



United States Department of the Interior
NATIONAL PARK SERVICE
MONTEZUMA CASTLE & TUZIGOOT NATIONAL MONUMENTS
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Memorandum

To: Director, Intermountain Region

From: Superintendent, Montezuma Castle and Tuzigoot National Monuments

Subject: Annual Narrative Report FY 2003 for Montezuma Castle and Tuzigoot National Monuments

Administration

We received a permanent position through the Vanishing Treasures (VT) program. A historical architect was added to serve all VT parks with Montezuma Castle and Tuzigoot serving as the host site. Funding was received in FY 2003 and the position was advertised but not filled. We again announced the position in fall. The Montezuma Well ranger position was filled by Rex Vanderford, formerly a protection ranger at Wupatki National Monument. Mickey Estrada filled the facility manager position in May nearly after year being vacant. Jerald Weaver, resources manager in the intake program was detailed as the resources manager from February through October.

Representative Rick Renzi visited on July 3. He introduced a bill to expand the boundaries of Montezuma Castle by 157 acres. The private parcel was adjacent to the north boundary.

The IMRO GSA space coordinator worked with the superintendent to synchronize the rents for the maintenance facility and headquarters with the goal to combine the two offices and save rental costs. Currently NPS pays about \$90,000 total for both spaces.

Community Relations

Continual emphasis effort was put into creating and strengthening community relations. The superintendent participated in the following organizations:

- Yavapai Cultural Heritage Alliance – establish and promote heritage preservation and tourism (founding member along with historical societies and chambers of commerce representatives)
- Verde River Citizens Alliance – water resources preservation and education
- Verde Valley Land Protection Institute – land conservation and preservation
- Southwestern Academy – private school with environmental focus (board of directors)

She assisted Arizona State Parks with two selection panels for park managers of Jerome State Park and Fort Verde State Historic Park. The supervisory park ranger also sat on two panels for protection park rangers in local state parks. Relationships were maintained with the Trust for Public Lands, Archeological Conservancy, The Nature Conservancy, Audubon, Verde Valley Archeological Society.



Park staff were involved with the Verde Valley Birding and Nature Festival, Verde River Days, and March Archeological Awareness Month through exhibits, interpretative programs, committee activities, and/or lead role. Local 10K fun runs include both Tuzigoot and Montezuma Castle in the routes.

The superintendent worked closely with the Camp Verde Chamber of Commerce and staff of Fort Verde SHP to better advertise the state park and encourage visitation from Montezuma Castle visitors. Montezuma Castle had approximately 644,000 visitors while the state park visitation averaged 30,000 people the past decade. In response to requests from several local Chambers of Commerce, we ordered 100,000 more park brochures to distribute locally and have plans to improve the website information.

Tribal Relationships

Tribal relations were advanced when the administrative officer initiated contact with the Yavapai Apache Unity Group (high school and college youth group) to hire a GS-03 cash clerk through the STEP authority. Through the general management plan process, the superintendent contacted **eight** affiliated tribes, and met with some groups, Hopi, Salt River-Pima-Maricopa, Yavapai Prescott, and Yavapai Apache. There was a previous meeting with Hopi cultural office member in March when representatives were in Verde Valley.

Lands

- Montezuma Castle Boundary Expansion There was some political movement in the process to exchange the 157-acre parcel adjoining the Castle Unit. The exchange would be between private owners and US Forest Service, with the land transferring to NPS after receipt by USFS. The exchange would add a riparian bottom with adjoining cliffs, more wildlife habitat, and archeological resources. This exchange was removed from a controversial larger exchange package that Western Lands Group compiled for USFS lands, which remained unresolved because of details, such as no exchange of water rights, water consumption, and continued grazing privileges. There was no dispute about the value of adding more land to Montezuma Castle. In November 2002 the bill passed the House, but was stopped in the Senate due to its controversial content. Representative Renzi reintroduced the bill HR 622, which was authorized in July and sent to the Senate where Senator McCain amended it in the Senate Energy and Natural Resources Committee.
- Tavasci Marsh Land Exchange The BLM finished the draft EIS for copper mining near Safford, Arizona, and the document was circulating in the agency and DOI offices before being finalized. Although BLM said the FEIS was scheduled for spring 2003, it was not released by fall. Tavasci marsh is one wetland mitigation exchange for mining by Phelps Dodge. BLM expected court challenges to the FEIS and delays of 3 to 5 years to implement, at which time the land ownership would be transferred to NPS.
- Phelps Dodge Property around Tuzigoot Trust for Public Lands continued its lead role to build a coalition of groups to protect open space and discuss with Phelps Dodge about giving the coalition time to purchase the lands around Tuzigoot. Members included Trust for Public Lands (lead), The Nature Conservancy, town of Clarkdale, Arizona Game and Fish, Arizona State Parks, National Park Service, Keep Sedona Beautiful, Friends of the Forest, Audubon, and others. While Phelps Dodge representatives said they would not build a housing development, they were interested in a buyer who could develop if desired. Phelps Dodge held an open house in Clarkdale in late summer for its proposal to cap the mine tailings with dirt and restore arid native landscape. TPL representatives received permission to review Phelps Dodge's open files documenting chemical composition of the tailings.

Planning

A team from Denver Service Center (DSC) began working with park staff in June on the general management plan, which will take 2½ to 3 years to complete. Initial work involved monument staff, volunteers, and WNPA staff describing the mission, purpose, significance, and interpretative themes. The park mailing list was expanded, which is important since none existed a year earlier. The DSC team prepared and mailed a newsletter. Open houses, partners meeting, and tribal consultations were scheduled for fall and early winter. A visitor use survey was approved as part of the GMP and will be conducted fall 2003 and spring 2004.



Cooperating Association

Montezuma Castle and Tuzigoot are affiliated with the Western National Parks Association (WNPA), which has a field manager and six part-time sales clerks working in the park. The field manager and superintendent continued to increase the variety of sales items, notably water, T-shirts, hats, bags, kids books, books on natural, cultural, and local history. The sales for these monuments were among the highest of WNPA's 64 areas. Gross sales for each outlet in 2003 were:

Montezuma Castle	\$486,536.60
Tuzigoot	<u>\$ 85,992.64</u>
Total	\$572,529.24

Many projects and services were completed through the aid funds. They included the new interpretative display at Montezuma Castle, monument newspaper, training, volunteer appreciation, display exhibits, contributions to the Verde Valley Birding and Nature Festival, teacher's guide, park brochures, and more.

Interpretation

Staff at Montezuma Castle and Montezuma Well contacted 634,965 visitors in the visitor center and contact station, a decline of 9,101 visitors from last fiscal year. At Tuzigoot visitation increased to 116,361 visitors. Formal and informal interpretive programs, including the Junior Ranger program, were presented plus off site programs. The results of the 2003 Visitor Survey Card indicated that 96% of Montezuma Castle visitors and 96% of Tuzigoot visitors understood the significance of the sites.

Interpretive staff created a new park newspaper and five site bulletins that will be distributed to the public in early 2004. Our teacher's guide is in the final stage of completion and will be printed in 2004. The park brochure was improved with two new cover images and revised text. Staff committed to more formal presentations at Tuzigoot (200 talks per year) and Montezuma Castle (400 talks per year). The interpretation at Montezuma Well became more structured due to the drive of the new ranger. Scheduled programs and roves were offered. All staff doing interpretation was assigned a special project of their choice, and permanent rangers were assigned a certain number of guest speakers, special programs, and off site events. As a result there were two star gazing programs and in August weekends there were riparian and bird watching walks.

Public Use and Fee Collection

A re-survey of visitation patterns at both monuments began in July 2003 and will continue until June 2004. Visitation continues to decline at Montezuma Castle. Tour buses remain a significant part of the overall visitation pattern at Montezuma Castle. In FY 2003 a total of 51,956 bus visitors were counted at Montezuma Castle. Visitation figures for each management unit were:

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Montezuma Castle (includes Montezuma Well)	804,415	730,887	644,066	634,965
Tuzigoot	114,494	119,695	112,167	116,361

Entrance fees are collected from all visitors to Montezuma Castle and Tuzigoot units. A comparison with FY00 shows the following:

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Montezuma Castle	\$880,672	\$750,653	\$823,149	\$780,597
Tuzigoot	<u>\$102,200</u>	<u>\$ 94,063</u>	<u>\$126,741</u>	<u>\$123,050</u>
Total	\$982,872	\$844,716	\$949,890	\$903,647

Law Enforcement

Chief Ranger Steven Sandell retired with nearly 24 years of service at Montezuma Castle and Tuzigoot National Monuments. His position will remain vacant until there is sufficient funds to move a replacement.



Incidents included theft from automobiles, car clouting, parking and moving violations, and an individual wandering in a closed area. The individual fled from the ranger, was caught, and later charges dropped by the magistrate despite our efforts to make a case. A few months later the individual was arrested for stealing archeological artifacts on US Forest Service lands.

An OFS funding proposal statement for Tuzigoot was amended to accurately reflect the monument's Law Enforcement Needs Assessment for an additional protection ranger. The funding proposal also included an estimated annual recurring cost for the current protection staff.

Fiscal

The park operating base budget was \$1,122,000.00. This included an additional \$88,000 for a Vanishing Treasure historical architect position. These funds were supplemented by a variety of other funding sources including.

Cost of Collection	\$280,400
VIP	1,100
Donations	\$27,400

Personnel

The FY 2003 park staff consisted of 16 permanent employees, 18 temporary employees, 5 STEP students, 1 Student Conservation Associate, and 1 term employee.

Volunteer In Parks

The program became more organized by developing a list of projects through the coordinator consulting with other divisions and staff. A total of 19 volunteers consistently provided services to the monuments for a total of 4,079 hours primarily in interpretation but also administration, computer and programming, safety inspections, trash. Other services identified on the list were provided in April with a special volunteer day with Wal-Mart, Unilever, and NPS in partnership with National Parks Foundation. This work day resulted in 592 donated hours at all three sites staining an observation deck, picking up trash, cleaning the historic ditch, pick up concrete debris, building barriers to social trails, and pulling weeds. The day began with a ceremony at Wal-Mart, work sessions, and catered lunch at Montezuma Well picnic area. In May, a troop of Boy Scouts and family donated 99 hours at Montezuma Well obliterating social trails leading to closed archeological sites and rims. The ranger talked to the scouts after the work about archeological preservation.

The second recognition brunch was held for regular VIP and attended by the majority of our volunteers. Gifts were presented to all in appreciation for the hours donated.

The Volunteers of Outdoor Arizona (VOAZ) organization made contact with the superintendent to do projects in the monuments. Initial meetings were held to establish a project list and volunteer days. VOAZ offered skilled volunteers for selected projects.

We continued to add to the project list looking for more assistance in areas not normally requested in the past, such as administration and resources management. Additional we began looking for a volunteer to coordinate the volunteer program in conjunction with the NPS coordinator. The program and volunteer potential is great but too much work for staff with limited time. A volunteer coordinator working with NPS would be an asset to the program.

Housing

Housing inspections were performed and the units continue to be listed in good condition. A residence at Tuzigoot was converted into a new Resource Center to provide office space for the historical architect, masonry workers, archeological technicians, natural resources manager, and seasonal and research staff. The resources library will be moved to the Center, and there will be a small conference room.



Property

All property was surveyed. Two new computers were purchased for the historical architect position and a laptop for the ranger division.

Research

Several research projects were ongoing in 2003. They include studies on archeological overview and assessment, water resources geohydrology, visitor use survey, cultivated pre-Columbian agave, non-native plant spread and control, critical habitat for sensitive species, yellowbill cuckoo survey, water quality, invertebrates in Montezuma Well, baseline inventories of plant, animals, and water, rattlesnakes, waterfowl parasites, and bats,

A major effort was staged for the baseline inventories for all three units through the Sonoran Desert Inventory and Monitoring Network. Initial scoping sessions for identification of vital signs began in FY 2000 and continue progressively for all parks individually and collectively. A Level I survey of water resources was initiated, and Phase II of the water resources inventory and monitoring protocols started in November.

Resource Management

A natural resources manager was on detail in the monuments from February through October. He organized the research database, park procedures, and tracking. He prepared several project statements and obtained funding for projects and research. A compliance process was established, and resources management plans reviewed for updating. Water Resources Division, WASO, started the water rights inventory.

Reviews of the list of classified structures and condition assessment for archeological sites were completed. A special project under the Vanishing Treasures program allowed funding for a baseline photodocumentation of the Tuzigoot ruin, and a Cultural Cyclic project provided for seasonal Laborers to augment the permanent Vanishing Treasures program for 6 months

The parks have negotiated agreements with the Western Archeological and Conservation Center to bring collections of artifacts, library material, and slide files up to NPS standards. Initial work was completed in FY2001 with additional work scheduled for FY02 and FY03.

Maintenance

Fee demo projects were at the core of the maintenance operation. A project that was supposed to replace an old toilet at Montezuma Well did not come through for us. An AD contractor submitted a high bid and efforts on having the contractor lower his bid was unsuccessful. A new company that constructs pre-fab buildings was contacted. We will use this company to replace the old restroom facility.

Several other projects were ongoing. One was to replace old trash receptacles with new ones throughout all three parks. The process for replacement of restroom fixtures at Montezuma Castle and Tuzigoot was started. Park personnel worked with the engineer and the contract specialist of the Southern Arizona Office on putting a package together so bids can be solicited. An interpretive deck was designed for the Montezuma Castle complex, reviewed by park staff, and approved by the management team.

A stone patio on a CCC building was restored. New energy efficient windows and doors were installed at Montezuma Castle and Tuzigoot housing units. Two houses and a pump house at Montezuma Well had their exterior painted. At Tuzigoot a house was rehabbed and converted into office space. At Tuzigoot all housing units had the old cedar fences removed. At Montezuma Well the irrigation ditch was maintained by having weeds removed and dug deeper. One sewer lagoon was pumped. The monuments stayed in compliance with ADEQ on water quality. Sections of the boundary fence were repaired. New PMIS projects were entered into the system for deferred maintenance projects. All FMSS requirements were met. Energy report was compiled and submitted to the energy coordinator in Denver. Two seasonal laborers were hired.

Vanishing Treasures

Through the Fee Demo process Tuzigoot received funding for a documentation project. Four seasonal archaeologists were hired. An extensive process was conducted at Tuzigoot National Monument on Group IV and



V that includes a total of 14 rooms. Documentation included a description of the current mortar type present on the wall as well as condition assessment including basal erosion, voids, rodent or insect damage, and presence or absence of original Sinagua mortar. Floor plans were drawn to scale for each of the rooms and include floor features, wall lean measurements and capping mortar data. Profiles were recorded for all interior and exterior and entered into AutoCAD with a standardized key for different mortar types and other features. All walls were documented in both black and white and color slide photographs.

The program has been removing the hard mortar, salvaging all structurally sound stone, and replacing the mortar with a softer and less impervious soil cement mix, while using new stone to replace those that have deteriorated. The result has been a consistent and more porous surface that protects stone components from rapid deterioration, while still being hard enough to serve as a structurally efficient support for the walls. Visually, the end product more closely approximates a soil and stone wall in terms of color, texture, and consistency. For the year ending September 30, 2003, 1087 sq. ft. of wall was repointed, replaced 302 sq. ft. of deteriorated stone surface, repaired 220 linear ft. of wall basal structure. Two seasonal laborers were hired.

Safety

A maintenance employee was appointed as the new safety officer and took the lead in our monthly safety meetings. He reevaluated the park's safety program. Assessed and reported to the management team findings on all incidents within all three parks. Initiated an accident prevention program.

Results included an inspection of all the structures and equipment, repair of the metal handrails at the Tuzigoot parking lot, and repair the wood railing on the deck at the Tavasci marsh. Safety equipment was purchased including personal protective equipment, which included safety boots, prescription eyeglasses, back braces, gloves, sunscreen, and various types of gloves. Aging ladders were replaced. Small portable acetylene torch was purchased. A new table saw was purchased as well.

Kathy M. Davis
Superintendent

