that the marsh be placed under the stewardship of Tuzigoot National Monument. Carl Martin, then superintendent, supported the plan. Four natural areas were proposed for Yavapai County, including Watson Lake near Prescott, Cedar Basin, Burro Creek near the Yavapai-Mohave County line, and Tavasci Marsh.[7]

Before discussing the report on Tavasci Marsh as a proposed natural area, though, it is necessary to understand the context within which these proposed areas were being

planned. By 1974 there were already thirty-six established natural areas covering about 86,500 acres of land ranging in size from 15 to 23,500 acres. Less than half were privately owned or controlled by the Defenders of Wildlife or the Nature Conservancy. The remaining acres were administered by four federal agencies, including the Forest Service in the U.S. Department of Agriculture, the Bureau of Sport Fisheries and Wildlife, the Bureau of Land Management, and the National Park Service, all three of which are in the U.S. Department of Interior.

Research Natural Areas were classified by the federal land management agencies to designate research lands on which various natural features are preserved in an undisturbed state solely for research and educational purposes. This classification set the areas apart from land with recreational, wilderness, or similar orientations. The purpose of the Research Natural Areas was to protect tracts where, "natural processes are allowed to dominate and where some natural feature(s) is preserved for research and education."[8] The reasons for preserving the Research Natural Areas were threefold: " 1. to provide baseline areas against which the effects of human activities in similar environments can be measured; 2. to provide sites for study of natural processes in undisturbed ecosystems; and 3. to provide gene pool preserves for plant and animal species, particularly of rare and endangered types."[9] The guiding principle for the Research Natural Areas was to prevent unnatural encroachments or activities that directly or indirectly modified ecological processes on the area. Logging and uncontrolled grazing were prohibited. Physical improvements like roads, trails, and fences and buildings were not allowed; public uses were discouraged; and management practices had to preserve the plant community for which the Research Natural Area was originally created. A scientist

wishing to study a Research Natural Area in a national park or monument needed to propose the research to the Superintendent, receive approval and collecting permits, and adhere to the administrative policies for Natural Areas of the National Park System.[10]

The 1974 publication of *Established Natural Areas in Arizona, A Guidebook for Scientists and Educators* described and mapped each of the thirty-six natural areas. The section for each area included an abstract followed by location and then information on access and accommodations, climate, topography and landform, biota, research, history, reference to special maps and aerial photographs and a sketch map of each. There were no natural areas in Yavapai County at that time.

The Arizona Academy of Science's proposal for Tavasci Marsh to become a natural area is worth quoting at length because it is the first comprehensive analysis of the biology, health, and future potential of the marsh. Published only eight months after the Arizona Game and Fish Department report by Todd, this report by the Department of Economic Planning and Development out of the Governor's office was part of a wider effort to expand the number of natural areas in Arizona.

The proposal described the Tavasci Marsh as, "an oxbow remnant of the Verde River … fed by springs that emerge upstream (north) …. and drained at the south end by a man-made ditch. A second ditch runs along the west edge of the marsh and extends northward toward the old Tavasci Ranch buildings. The source of water in this ditch is unknown, but may be the same as that feeding Tavasci Marsh."[11] Echoing Todd's previous analysis, the report estimated ten acres covered by cattails with the remaining twenty-five of open water and intermittently submerged meadows. It also echoed Todd's observation that the marsh was likely the only breeding ground of the Virginia and Sora

Rails in Yavapai County. Water-oriented vertebrates included bullfrogs, leopard frogs, Sonoran mud Turtles, and muskrat. The fauna section included an archaeological note that referred to the inhabitants of the pueblo-type dwelling at Tuzigoot as having been drawn to the area because of plentiful water supply and rich farmlands, and the possibility that the Tavasci Marsh may have previously been larger and provided hunting grounds. The section concluded with reference to the bones of waterfowl found during the 1935 Caywood and Spicer excavation. The natural area qualities section of the report noted the educational potential as

> currently being exploited in this vane inasmuch as personnel from Tuzigoot National Monument take monument visitors to the marsh for nature walks and interpretive discussion of marsh ecology. Also, members of the Northern Arizona Audubon Society frequently visit Tavasci Marsh on their outings. There are very few marshes available to Arizona students. Biology classes from local schools in the Verde Valley could make definite use of Tavasci Marsh as a living laboratory that demonstrates a natural system that many Arizona students have never seen. The marsh is readily accessible, thereby enhancing its potential educational value. Tavasci Marsh also has scientific potential and could provide valuable information relating to studies of aquatic ecosystems. As an example, decreasing water flow from the south end of the marsh would enlarge the submerged land area. Studies of plant succession in response to such submergence could be conducted. Also, studies of marsh recovery could be conducted following the elimination of overgrazing by cattle. Other studies embracing the fields of limnology, invertebrate zoology, vertebrate ecology, behavior and other could be

accomplished at this site. Finally, and perhaps most importantly, Tavasci Marsh is a marsh. Marshes are decidedly unique and uncommon habitat types in Arizona. The strongest argument favoring natural area status for Tavasci Marsh must be couched in terms of the scarcity of marshlands in a notably arid state."[12]

In the section in the report on the history of disturbances to the marsh, it is described as "named for the Tavasci family which settled in the area over 50 years ago and began raising cattle." [13] The section continues to discuss various specifics regarding the marsh, including evidence of their cattle raising, the layout of the buildings on the farm including the ranchhouse, barns, corrals, storage buildings, etc., and an overview of the number of cattle seen on the property at that time. It detailed the current state of the marsh, taking note of heavily grazed areas as well as the practice of burning dry cattails each winter. It reports on the burning at length. According to the report, "burning allows the cattle to be more easily seen should they become bogged down in the soft marsh bottom. Burning also allows the cattle easier access to tender, spring cattail growth. This combination of browsing by cattle and periodic burning has probably reduced the extent of cattail considerably."[14] The report suggests that recovery would likely occur rapidly if cattle were absent from the marsh. The report then goes on to examine aspects of drainage, noting that the existing drainage ditches in the marsh were probably constructed in order to partially drain the marsh after the Tavascis began raising cattle. The marsh was drained in an effort to form large "pasture-like open areas at the north end of the marsh." The report concludes that reducing the current practice of draining the marsh would effectively create a marshy area two or three times the size of the current Tavasci Marsh and would also have positive effects on other natural aspects of the area.

The report then outlined certain recommendations for the Tavasci Marsh. These recommendations are noteworthy since they show a unique attempt to preserve the natural aspects of the Tavasci Marsh. They are highly important because the following recommendations, made seventy years ago, still resonate with the mission of the monument today.

> We feel that an educational and/or scientific natural area should be established at Tavasci Marsh. The natural area should extend for at least ¼ mile east and west of the marsh itself and include an area ½ mile upstream and ½ mile downstream. These boundaries would provide a reasonable buffer zone against encroachment on the marsh and include some of the very fine stands of Cottonwood trees lying to the north and south of Tavasci Marsh. Ideally, following exclusion of cattle and increasing the size of the water influence area, ecological studies could be initiated to study the recovery and succession processes occurring in the marsh. Virtually nothing is known of successional patterns in Arizona marshes. An ideal situation thus exists at Tavasci Marsh to study the floral, faunal and limnological changes that occur as a marsh area recovers from excess disturbance and expands in size. No development of the area is deemed advisable with the possible exceptions of reducing water flow out of the marsh, providing a small parking area for educational groups, etc. and perhaps fencing to eliminate cattle from the marsh proper. It may, at some future date, be worthwhile to put short boardwalks into certain areas to allow visitors a better view and appreciation of the marsh and its inhabitants. The latter is not recommended, however, unless the size of the marsh can be substantially increased by reducing water egression. Stewardship of

this proposed natural area would most logically reside with Tuzigoot National Monument, a very short distance away. Personnel at Tuzigoot are presently interested in Tavasci Marsh and are trying to effect a land exchange with the Phelps-Dodge Corporation, which owns the property. No conflicts are envisioned in this management situation with the hereby proposed uses of Tavasci Marsh."[15]

At the same time, the Bureau of Land Management was negotiating with Phelps Dodge to trade land including the Tavasci Marsh for Bureau of Land Management acreage in Copper Basin that the mining company wanted for mining operations. Since the National Park Service was already informally using the marshlands, it was supposed that Tuzigoot would be given jurisdiction by BLM for the marsh and a buffer zone around the monument.

There is no mention in the report of how the Tavasci dairy operation would be factored in to this change in operations, ownership, and management. The Tavasci dairy was a thriving business. As John Tavasci recalls, the dairy supplied milk to Jerome, Clarkdale, and even Cottonwood. In order to irrigate the diary, as well as the local golf course, an irrigation ditch had been created my means of a two-mile tunnel through a mountain. Since the monument land was included in the Tavasci land according to the lease, the cows were put out to pasture on monument land, and irrigation ditches also ran onto monument land. These practices ultimately led to interaction with people from the park service. NPS attempted to intimidate the Tavascis despite the fact that at that time the dairy rights trumped Tuzigoot's claims. At the same time that the Tavasci family was using the land for their livelihood, NPS saw those practices as a threat to monument efforts to conserve the ecosystem and the land. Each party wanted to manipulate the land

based on their values. While both the Tavascis and NPS valued the land, it was clear they valued it in conflicting ways and for conflicting purposes.

The Natural Areas Study Committee of the Arizona Academy of Science proposed a system of natural areas upon completion of forty individual reports. Tavasci Marsh was the first report, although it is not clear from the context whether it was conducted first or considered a highest priority. The impetus for the study was a 1974 legislative message by Governor Jack Williams stressing regional land-use planning. The proposal for a Natural Area System aimed to accommodate future growth in Arizona while preserving a high quality natural environment. The influence of man was to be unobtrusive or absent in these natural areas. The values to be protected included a variety of areas: biological, geological, hydrological, aesthetic, environmental quality, educational, and regional planning. At that time the federal government had a Research Natural Area Program in effect with twenty-eight areas in Arizona. The report supported the necessity for an Arizona Natural Area System because rapid population and economic growth threatened Arizona's environment and it argued that a state natural area policy would serve broad planning goals. Administration alternatives for the proposed system included creating a new independent Natural Areas Council or Commission, to insert it into an existing state agency, such as the State Parks Board or Game and Fish, or to establish a Natural Areas Council within a State Department of Natural Resources.[16]

There were various proposals for legislation to protect the Verde Valley's environmental quality and the Arizona Academy of Sciences, the Audubon, and other naturalist societies raised alarms about the impact of development on the viability of the Verde River. For instance, the Arizona Department of Transportation (ADOT) was

planning transportation routes to accommodate Arizona's new residents and tourists. A twenty-one-mile, high-speed, paved highway within the Prescott National Forest, called the Clarkdale-Williams Highway, was proposed for construction in the late 1960s, which would funnel traffic from the existing highway system onto the Tuzigoot National Monument approach road and then go northwest up the Verde Valley. Because of the National Environmental Policy Act of 1969, the Prescott Forest of the USDA Forest Service had to prepare an environmental statement for the proposed highway. The initial proposal by ADOT presented evidence for the social and economic benefits of the highway, but a wide variety of subsequent opposition rose to defeat the route. There was one enthusiastic letter of support from the superintendent of the Grand Canyon National Park because the road would provide additional visitor access from Tucson and Phoenix to the Grand Canyon. Otherwise there was opposition to the road on the grounds of negative environmental impacts on air quality, water quality, wildlife movement and distribution, cut and fill scars, archaeological protection, and the impact of the project on the beauty of the area.[17] The ten-year planning of a new highway met with a "no highway alternative" recommendation by the Forest Service until ADOT could demonstrate construction was in the public interest to warrant an easement.

First Federal Moves to Acquire the Marsh

The initial impetus for Tuzigoot to expand its boundaries began as a result of the tangential impact on NPS of being part of a land swap between Phelps Dodge and the National Forests Service. In the early 1970s Phelps Dodge proposed a land exchange that would deed land to the Sitgreeves, Coconino, and Prescott National Forests as well as

land to NPS to expand Tuzigoot's boundaries in exchange for acreage to add to the mining companies land in the Copper Basin area southwest of Prescott. (ADD MORE HERE ... WAS THE PROPOSAL FOR 500 ACRES?)

The major evidence that Tuzigoot was interested in enlarging its boundaries is found in three reports. The first was the November 1973 Statement for Management and Planning. One of the management objectives offered by Superintendent Carla Martin was, "to seek legislation to include 500 acres of adjacent prehistoric Indian farmlands and endangered desert and marshlands."[18] The second was the environmental assessment draft master plan of 1974 for Montezuma Castle and Tuzigoot. The environmental impact statement on the combined master plan offered guidelines with a new focus, "emphasizing the multi-cultural multi-racial heritage of the region and its relevance for today's visitors," and aimed to show that, "each occupant of the valley shaped and was shaped by its environment. It questioned whether ... "it is possible in our contemporary struggle with our environment to learn from the lifestyles of these earlier cultures."[19] Proposed land acquisition was prioritized in three areas. The marshlands and grasslands were considered the highest priority for preservation of the historical and interpretive integrity of the monument. The objectives also included that the tailings pond serve as a buffer zone against future development. This bold proposal, prompted by fear that development would encroach on the monument, required negotiations with four landowners, Phelps Dodge being the largest, followed by Clarkdale Realty Company and then individual landowners including Geroge T. Gieler and Von Gausig and Mabery of Mabery Associates. The environmental description section documented the Tavasci Marsh as comprising sixty-six acres, being a unique ecotype within the Verde Valley, and

one of only a few marsh habitats in the state. The report noted the State of Arizona's Department of Economic Potential and Development proposal to set aside the marsh for management by a conservation agency as a wildlife refuge and scenic research preserve. The costs for assuming liability for the tailings and its stream pollution are noted, as is the need for a program to stabilize the area to alleviate dust. The list of organizations that were requested to review the draft environmental assessment give a clue to the growing civic and environmental organizations that were paying attention and playing a role in protecting the environmental resources in the Verde Valley. The list includes the Arizonans for a Quality Environment, the Arizona Chapter of the National Wildlife Federation, Sierra Club, and Audubon Society.[20]

Superintendent Carla Martin enlisted the unanimous support of the Clarkdale City Council for the proposed land exchange, which agreed to offer a letter of support for congressional data being collected for the expansion. She estimated the number of people visiting Tuzigoot annually at 100,000 and noted the visitors had a half a million dollar impact on the neighboring communities. At the time the proposed land exchange would only enlarge the monument by one hundred and sixty acres but Martin revealed the desire for an additional two hundred that would include Peck's Lake. She offered a future vision for an S-shaped green belt area along the river to be preserved for education and recreation.

The third document of major significance in the mid-1970s was the Natural and Cultural Resources Management Plan and Environmental Assessment for Tuzigoot of April 1975. This document marks the first integration of natural and cultural resources and set the stage for studies, needs, and actions for the next thirty years. Echoing the

master plan, natural and cultural resources called for acquisition of the additional five hundred acres of adjacent lands as a buffer against development, protection of endangered marsh and desert ecosystems, and for the first time it stated the goal of acquiring prehistoric Sinagua Indian farmlands as a part of recreating the monument's prehistoric scene. Professional resource studies were deemed as necessary. For the first time, the work of professional archaeologists began to seep into the management plans at Tuzigoot. For instance, proposed surveying of archaeological resources were necessary to yield information on settlement pattern data for each phase of occupation at Tuzigoot: man-land variables and adaptation to ecological zones; population sizes and aggregates; economic, social, and cultural change during occupation; and a collection of research inside and outside the monument to augment the interpretive program.[21] Reestablishing native vegetation in disturbed areas and removing modern intrusions on the prehistoric scene were deemed desirable and bat management activities were required to decrease safety hazards to visitors and staff.

Administrative changes at NPS in 1974 resulted in a change in superintendents at Tuzigoot, which was restructured into a single management unit with Montezuma Castle and Montezuma Well in 1975. Although the monuments had worked together cooperatively since the establishment of Tuzigoot in 1939, the new arrangement promised to bring more efficient use of resources and staff expertise as well as to coordinate the interpretive stories presented at all three national monuments in the region.[22] Glen Henderson served as superintendent for the next 28 years Can you summarize his style of superindenting? …

Tales of the Tailings: Approval in 1978 to Expand by 791 Acres ... Including the Tailings

While the location of the headquarters changed, the plans for expansion remained constant. However, the exact acreage requested rose and fell in reaction to changing circumstances that affected liability issues. From 1973 to 1989 the expansion plans grew to 791 acres and legislation of November 1978 authorized the acquisition by donation or purchase with donated or appropriated funds. (Need more here on why it grew from 160 to 791, negotiations among PD, Forest Service, NPS.) Need to insert here how the 1978 expansion was amended in January 1988 because of the need to exclude tailings.

Cooperative Marsh Management: Phelps Dodge and Arizona Game and Fish Commission

THE January 15, 1990 agreement between Phelps Dodge and Arizona Game and Fish Commission transferred management control to the state for the joint Tavasci Marsh Habitat Restoration Project. Phelps Dodge and the Commission had entered into an agreement in 1951 concerning the management and control of Show Low Lake in Navajo County, and the 1990 agreement served as an amendment to that original agreement. The amendment called for Tavasci Marsh and a riparian area at Packard Ranch to be cooperatively managed with the Arizona Game and Fish Commission. Ownership remained with Phelps Dodge, and the agreement was to remain in effect and run with the riparian areas until any portion was conveyed to one of eight federal or state agencies: the National Park Service, the U.S. Bureau of Land Management, the U.S. Bureau of Reclamation, the U.S. Fish and Wildlife Service, the U.S. Forest Service, the Arizona Game and Fish Department, the Arizona State Land Department, or the Arizona State

Parks Board. Grazing was allowed to continue until Phelps Dodge ended their lease with the Tavascis.

NEED TO INSERT HERE THE PERSPECTIVE OF JOHN TAVASCI, WHO IS STILL LEASING LAND FROM PHELPS DODGE, INSERT QUOTE ABOUT THE CONFLICT WITH NPS STAFF WHO THREATEN HIM ONE DAY, AND HIS ACTIONS TO CURTAIL ANY INFRINGEMENT ON PD PROPERTY ....

Glen Henderson's 1995 Statement for Management continued to position the acquisition of the marsh as critical to the long-term well being of the Monument. The Tavasci Marsh Overlook Trail was completed in 1997. With a grant from the state Heritage Fund, a fully accessible 1,800-foot concrete trail led to an observation point above the marsh. Tuzigoot visitors now had a vantage point to see the marsh, but management was still in the hands of Arizona Game and Fish.

Tale of the Tailings: A Proposal to Dredge Peck's Lake to Cover the Tailings

While Tuzigoot was initiating moves to increase its boundaries to include the marsh, it was mostly reacting to the work and direction of environmental agencies and interest groups beyond the monument. In a 1979 report on pollution source analysis for the Verde Valley, the Northern Arizona Council of Governments documented river pollution from three major land-use activities: urban, agricultural, and mining or industrial. The report identified a series of suspected water pollution problems and recommended future sampling to provide definitive information on water quality problem areas. The section on the tailing piles provided a succinct statement on the origins of the tailings from intermediate-grade ore operations to the Clarkdale concentrator where it was pulverized and treated with a frothing agent. Sulfide minerals, including copper,

adhered to the bubbles and the waste rock materials. After this reaction the tailings were left behind as slurry. At that time, according to the report, Phelps Dodge groomed and irrigated the tailings for dust control. However, the report referred to an allegation that the "southeast corner of the pile was eroding in to the Verde River" and that Phelps Dodge had repaired the berm where the erosion was occurring.

There were several reclamation projects referred to in the report that were relevant to future land uses surrounding Tuzigoot. The report referred to the legislation to enlarge the boundaries of the monument by five hundred sixty acres and the lack of funds allocated by the National Park Service. It then referred to the town of Clarkdale as having, "received permission from Phelps Dodge to pump effluent from the municipal sewage treatment plant onto the pile. Pumping operations may begin this year if the effluent level in the sewage lagoon becomes high enough." The other reclamation alternative was a vision of the Arizona Game & Fish concerning Peck's Lake. The report described Peck's Lake as

> an impoundment of the Verde River owned by Phelps Dodge and leased to the town of Clarkdale. The lake is shallow, and aquatic weeds are a major problem. A project to dredge the lake has been proposed by the Game and Fish Department. The dredgings, or 'hydrosoil', are to be spread over the tailings pile to a depth of about 3.5 feet. Revegetation of the pile would then be done to provide a resting and feeding area for waterfowl. Clarkdale sewage effluent may supplement irrigation water from Peck's Lake for revegetation purposes. At present, the tailings are periodically irrigated with 800 gpm of water for dust control; Phelps

dodge has these water rights. The water rights should be included with the tailings pile, in the event of National Park Service acquisition of the pile."

The negotiations for the reclamation project by Game and Fish were ongoing, approved by the Arizona Outdoor Recreation Coordinating Commission, and set for beginning July 1980. Phelps Dodge agreed to an easement to allow disposal of the Peck's Lake hydrosoil on to the tailings and to lease Peck's Lake to Clarkdale."[23]

Four Competing Views of the Verde

Between the 1970s to the present, competing views on the Verde were simultaneously playing out on the river and the land. The river as a recreation resource, the riverbed as a resource for sand and gravel mining, the river in need of water quality protection, and the river as backdrop to a high-end residential development were all gaining attention and action. Tuzigoot would be drawn in to each of these competing values and efforts to shape the future of the Verde.

The Verde River as Recreation Resource

Several years after Carla Martin first offered the public a vision of a green belt encompassing Tuzigoot, the Verde Valley Recreation Resource Information Group (VVRRIG) began focusing on recreational resources of the Cottonwood Reach section of the Verde.[24] In 1979 the group included representatives of the Town of Clarkdale, Yavapai-Apache Tribal Council, Yavapai County, Arizona Game and Fish, Dead Horse Ranch State Park, several Forest Service ranger districts, and Tuzigoot.[25] VVRRIG commissioned the University of Arizona to study the Cottonwood Reach of the Verde and the study suggested the need to preserve as well as develop the recreational potential

for residents and visitors. The study proposed a series of habitat preserves. Additional studies on tourism introduced the Verde Valley as perhaps containing, "the greatest density of different types of vacation or recreational experiences of any similarly sized area in Arizona." Another 1979 publication recommended that a seventy-eight mile stretch of the Verde be included in the National Wild and Scenic Rivers system.[26] In the mid 1980s Governor Bruce Babbitt took a position to protect the Verde when he learned from the local community about plans to create a gravel operation near Tuzigoot. Together they proposed a greenway to stretch six miles from Tuzigoot to below Dead Horse Ranch State Park. Max Castillo, a long-term employee of the Dead Horse Ranch State Park, accounts for the activism of the volunteer group for protecting the Verde as a result of losing so much public access to the river through ownership changing into private hands. As a child, Max's access point was Creighton's Hole in Cornville, and he believes that he, like others, were disturbed by the prevalence of no trespassing signs that cropped up along the Verde and that led to involvement in volunteer efforts to protect the river.[27] The trespassing signs, though an attempt to protect the integrity of the land, were negatively received because people saw the Verde as it ran through Tuzigoot as part of their community. They did not view their presence there as trespassing. Restricting public access meant that the community may not be able to do something as traditional as use a swimming hole.

In order to understand some of the procedures of the VVRIG, it is necessary to examine an episode in the early 1970s that had a far-reaching impact on methods of acquiring land for the greenway. In 1972 the legislature appropriated funds for a state park at Dead Horse Ranch. Over the next several years an access road crossing the Verde

at Fifth Street in Cottonwood led to condemnation procedures to acquire private properties, which stirred up negative responses in the town. Condemnation was followed by flooding that also prevented access to the park, but by 1977 the state park opened to the public. This meant that several years later when the Greenway ideas gained momentum, the consternation over previous condemnation procedures was still felt in the community, and it was necessary for Governor Babbitt and the leader of the Nature Conservancy and others to quietly contact landowners in person along the Verde to assess their interest in selling land to the state for the greenway. No condemnation procedures were threatened. Rather, Babbitt and others in the legislature proposed a two million dollar acquisition fund for Verde River protection which passed in the form of House Bill 2510. This was a dramatic departure from previous acquisition funds that were for specific sites with defined boundaries and costs, whereas this legislation enabled acquisition wherever parcels and easements were possible. A task force comprising representatives of Arizona State Parks, the State Land Department, the governor's office, the Nature Conservancy, and Arizona Game and Fish identified thrity-five parcels and acquired two hundred ninety-three acres. The formation of the 1988 Verde River Greenway Ad Hoc Advisory Committee comprised representatives of a much larger group, including Arizona Game and Fish; the U.S. Forest Service; the towns of Cottonwood, Camp Verde, and Clarkdale; the local chamber of commerce; Yavapai County; and various other groups and individuals. The first recommendation was to expand the greenway to a thirty-six-mile stretch. In ten years four hundred ten acres were acquired.[28] (NEED TO REFERENCE THE NATIONAL RESOURCE DEFENSE COUNCIL AND OTHER PRIVATE CITIZENS INVOLVED ...)

The work of the various agencies and volunteers is reflected in the publication of the report, "The Verde River, A Resource for all Generations ..." which opens with the question of whether the lush green waterway will be available to future generations. The protection of the corridor was called for in response to the fact that only fifteen percent of the state's original riparian acreage was still in a natural form, and that the riparian habitat was a biological resource, a recreation resource, an environmental resource, a cultural resource, and a disappearing resource. Members of the community were encouraged to help by managing the riparian resources, helping to plan and implement proper uses, to donate or sell conservation easements, to assist in obtaining sales or donations, and to use sound agricultural practices adjacent to the river. Individual land owners were an important part of conservation efforts. In an introductory message from the Governor, Bruce Babbitt implored, "There exists a major opportunity to bring private lands and water together with those in the public domain to create a corridor of open space for recreation and conservation purposes. This may be achieved through local partnerships and cooperative / coordinated management by city, county, state and federal agencies together with private interests. Such a network through the Cottonwood area would provide greater benefits from each element than any single element could provide without the network. I ask you to consider this unique community opportunity and help preserve the Verde River as a 'resource for all generations.'"[29]

The Verde River as Sand and Gravel Pit

In a 1997 interview with the former Superintendent of Montezuma Castle and Tuzigoot National Monuments, Glen Henderson was asked about when he started noticing greater

sensitivity to environmental issues. His reply was that, "the EPA [Environmental Protection Agency] came in and closed down some of the gravel mining companies that were extracting gravel directly out of the river. And I think from that time to now, to the present, you've seen a greater change for people, a greater understanding now that extracting gravel out of the river has more far-reaching consequence. I think there's a greater sense throughout the valley that tourism is important, and preserving the environment and some of the resources, that's why we lived here, and that's why people move here. So I think that's just a real, a much stronger concern throughout the valley."[30]

WILL INSERT HERE SAND AND GRAVEL OPERATIONS IN VERDE RIVER …

The Quest for Verde River Water Quality

A 1982 Verde River Water Quality Management Plan prepared for the Planning and Development Division of the Northern Arizona Council of Governments (NCOG) characterized surface water in Arizona as one of the most treasured natural resources and stated that, "Protecting the quality of surface waters for current users and preventing any future deterioration are very high priorities in the state's program for environmental protection." The final management plan for the Verde Valley, "not only summarizes the information presented in the previous two reports, but also offers implementation strategies to solve current problems and avert new ones. In addition this document suggests a process for continuing planning and reviews the public participation process followed throughout the Verde Valley study."[31] The 1979 study by NCOG identified the Verde River as the highest water quality planning priority in Northern Arizona and the 1982 study included the finding of the sampling study recommended in the earlier study.

It is interesting to note the extent to which public participation affected the process of adopting a final water quality management plan by the early 1980s. The Verde Valley Task Force voting representatives included the Verde Natural Resource Conservation District; Cocopai Resource Conservation and Development Area Council; the towns of Jerome, Clarkdale, and Cottonwood; and various other organizations including Camp Verde Sanitary District, Yavapai County, Salt River Project, Irrigation Ditch Associations, Ranching Industry, Real Estate Industry, Environmental Organizations, League of Women Voters, and Indian Tribes. Ex officio members included Prescott and Coconino National Forest, National Park Service (Tuzigoot and Montezuma Castle and Well), U.S. Geological Survey, Soil Conservation Service, Agriculture Stabilization and Conservation Service, Cooperative Extension Service; and the Arizona Department of Health Services, Transportation, Game and Fish, State Parks, Mineral Resources, and State Land Department. In addition, the Natural Resources and Environmental Quality Advisory Committee served the NACOG with membership categories of public officials, industry members (timber, ranching, mining, and utilities), interest groups, and private citizens. The NACOG Regional Council's executive board included two representatives from each of the four counties, a supervisor, school superintendent, and one representative from each of the eighteen incorporated cities and towns as well as the Indian tribes. Obviously, by the early 1980s, there were many eyes and many perspectives on how to measure and maintain water quality.[32]

The conclusions and recommendations in the Executive Summary cited the transfer of the Tavasci Marsh to the National Park Service as a long-range recommended alternative. It was to be achieved by a land exchange with Phelps Dodge. It further cited

1981 water quality testing results in the marsh area as contributing very high fecal coliform counts in inflows between Clarkdale and Cottonwood, presumably linked to grazing.[33] Glen Henderson, the superintendent of Tuzigoot at the time, was quoted as feeling confident that Tavasci Marsh would become a part of the Tuzigoot National Monument, and that when it was part of the park service that grazing would be eliminated.

The Verde with Full-Scale Development of Peck's Lake and Golf on the Tailings

In the 1980s Phelps dodge revealed an enormous development proposal that put Peck's Lake at the center of a mixed-use residential development by the Phelps Dodge Development Corporation called the Verde Valley Ranch.

The Verde Valley Ranch Project in full-scale development featured 1,755 residential units with 300,000 square feet of commercial facilities, a motel and restaurant, some public access land, at least one new road, and an eighteen hole golf course. The Planned Area Development would double the size of Clarkdale and be bounded on the west and south by the Verde River, on the north by Peck's Lake, and on the east by Tavasci Marsh and Tuzigoot. This large scale development caused controversy, but generally was reported as desirable for what Phelps Dodge promised to do for the city, including contributions to several municipal projects including a two million dollar, 250,000 gallon capacity wastewater treatment plant, a contribution toward a new public safety building, and a four-wheel drive vehicle for the police department. The development was designed to attract affluent retirees or near-retirees and projected build out could take ten years. In anticipation of the planned area development, Phelps Dodge

did not renew their lease with the Tavascis, who were asked to get off the land.[34] Though the Tavascis were physically leaving the land, their legacy would remain. The letter from Phelps Dodge terminating the lease officially names the marsh. Up to that point it had been nameless, but it was endowed with the name of the family that had lived on it for so many decades. The elderly John Tavasci was touched, that upon his leaving the land, the area would still be known as Tavasci Marsh. (include letter here)

An abbreviated timeline for the Verde Valley Ranch plans between 1987 and 19__ went as follows. The project publicity began in 1987 when Phelps Dodge announced a feasibility study for the planned area development. The Yavapai County Planning and Zoning Commission began hearing the plan in October and it quickly became clear that the Army Corps of Engineers, the Environmental Protection Agency, and the Arizona Department of Environmental Quality would need to review plans. Public sentiment was divided among supporters, including the Verde Valley Chamber of Commerce and the cities of Clarkdale and Cottonwood; opponents included Jerome, the Audubon Society, Northern Arizona Paddler Club. Arizona Game and Fish advised the need for more studies, others expressed a concern for density. The testimony before and against heated up over time, and a January 1989 planning meeting went for five hours and had standing room only. In March 1989 the Yavapai County Board of Supervisors approved the plan. However, there was a last minute request by Arizona Game and Fish to evaluate habitat loss and to supply additional water quality information. At the eleventh hour, the U.S. Fish and Wildlife voiced concern over having not been notified on a timely basis. A month later Phelps Dodge announced that it wanted Clarkdale to annex the ranch area. In 1990 the Environmental Protection Agency identified

contamination from a tailings pile via Peck's Lake and required Phelps Dodge to regularly send groundwater samples. Environmentalists requested the area be put on the federal superfund cleanup list. Clarkdale annexed the ranch area in January 1991. By June, Phelps Dodge was surveying soils and looking forward to receiving permits to dredge Peck's Lake. It closed the Verde Valley Country Club in October 1991, which was a loss to the recreational resources of the community. During 1992 the plans fell from the front pages of the newspapers as the project stalled in the face of federal official requirement for a storm water permit by the EPA National Pollutant Discharge Section and for an Army Corps of engineers permit because of the disturbance of wetlands. Clarkdale protested the EPA report, but by November 1993 the plans no longer included dredging of Peck's Lake and changed to include more open space, two miles of shoreline that would remain open to the public, four miles of public trails, and sixteen acres of lakefront property that would become parks.

The team that drafted the Environmental Impact Statement (EIS), published in 1991, noted that the project area was not within the purview of federal or state legislation, and that it was being prepared in accord with the Governor's Task Force on Environmental Impact Assessment Recommendations for the State of Arizona. Issues that would have significant environmental impacts were identified as surface water quality, groundwater quality, wildlife ecosystem diversity, aquatic ecosystem diversity, and the Tuzigoot National Monument. The situation escalated and by 1990 Phelps Dodge was in violation of the Clean Water Act and under orders to correct seepage from its tailings into the Verde River and to determine the depth from the tailings to groundwater, to install monitoring wells, and to mitigate the situation. As the EIS stated, "this

corrective action must occur even if the planned Verde Valley Ranch development is never built." Four alternatives were presented, including no action, full-scale development, limited development, and reclamation and preservation. The report determined that alternative four, reclamation and preservation, had the "least negative impact and the potential for considerable positive impact upon the environment." Peck's Lake and Tavasci Marsh, both characterized as important wildlife habitats, were considered a water of the United States, which entitled them to some federal protection. They were also considered wetlands and therefore afforded protection by the U.S. Fish and Wildlife Service.

In the meantime, NPS initiated the Inventory and Monitoring Program in the early 1990s to detect long-term changes in biological resources and for the first time Tuzigoot was positioned for inventorying its biological resources and for making management decisions based on those studies. During the 1990s a dizzying array of research was conducted at Tuzigoot on avian ecology, the ecology of amphibians and reptiles, fire management, invasive species, as well as inventorying and monitoring, and vegetation mapping. Kathy Davis, then chief of natural resources of the NPS Southern Arizona Office, provided the initiative for much of this research and secured funding for plant, amphibian, and reptile inventories. This research also led to changing perspectives on how to manage Tuzigoot and its landscape. Understanding the need for a deep knowledge of the ecology of place, managers also needed a deep knowledge of the ecology of their management. As Bill Halvorson pointed out at the time,

> cooperative management of landscapes, or even a single management unit requires that a number of barriers be moved or overcome: 1) multiple-use

> mandates, 2) interagency working relations, 3) the need to build constituencies and consensus among disparate groups, 4) the vast amount of information that must be obtained and managed, 5) the vast array of environmental and administrative regulations, and 6) financing and political pressures. We have come to a time in history when many adjustments have to be made to allow more information, more people, more wants, and desires to be considered in all land-management decisions. As a people, we are moving away from decisions by and for the good of the few to decisions by and for the good of the many. It is not an easy transition for anyone.[35]

From here on needs attention: need to weave together these events …

1992 Water Resources Management Plan September 1992, a working document for each park to attain compliance and ensure cooperation with others in water planning. Subordinate to Natural and Cultural Resources Management Plans. Notes fecal coliform in Verde between Clarkdale and Cottonwood: probably related to cattle grazing … which was eliminated by PD in 1991 …

1994 … $23,000 in Heritage funds to NPS to evaluate water needs of national park sites. How much water flows in and out, how much needed to maintain riparian system …

Add headline: "Magical marsh land" article … blue herons … Tavasci needing to drain the pasture land to protect cattle after stuck in the mud following rains … 14 Snowy Egrets nesting there …

Add article on Outdoor scene, Mike Alan … waterfowl shooting … AZ Wildlife Federation and Izaak Walton League … trying to save Tavasci marsh …

5/5/95 article Journal, Camp Verde

PD asked for 5,975 acres of Forest Service Land, 3,040 of BLM land … for which they offer 1,160 acres of patented timberland on Mongollon Rim, 140 acres of land at Gov't Springs in Prescott Forest and ___ acres at Packard Land

11/29/95 Journal, Camp Verde … environmental groups, represented by Land and Water Fund of the Rockies … Save our Lovely Valley Environment (SOLVE) Epilepsy Support Group, Sierra Club … appealing ADEQ for aquifer protection permits for housing and rec project to Clarkdale and PD … seek to halt groundwater permits … covering a potential Superfund site with homes rather than cleaning up "witches brew." 1990 EPA ordered Clarkdale to stop pouring sewage effluent over tailings

1997: PD offerered 323.75 acres including Tavasci Marsh in exchange for lands held by BLM for mining operation in Safford …

Epilogue to the Verde Valley Ranch Project: A Rethinking of Monument Boundaries

The Verde Valley Ranch project certainly complicated Tuzigoot's future plans. By the time the Ranch plans were publicized the boundaries of the national monument were expanded by legislation to include the marsh and a buffer zone. As Glen Henderson recalled, the plans for the Verde Ranch complicated the relationship between the Monument and Phelps Dodge. In 1997 he stated, "Tuzigoot is unique in that Phelps dodge donated not only the land that Tuzigoot currently holds in public ownership, but they also donated the right-of-way for the entrance road, or the majority of it, over nine acres. So I think you've always had a very close relationship with Phelps-dodge, and then you're totally surrounded by Phelps-Dodge holdings over there, so I think it makes for, you know, a relationship that although sometimes you're holding each other at arm's length, but at sometimes you're trying to embrace each other, too, to do what's right for the Monument." He went on to say that the Verde Valley Ranch "shows some of the complexity that you get into in trying to deal with an issue of this kind. Initially the tailings and much of the land that was going to be developed for the Verde Valley Ranch, its included within the legislated boundaries of the Tuzigoot National Monument." In referring to the superfund legislation, he noted the hesitation the monument felt with regard to liability for the tailings.

> Although we had never advocated that we would purchase the tailings outright, we had talked about trying to acquire an easement over the tailings to prevent anything from occurring on that land, and to provide a buffer for the Park. Because before that, there had been a proposal from the town of Cottonwood to

convert the tailings into a landfill. It had even gone to the extent that they had dug test trenches out on the tailings to se if it was stable enough, and the walls were stable enough that they could actually bury landfill or waste on it. And when they passed this waste legislation we said 'well, wait a minute, we can't make the Park Service liable for anything that might be bad in those tailings.' So it was discussed with the Regional Director and myself and we had a couple of meetings on it which resulted in a decision that was made that we would go back and revise our boundaries. We had never acquired any land, but we did have legislation, and we still do, that says those are going to be part of the Monument. So we went back, revised our master planning document to exclude the tailings. And when you excluded the tailings you also excluded some of that other land that had been included as a buffer because you couldn't just say we're going to exclude the tailings because they're hazardous but we still need a buffer. That didn't make a logical boundary. So we excluded the tailings and some of the other lands and concentrated our efforts on protecting the marsh on the east side of Tuzigoot Ridge, essentially. So once we did that, the Park Service put me in a position to say to Phelps Dodge we don't want that."[36]

Henderson characterized the response to the proposal for the Verde Valley Ranch project as garnering very little opposition, in part because Clarkdale would be the beneficiary of a new sewage treatment plant that Phelps Dodge would build, and that was a shared interest. The monument was not in a position to oppose the development and was thankful for an agreement that Phelps Dodge would not develop the portion of the tailings directly below the ruins and would parallel the golf course holds adjacent to the

monument boundary to give a slightly wider buffer. The housing would have a twenty-five-foot setback that would be left as open space, and there was agreement to fence the houses along their back property lines to prevent access to monument property. While Tuzigoot was unable to protect the viewshed, they would have to settle for an agreement for the property developers to use earth tone colors to try to reduce the impact.[37] Fortunately for Tuzigoot, the economic climate for development in the Verde Valley shifted and the Verde Valley Ranch remained an idea on paper rather than butting up against the National Monument. It would have changed the character of the surrounding landscape drastically if a housing development had been built near Tuzigoot.

It was time for Tuzigoot to .....

Need to insert information about reducing the amount of acreage to exclude tailings, liability issues, etc.

Need conclusion here .

Things that need to be inserted somewhere in this chapter or elsewhere ...

1973 … Henderson super, "It appears beneficial to all concerned to allow disposal of waste water on the tailings pond land. It would be of interest to determine whether the effluent would restore the tailings pond soils to the point of restoring desirable vegetation over a period of time."

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[1] Stewart Udall also published *The Quiet Crisis* in 1963, which put Americans on alert about the need to repair mistakes of the past that despoiled America's natural resources and to rethink future stewardship of America's natural resources. See Richard West Sellars, *Preserving Nature in the National Parks*, (New Haven: Yale University Press, 1997), especially chapter 6, "The Science and the Struggle for Bureaucratic Power: the Leopold Era, 1963-1981," which documents the post-Mission 66 Park Service era, the struggle over the Wilderness Act, and the development of scientific resource management.

[2] Earl Jackson, *A Survey of the Verde Drainage* 1933, thesis pgs. 3-6. This is the first physical description of the area by a professional. Jackson characterizes the Verde River as follows: "The Verde River heads in the rough country near Bill Williams Mountain, and runs from there into the Big Chino Valley, where, in its meandering course it presents the appearance of nothing more than a large arroyo, carrying water when the snow blankets the region or heavy storms come. The Big Chino is a broad fertile expanse of grassland which was well adapted for farming country save for the relative lack of water. It is believe (sic) that dams or represos were used to store water for the dry season extending from March until the latter part of June. In the southeastern site of Chino Valley the river enters the breaks of the mountain country again, and for several miles meanders through a box canyon with occasiona terraces which would have been suitable for farming. In the next fifteen miles the river drops a thousand feet, and near Packard's ranch emerges into the more level country of the Verde Valley. From the breaks to the northeast rises the first important tributary, Sycamore Creek, and from that point south the river assumes greater proportions by the further contributions of Oak Creek, Beaver Creek, Cleer Creek, Fossil Creek, and the East Verde. No streams of any importance flow in from the west, and the Mogollon Rim is large responsible for the Verde's water supply. Although the Verde River caries an immense amount of water in flood seasons, the Verde Valley in its total extent is what might be called arid, having a mean average rainfall of ten inches, although as much as twenty-five inches has been known. This scarcity of rainfall necessitated irrigation by the prehistoric inhabitants, which practice was not of the greatest difficulty, as the only cultivable lands are the alluvial terraces along the bed of the stream. These terraces reach considerable extent in a north and south radius of fifteen miles about Camp Verde, where at the present day cultivated fields occupy a territory of three miles or more breadth on either side of the river.

Natural vegetation is mostly of desert growth. In the lower Verde region, from about 1800 feet elevation at the Salt River to about 3000 feet north of Lime Creek at the Southern box canyon, the growth consists of catclaw, mesquite, creosote brush, Prickly Pear, ocatilla, pencil cactus, cholla, and Six Weeks' grass. Iin the soil of the river terrace, where the mesquite and catclaw grow the thickest, is a surface layer of several inches of very rich loam, in which the grass and alfileria grow in abundance. The alkali hills, which merge upward out of the terrace, toward the mountain slopes, present a forbidding aspect to any kind of growth. In the Middle Verde region, the catclaw, mesquite, and creosote bush still predominate, with the added appearance of Palo Verde on the higher slopes. Here the terraces are broad, level, and rich, and support

much farming. I am told that the early white settlers in the Valley, up to about the first decade of the twentieth century, found the grass growing in such profusion along the river that they were able to cut it with scythes and stack it for hay. Since then the district has become greatly overstocked with cattle, forage has suffered, and with the loss of surface protection the ground quickly became pitted with deep, rough arroyos. At about 3500 feet elevation juniper crowns the ridges, and becomes thicker as the land rises, until at about 5000 feet the first jack pines appear. From this level to the top of the Mogollon Rim at 7000 feet is heavily forested yellow pine country.

[3] Henry Hill Collins, *Birds of Montezuma Castle and Tuzigoot National Monuments* (Sante Fe: Southwestern Monuments Association, 1951).

[4] For more information on riparian areas see *Restoration of Riparian Habitat* and *Arizona's Changing Rivers* by Barbara Tellman, Richard Yarde, and Mary G. Wallace from the Water Resources Research Center, College of Agriculture, University of Arizona, March 1997.

[5] Richard L. Todd, *Tavasci March Biological Report* 1972. pg. 1

[6] Ibid.,1-4.

[7] E.Linwood Smith and Gordon L. Bender, *Tavasci Marsh* 1973. This report was No. 1 of 40 proposed Natural Areas and comprised sections on Location, Description, Fauna, Water Chemistry, Natural Area Qualities, History of Disturbance, and Recommendations. The appendices included bird species, water chemistry measurements, a sketch of the Tavasci Marsh area showing the relationships between the present and abandoned course of the Verde River, Literature cited, and photographs. It concludes with a letter from the Superintendent at Tuzigoot, Carla Martin, dated March 6, 1973, in which she states her appreciation for the proposal and its helpfulness in efforts to prepare legislative support data to request authority to extend the monuments boundaries as well as clarification on several data points. One clarification stated that staff do not take the general monument visitors to the marsh and that the tours were limited to environmental education groups of school children and leaders. She also noted that the cattails used to be burned each winter by that subsided due to lack of time by the leasee. She concluded with a note that the monument would like to restore ancient farming methods as a "living history" interpretive exhibit and to develop a trail for the handicapped, to have 'night walks' when the Dead Horse Ranch State Park develops overnight facilities. She ends with assurance that all of developments would be secondary to preservation of the marsh as a refuge.

[8] E.Linwood Smith, *Established Natural Areas in Arizona, A Guidebook for Scientists and Educators* (Phoenix: 1974; see introduction, pages 2-3.

[9] Ibid.

[10] Ibid., 4-5.

[11] Ibid.

[12] E.Linwood Smith and Gordon L. Bender, 1973, 1-5.

[13] Ibid., 6-7.

[14] Ibid.

[15] Ibid., 7-8.

[16] State Planning Section, Office of Economic Planning and Development January 1974. It is interesting to note that the report alluded to a proposal "already in the hopper" which could be directly related to a natural areas system, one of which was the Historical and Scenic Areas proposal being made by the Highway Department (Ben Avery and Caron Beard, for which administration was being assigned to the Parks Board. See page 24.

[17] Department of Agriculture, Prescott National Forest 1976, pages iii, 10-11, 113-114. It is interesting to note that there was objection to the road by the Maricopa Audubon Society because of the impact on Bald Eagles and Black Hawks. Arizona State Parks noted the lack of reference to protect archaeological and historical sites within the proposed project area and that the Section 106 procedures of the National Historic Preservation Act would apply. The Arizona State Museum referred to the need to access the archaeological resources, and there is reference to Hatalacva. The Arizona Game & Fish Department objected to a road paralleling or crossing the Verde River and the resulting degradation of unique and valuable riparian habitat as well as the danger to the Sycamore Wilderness Area. Superintendent of Tuzigoot, Carla Martin referred to the small system of visitor facilities in relative isolation that would be instantly overloaded. She also noted concern over the destruction of Hatalacva Ruin, "a Sinagua site as large and archeologically significant as Tuzigoot itself." Page 115.

[18] Statement for Management and Planning (Management Objectives), Tuzigoot National Monument, 1973.

[19] United States Department of the Interior National Park Service 1974, pages 1, 4.
[20] Ibid, pages 29-31, 45.
[21] Tuzigoot National Monument 1975; pages 3-7.
[22] Protas, 2002,146.
[23] Northern Arizona Council of Governments 208 Program 1979, pages 9, 67-69.
[24] This is a reference to how far the watershed reaches out. The Cottonwood Reach is one of various reaches identified in the area.
[25] Jay M. Price, *Gateways to the Southwest, The Story of Arizona State Parks* (Tucson: University of Arizona Press, 2004), 134-135.
[26] Ibid. Price's footnotes for pages 132-137 appear on page 206 and refer to the University of Arizona Cooperative Extension Service's publication, Recreational Resources of the Verde River, Cottonwood Reach, 1979, as well as a U.S. Forest Service joint publication by the Coconino, Prescott and Tonto National Forests called Verde River: Wild and Scenic river Study: Report and Environmental Impact Statement, April 1981.
[27] Max Castillo, interview by Nancy Dallett, June 10, 2008, Dead Horse Ranch State Park.
[28] Price. Price's section on the Verde River Greenway as well as an interview with Max Castillo, a Dead Horse Ranch State Park employee, capture the excitement during the 1980s when Babbitt was governor and intimately involved in negotiating, door-to-door, with Dan Campbell of the Nature Conservancy for the Greenway.
[29] Bruce Babbitt, *The Verde River: A Resource for All Generations*, a special presentation by the Governor Babbitt to the State Parks Board, November 8, 1986.
[30] Protas. 1997, 12. (Interview with Glen Henderson)
[31] William L. Towler, Anne Franci, and Dolores Gonzales, *Verde River Water Quality Management Plan,* Northern Arizona Council of Governments, 1982, 1.
[32] Ibid., 51-53.
[33] A fecal coliform count is the standard test to assess the drinkability of water.
[34] Joe Blanton, and Frederick R. Steiner, *Draft environmental impact statement for the Verde Valley Ranch Projct, Clarkdale, Yavapai County, Arizona* (Tempe: Department of Planning, Arizona State University, 1991) 12-13.
[35] William L. Halvorson, "Managing the Landscape – Society's Changing Perspectives," *First Conference on Research and Resource Management in Southern Arizona National Park Areas*, May 13, 1996: 45.
[36] Protas 1997, 10-16.
[37] Ibid., 19.

Tuzigoot Administrative History
Dallett Draft December 8 2010
Chapter 5 Twenty-first Century Tuzigoot

INFORMATIONAL OUTLINE ONLY

In 2002 Glen Henderson retired after 27 years at Tuzigoot. His retirement coincided with Phelps Dodge's ____ year planning efforts for Verde Valley Ranch. (Was it market conditions, opposition, that's not the business they were in??) The market conditions changed and the company eliminated their real estate office and began looking for a buyer instead. As of 2009 there is no buyer.

Notes for chapter:

NEED TO NOTE HERE THE VARIOUS GROUPS INCLUDING VERDE RIVER GREENWAY CORRIDOR, VERDE RIVER CITIZENS ALLIANCE, VERDE RIVER BASIN PARTNERSHIP, YAVAPAI WATER ADVISORY COMMITTEE, VERDE WATERSHED ASSOCIATION ... AND BRING IT UP TO DATE AND CHARACTERIZE THE LAST 10 YEARS OF DEVELOPMENT, INCLUDING AWARD WINNING FOR PLANS ...

(INSERT HERE UPDATED INFORMATION ON WATER QUALITY IMPACTS AND STUDIES)

Need to bring water quality issues up to date here .. include information about how the marsh and pilings were considered threats to water quality.

2002 Glen Henderson retired after 27 years
Ulrich acting Feb-May
Davis June 30th, up from Chief of Natural Resources in Southern AZ Office

First call for action May 5, 1955 ...
1990s EPS consent to cap
2006 capped
Davis nominated projected in March 07
May 07 nominaated for Hardrock Mineral Community Outreach and Economic Security Award by NPS
Prevent pollution
Minimize noise, dust
Reclaim land
Prevent erosion
Plant native species

Vanishing treasures : give background, when start for tuzi?

Trust for Public Lands lead, mtgs. Include Nature Conservancy, Clarkdale, AZ G&F, AZ Parks, NPS

Reactivate WNP Association

Verde Nature Tourism Alliance
Audubon
Audubon Important Bird Area
Nature conservancy
Service groups ... Boy Scouts

Sonoran Desert Inventory and Monitoring Network

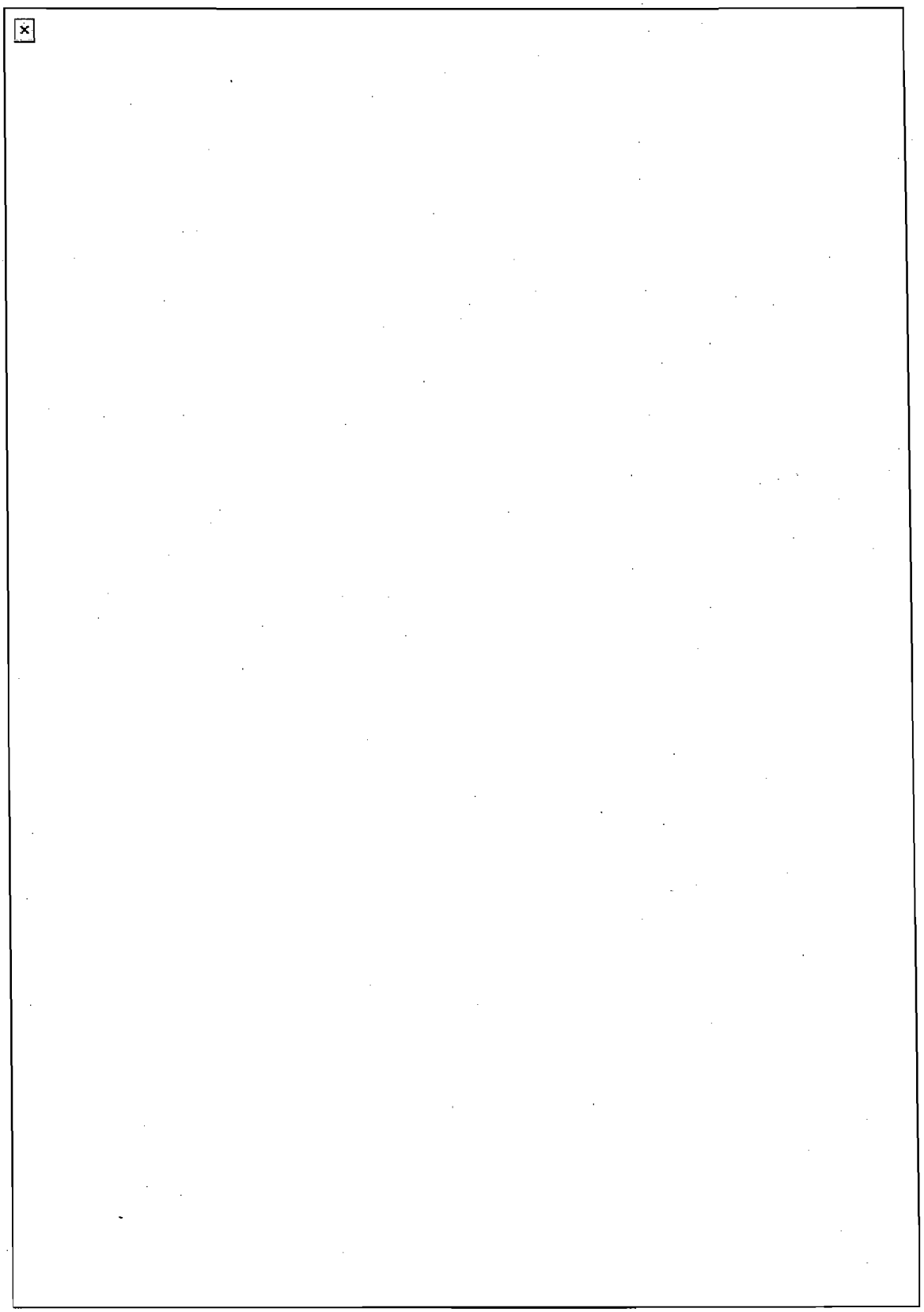
Vanishing Treasures: photodocumentation of Tuzigoot, Cultural Cyclic project

2003 Stantec Engineering study
Original plan when gold course was proposed was for a plastic underdrain and leachate collection system. Now need to prevent rainwater (not course watering) from reaching the tailings and going into aquifer. Aquifer Protection Permit needed
Towns effluent to go to Verde Valley cemetery and/or PHX Cement Plant

600 year old agaves on site?????

Peck's Lake closed Jan 1, 2005 (operated by Clarkdale since 1966)

Kathy Davis submits 16 questions Dec 17,03 but not sent until 2.27.04
2-4 feet of soil, then seeded ... 90 dap capping process, 125 acres



(picture did not show up in my file
2004 permanent position through VT: historical Architect

Yavapai Cultural Heritage Allliance
Verde River Citizens Alliance
VV Land Protection Institution
Trust for Public Lands
Keep Sedona Beautiful
Friends of the Forest

Residence turned into RESOURCE Center
Office space for historical architect, masonry workers, arch technicians, Natural Resource Manager, seasonal and research staff

2004 visitor guide newspaper, two annually
Volunteer in Parks

BLM land swaps: PD wants to mine in Safford
BLM gets Tavasci and riparian parcels in Gila Box Riparian Natural Conservation Area, Las Cienegas Natural Conservation Area, Dos Cabezas Mountains Wilderness
323.75 acres

Dos Pobres/San Juan Project?

2005: acquired Marsh December 5th 2005 as part of 324-acre
Joint development for public use with Dead Horse
Preserve historic integrity
Environmental integrity
Native vegetation community
Still "open to mineral entry"

Stems from 1996 proposal from PD to BLM for Safford open pit copper mine … 8 miles north of Safford
BLM to get 11 private parcels 3,858 acres including Gila Box Riparian, Las Cienegas, Tuzigoot

2005
8 affiliated tribes: Hopi, Yavapai-Apache, Yavapai-Prescott
Southern: Gila River, Salt River Pima Maricopa, Ak Chin,
Zuni by phone

Civic tourism initiative

RESOURCE MGMT DIVISION created October 1, 2005

Funds through fee demo to refresh vc museum exhibits

Possibility of next chapter .... K Davis and professionalization of staff...
Will include the following:

The 2005 publication by Cecilia A. Schmidt and Brian F. Powell of the School of Natural Resources at the University of Arizona, and William L. Halvorson of the USGS Southwest Biological Science Center Sonoran Desert Research Station epitomizes the results of gathering and analyzing the work many specialists who contributed an understanding of the monument's amphibians, reptiles, birds, and mammals. At the time of publication the tailings were still owned by the Phelps Dodge corporation and the Tavasci Marsh was held by the Bureau of Land Management. The Executive Summary opens the document with stunning findings, including that the authors found 330 animal species, of which 142 had not previously been recorded at the monument; that the bird community had the highest species richness of any national park unit in central and southern Arizona, due primarily to Tavasci Marsh and the Verde River; that the high number of non-native fish and plants presented particular management challenges; and that for the first time the taxa were nearly complete and that only some "rare or elusive species will be added with additional survey effort."[i]

2007

Verde Valley Regional Land Use Plan
Adopted by Board of Supervisors November 20,06
Awarded Governor's Excellence Award 07

Verde Valley water groups:

Arizona Department of Water Resources Rural Watershed Initiative
Citizens Water Advisory Group
Clarkdale Water Advisory Committee
Prescott Active management Area – Groundwater Users Advisor Committee
Prescott AMA-GUAC Safe Yield Subcommittee and its Technical Advisory Committee
Upper Agua Fria Watershed Partnership
Verde River Citizens Alliance
Verde Valley Natural Resources Committee

Verde Watershed Association
Yavapai County Technical Administrative Committee

North Central Arizona Watershed Consortium
Hyde Mountain Vista Association
League of Women Voters
Oak Creek Canyon Task Force
Prescott Creeks Preservation Association
Sierra Club
Stewards of Public Lands
Stoneman Lake Property Owners
Others

March 2008 Draft General Management Plan / environmental assessment

2010: sustainability park: Attached is a letter sent to Mayor Doug Von Gausig, Clarkdale, AZ about the proposed sustainability park which is an ambitious commercial and industrial endeavor adjacent to Tuzigoot National Monument. A link in the letter connects to the Clarkdale website to the White Paper and Executive Summary for a description of the project.

In the letter we have identified several concerns potentially affecting Tuzigoot National Monument, Tavasci Marsh, Verde River, Peck's Lake, and Tuzigoot Important Bird Area. I wanted to share our concerns with you. We believe the concept of a sustainable park has merit, however, we do not agree that it should be located next to or within the legislated boundaries of Tuzigoot, which is listed on the National Register of Historic Places.
There are other potential suitable sites nearby.

(would theoretically incorporate discussion of pros/cons)

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[i] Schmidt, Celia A. October 2005, xiii. Literature cited in this USGS report includes and immense amount of research conducted, primarily in the 1990s, and collected and analyzed by 2005. There are 128 bibliographic entries ranging in topic from ornithology to water resources to plant life, and contributed by organizations, archaeologists, architects, and United States departments.

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Chapter 6 The Archaeology of Knowledge

"It is clear that the ruins first excavated in 1933-34 have undergone many changes. Although the walls are stronger and more interesting in the eye of the average visitor, much is left in doubt as to how the "city of crooked water" actually appeared during its greatest period."
Dennis D. Neilson, June 1980

Each excavation and each stabilization effort at Tuzigoot reflects the time period within which it was created, and each is a layer or strata of evidence for our interpretation. This also holds true for each of the exhibits, pamphlets, and trail guides proffered by the Tuzigoot National Monument. It is possible to chronicle the major excavation and stabilization projects in an effort to see what the contemporaneous thinking was on the techniques and philosophy of archaeological investigation as well as how, in some instances, that thinking was manifest in the information offered to the public. This chronicle cannot be comprehensive, but will offer highlights of the evolving concepts, techniques, funding, and the NPS presentation of archaeology for the public. In each instance of excavation, stabilization, and interpretation, there is a chance to see how excavators, stabilizers, and interpreters overlay the ruins and the exhibits with questions and issues of their own time. As Arizona anthropologist Tom Sheridan reminds us, "Archaeology is an interpretive science constantly refining its techniques, employing new techniques, and reexamining the conclusions of earlier researchers." This was certainly the case at Tuzigoot.[1]

Excavation to Stock the Smoki Museum

From the moment the hilltop was deemed suitable for excavation by the Archaeological Committee of the Yavapai County Chamber of Commerce, there is documentation of the intended purposes and needs for the excavation. In 1935 Louis Caywood, who did the first excavation and repair work on the ruin, said, "The excavation of Tuzigoot Ruin was the outgrowth of an effort to build up a small local museum and to utilize the resources of a single county in the collection and preservation of archeological material."[2] The small museum it was intended to stock was the Smoki Museum at Prescott. Tuzigoot was the third of three excavations for that purpose. Caywood went on to say that, "It was felt that its excavation would provide archeological information in regard to the Upper Verde drainage which has heretofore been entirely lacking, no systematic excavation ever having been carried out in the region."[3] Today it is surprising to think of excavating to build up a collection of archaeological material, but at that time it was considered logical and acceptable to excavate as part of a strategy to create cultural institutions to attract more scientific exploration and tourism. Globe had its Gila Pueblo, Flagstaff had its Museum of Northern Arizona, Phoenix had its Pueblo Grande, Casa Grande had its Casa Grande, Dragoon had its Amerind Foundation, and so on. It seemed fitting to forward-looking citizens and businesses in Yavapai County to dig up a site in one part of the county to build up a collection in another. From this excavation came evidence interpreted by Caywood and Spicer to reflect three distinct periods of operation at Tuzigoot. The first, on top of the hill, comprised eight rooms, thought to be constructed before AD 1,000. An increase in population in circa 1200 brought on the second period of building, with new

rooms built over the older ones. The third period toward the end of the thirteenth century comprised seventy-seven ground floor rooms with possibly fifteen second-story rooms, some with fireplaces and stone linings, and all of which might have accommodated about 450 people.[4] This first systematic excavation was the first of its kind for the region, and it had the long-standing impact of uncovering and reifying what we now refer to as the Tuzigoot Phase of the Sinagua people, specifically the period from ____ to _____.

Caywood and Spicer's interpretation was a story that would help the public to relate to the Sinagua of the past. They drew a parallel between the prosperity of the 1920s and the prosperity of the Sinague: "The upper Verde valley at this time was experiencing a period of prosperity which might be likened to the years from 1921 to 1928 in the same region. And as suddenly as the recent boom period ended, so ended the prehistoric period of prosperity. The latter, however, ended with a finality that was complete – so complete that it is only with picks and shovels that we can come at the story of it."[5] Archaeologists and interpreters have been trying ever since to find ways to make sense of and relate to the lives of the Sinagua, and in the 1930s it must have been plausible or intriguing to wonder whether an economic decline could have caused the complete destruction of a people. While there was an effort to find similarities, there was also cause for wondering about differences in the sometimes unusual prehistoric practices of Sinagua people. Excavators at Tuzigoot were somewhat perplexed by the close proximity of human remains to the pueblo and that graves were used for multiple bodies. Aware of the taboo of now disturbing those bones, Caywood noted, "Such lack of taboo [on the part of the Sinagua] against the disturbance of bones inclines the

excavator to the thought that perhaps the inhabitants of Tuzigoot would not object greatly to his disturbance of their graves in his effort to discover and record their history."[6] Apparently Caywood was under the impression that people who buried their dead close to center of the village would not mind if the bones were disturbed. The way the excavations were handled was frowned upon by later archaeologists and anthropologists who worked at the Tuzigoot site.

1940s: Documentation, Experimentation, Demolition

Stabilization and repair by NPS has been ongoing ever since it was established in 1939. Director Frank Pinkley notified the custodian Terah Smiley in January 1940 that he had fifty dollars for a ruins stabilization account. It was up to Smiley to decide whether he would take on the work and if so he was requested to write up, "a fairly complete description of the type of work you plan to perform, and the location thereof. This will serve to build up a file of information concerning the work, and will be of help to us in the future. If possible, before and after pictures should be taken."[7] Pinkley supplied the ruins stabilization efforts with blank forms. Dale King, the archaeologist for Southwestern Monuments, further elaborated to Smiley that he needed six copies of each of the record sheets and the process to identify photographs. King suggested that Smiley make up the first set of sheets and send them to Coolidge where the Southwestern Monuments headquarters was located in order to check them and ensure they were being prepared in a manner consistent with the other monuments. Ted Smiley's Civilian Conservation Corps (CCC) Mobile Unit Record Sheets began a long process of documenting stabilization work at Tuzigoot. This was the first time in the

history of Tuzigoot that a formal process was instituted. The process was used to document the progress and changes at the park. Prior to that, Caywood and Spicer were doing things as they saw fit with no reporting. Pinkley systematize and formalized the process.

John Cotter's stabilization work in 1940 with high school boys paid with National Youth Association (NYA) funds required carrying by hand water, sand, clay tools, and all materials to patch and repair walls, as well as demolish parts of Unit IV. He had difficulties keeping the young men working at Tuzigoot because he was in competition with higher pay for working in the smelter. He sent soil samples to the American Bitumuls Company in Los Angeles to see whether Bitudobe Stabilizer might be advisable for Tuzigoot. After testing the soil, the company found the soil content was highly unsatisfactory for use with Bitudobe because it contained, "the highest quantity of water soluble salt that we have experienced in our laboratory."[8] They suggested Bitumuls Concrete Admix. Charlie Steen, then junior archeologist at headquarters, approved the experiment: "Go ahead and try a drum of the Bitumuls Concrete Admix. So far as I know it has not been used at any of our monuments and you might as well be a white rat."[9] Experiments progressed with linseed oil as an erosion arrester and Bitumuls Admix as an adobe strengthener. Other southwest national monuments experimented with Diamond Seal, manufactured by the Zone Company in Fort Worth, which was designed for hardening brick, stone, and cement. Tests at Casa Grande National Monuments were failures and although there was a request for samples of caliche so that the company could create another mixture, there is no evidence that it was ever used at Tuzigoot.[10]

A Special Report on ruins stabilization by A.E. Buchenberg of December 1941 set forth the disproportionate attention and funding for custodians residences, administration, service buildings, landscaping, road building, and various improvements for public use, as compared with ruins preservation. Buchenberg noted, "it may be suggested that since these prehistoric structures have in some measure survived for six or seven centuries, the rate of depreciation must be low and that there is little cause for immediate concern. A careful study and analysis shows that disintegration is going on at a rapidly progressive and alarming rate due to time, and elements, irresponsible archaeological excavators, vandalism, and other causes antedating present date protection." He characterized the growing interest at NPS in ruins stabilization was not equal to the extent and rate of destruction and were inadequate to meet the situation.[11] The deterioration and vandalism were having a large effect, and there was no understanding on behalf of NPS regarding the rate of change, or how to counteract the negative impacts.

Cotter's need for stabilization turned to a need for demolition in 1942 when the WPA roof and wall construction was found to be a danger to visitors. The roof turned out to be six inches of wire-reinforced cement and concrete in layers, which compromised the supporting walls and needed to be pounded to rubble with a twenty-five-pound sledgehammer. The masonry walls had been built with the best concrete filled masonry. The concrete was solid, two feet thick, and also needed to be demolished with a sledgehammer.[12] In this case the wall was eighteen feet high, which created an extra problem for those wielding the sledgehammer. Cotter wondered whether the expert use of dynamite or hydraulic jacks would be possible. As a result of

this demolition, several rooms were filled with rubble that remained in the ruins until the next big stabilization project in 1953. The 1942 demolition so soon after the reconstruction was a sign of the inefficient planning. The roof had been too heavy, but this had not been taken into consideration. The bigger problem was the effort that had to go into its demolition.

Between January and June 1947 Cotter worked with two Yavapai Indians to patch the entire ruin. Several years later, looking back on this first major ruins stabilization project since the original excavation-restoration of 1933, there was consensus that the work was, "haphazard, lacking in desired uniformity, and serving purely as stopgap aid. This has been largely due to inadequate funds, equipment, and personnel, and by no means to any lack of industry, enthusiasm, or initiative on the part of meager personnel undertaking the work."[13] Roland Richert also later extended praise and credit to John Cotter,

> for having literally held the ruin together during the first decade of Monument status. While it is true that some of the earlier work has not held very well because proportion of cement to soil and sand were too lean, and sometimes contained too much red coloring, it must be said in all fairness that soil cement techniques have been somewhat improved since 1940. Moreover, due to press of other duties, it was impossible for one man to give constant supervision to a large turnover of inexperienced personnel, most of whom were immature high school boys. Hence we reiterate that Mr. Cotter cannot be praised too highly, for he single-handedly kept current the maintenance status of a large surface ruin

while at the same time offering guide service to an ever-increasing number of visitors.[14]

Roland Richert prepared a report on the need for ruins stabilization in 1949 that called for additional experimentation with soil types. Previous stabilized adobe was made from soil taken from the room floors, which within a short time became crumbly and susceptible to erosion. He was convinced that clayey soils needed to be quarried from the base of Tuzigoot Hill or from along nearby gullies and washes, and he wanted proper formulas and procedures from the archaeologists Steen and Vivian and from King, naturalist at headquarters. Richert wanted the ruins to appear uniform and to replace all deteriorated concrete, and to plaster with new capping and pointing.

INSERT INFORMATION ON FIRST GUIDED TRAIL BOOKLET ...

INSERT INFLUENCE OF AL SCHROEDER ...CHANGING UNDERSTANDING AND QUESTIONS ABOUT SALADO AND SINAGUA ...

1950s and 1960s: Southwestern National Monuments Mobile Unit

Richert's subsequent stabilization work with six Navajos as a working crew took place between March and April 1953 and involved removing rubble from Unit IV, repairing doorways in matching masonry, anchoring eroding clay banks that underlay prehistoric walls, and patching and repairing holes in all walls of the ruin. Richert's stabilization report is a rich repository from the first time Tuzigoot was in a position to have the services of the Mobile Unit of the Southwestern National Monuments (check to see if this is correct, Matt, can you help on this?). In the introduction, Richert provided a synopsis of Tuzigoot geography, geology, and archaeology. Richert understood the

1990s: Vanishing Treasures and a Focus on the Future

Need to address this with Matt, draft to develop after July 15, 2009

Possible insertion of information about early 1990s efforts to stabilize the WPA restoration … poster highlights employees working with natural soil material mixed with cement and red-tone cement coloring … (see Del Carlo article in 1995 research and resource management)

Insert 1997 Whittlesey et al Vanishing River: Landscapes and Lives of the Lower Verde Valley

Insert hiring of archaeologist … historic event, first on site since _____.

Insert Feb 2004-Dec 2007 Architectural Condition Assessment, Treatment Histories and Recommendations

Insert October Southwest Biological Science Center … Vascular Plant and Vertebrate Inventory of Tuzigoot National Monument

Insert 2008 Robert Powers and Nancy Pearson … Overview and Assessment of Middle Verde Valley Archeology … by then 100s of "gray literature" in federal and state land managers, contract arch firms. Pearson unearthed many … not comprehensive but review of major reports and interpretive syntheses …: provides broad review and current arch knowledge of middle Verde valley…

In *The Archaeology of Knowledge* Foucault writes, "let us say that history, in its traditional form, undertook to 'memorize' the *monuments* of the past, transform them into *documents*, and lend speech to those traces which, in themselves, are often not verbal."[30] Tuzigoot's became a monument through a process of documentation. This documentation was sometimes the result of environmentalists attempting to preserve the land. The documentation was other times Pinkley's attempt to systematize monumental operations. The documentation was the agreements between the town and government, the letter for Phelps Dodge to the Tavascis, the document that was signed by a President ? to establish the monument officially. All these documents have given Tuzigoot a voice: a voice that speaks of its past, and a voice that helps to shape its modern role.

1

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