

# VANISHING TREASURES

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YEAR END REPORT  
FISCAL YEAR 1999

NATIONAL PARK SERVICE  
JANUARY 2000

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An electronic version of this report can be accessed through the Vanishing Treasures home page at <http://www.cr.nps.gov/aad/vt/vt.htm>

Published by the National Park Service Vanishing Treasures Program



## CONTENTS

<b>SECTION 1 INTRODUCTION</b> .....	3
<b>SECTION 2 PROGRAM FUNDING</b> .....	5
FY 1998 .....	5
FY 1999 .....	6
FY 2000 .....	7
FY 2001 and Beyond.....	8
<b>SECTION 3 VT PROJECTS AND PROJECT FUNDING</b> .....	13
FY 1999 Projects.....	13
FY 2000 Projects.....	14
FY 2001 and Beyond.....	15
Program Management Funds.....	15
<b>SECTION 4 PERSONNEL HIRING PRIORITIES</b> .....	17
Development of VT Staffing Needs.....	17
The First VT Personnel Hiring Priority List.....	17
Hiring Accomplishments in FY 1998 and FY 1999.....	18
Proposed Hiring in FY 2000 .....	18
FY 2001 and Beyond.....	20
The Second VT Personnel Hiring Priority List .....	20
Work Force Diversity .....	23
Professional Support Positions.....	23
<b>SECTION 5 PERSONNEL HIRING REPORT</b> .....	26
Personnel Hired in FY 1998.....	26
Personnel Hired in FY 1999.....	32
Separate VT Base Increases.....	40
<b>SECTION 6 FY 1999 PROJECT COMPLETION REPORT</b> .....	42
<b>SECTION 7 ADVISORY AND WORKGROUP ACTIVITIES</b> .....	54
Database Workgroup.....	54
Career Development Workgroup .....	56
Funding Workgroup .....	58
Guidelines and Standards Workgroup.....	58

## TABLES

2.1 Vanishing Treasures Budget, FY 1998-FY 2000 .....	9
2.2 FY 1998 Operating Budget.....	10
2.3 FY 1999 Operating Budget.....	11
2.4 FY 2000 Operating Budget.....	12
3.1 Summary of Project Funding, FY 1998-2000 .....	16
4.1 Summary of Personnel Hiring, FY 1998-2000.....	19
4.2 VT Hiring Priority List .....	25
7.1 Vanishing Treasures Personnel.....	59

## SECTION 1, INTRODUCTION

This document provides a report on the expenditures and accomplishments of the Vanishing Treasures Program (VT) in FY 1999. It includes specific information on expenditure of program funds, an accounting of preservation treatment projects implemented in a select number of VT parks, and it presents a report on the personnel that have been hired with VT funds since FY 1998 and many of their accomplishments. This document provides information regarding the proposed use of funds in FY 2000, and some projections for FY 2001 and beyond. Finally, it provides an update on the activities of the Program's Advisory and Workgroups.

Specifically, this document contains 7 separate sections including this introduction. **Section 2, Program Funding**, provides a complete accounting of funding that the program has received to date and presents a synopsis of expenditures and accomplishments on a state-by-state basis. **Section 3, Projects and Project Funding**, provides a discussion of the use of funds dedicated to implementing high priority projects and the management of the Program. **Section 4, Personnel Hiring Priorities**, provides a description of the hiring accomplishments of the Program. It includes information on how the hiring priorities were established and it presents the list of personnel that are needed beginning in FY 2001. **Section 5, Personnel Hiring Report**, provides a brief description of the accomplishments of the personnel that were hired in FY 1998 and FY 1999. **Section 6, Project Completion Report**, presents brief summaries of the high priority preservation projects that were implemented in FY 1999. Finally, **Section 7, Advisory and Workgroup Activities**, provides a brief update on the activities and accomplishments of VT's Advisory and Workgroups. To accompany

this document, and for those of you only interested in a very brief overview of VT and its accomplishments to date, we have prepared a separate Management Summary.

### Report Compilation

Consistent with the nature of the Program, this document represents the input and assistance of a large number of individuals. The document itself was compiled and edited by the VT Program Coordinator. The layout and design of the report and additional editing and compilation were accomplished by Al Remley, Archeologist, Flagstaff Areas. Much of the assembling of the figures presented in the funding sections of the report was accomplished by Jill Edlund, VT's Budget Analyst. The report editor alone bears the responsibility for any errors of omission or inaccuracy in the figures that are presented.

Credit for the bulk of the document deservedly goes to a number of individuals that had the dubious honor of having to keep track of either the accomplishments of personnel that were hired with VT funds in their park, the projects that were being completed in their park also with VT funds, or both. Specifically, the individuals that contributed to the Personnel Hiring and Project Completion Reports of this document include the following:

Barry Cooper, Terry Nichols, and Charlene Yazzie,  
Aztec Ruins National Monument  
Butch Wilson and Dabney Ford,  
Chaco Culture National Historical Park  
Charisse Sydoriak,  
Bandelier National Monument  
Tom Alex,  
Big Bend National Park  
John Lujan,  
El Malpais National Monument  
Larry Ludwig,  
Fort Bowie National Historic Site

Don LaDeaux,  
Fort Laramie National Historic Site  
Don Spenser,  
Casa Grande Ruins National Monument  
Helen Fairley and Al Remley,  
Flagstaff Area National Monuments  
Melissa Schroeder,  
Grand Canyon National Park  
Chris Goetze,  
Glen Canyon National Recreation Area  
Jake Barrow,  
Intermountain Support Office, Architectural  
Conservation Projects Office in Santa Fe  
Julie Bell, Angelyn Rivera, Kathi Fiero, and Jim  
Mayberry,  
Mesa Verde National Park  
Lenny Hempstead,  
Montezuma Castle/Tuzigoot National  
Monument  
James Charles and Irv Francisco,  
Navajo National Monument  
Lee Baiza and Miguel Estrada,  
Tonto National Monument  
David Yubeta,  
Tumacacori National Historical Park  
Glenn Fulfer, Mike Schneegas, and Phil Wilson,  
Salinas Pueblo Missions National Monument  
Steve Whitesell,  
San Antonio Missions National Historical  
Park  
Greg Fox,  
Western Archeological and Conservation  
Center, Tucson

In addition to this report, we do want to bring to your attention VT's new web page. You can find it at [www.cr.nps.gov/aad/vt/vt.htm](http://www.cr.nps.gov/aad/vt/vt.htm). Or you can link to it from the Archeology and Ethnography home page at <http://www.cr.nps.gov/aad>. And click on the "Conserve and Manage" page.

In this web page you will find information briefly describing what Vanishing Treasures is, what Vanishing Treasures resources are, and which parks are involved. Also, more specific information is available that thoroughly describes the long term goals of the program and its draft standards and guidelines developed for implementing the initiative. Finally, fiscal and program accounting are provided through VT's Year-End Report for FY 1998. This report will be up and running

on the web page very shortly. We owe a debt of gratitude to Terry Childs of the Archeology and Ethnology Program for finalizing the home page.

It is our hope that you will spend some time in reviewing this document and the separate Management Summary. We feel that both documents contain important information on the expenditures and accomplishments of VT. These reports clearly show that significant progress is being made towards achieving the goals of the Vanishing Treasures Program.



# VANISHING TREASURES



## SECTION 2, PROGRAM FUNDING

This section provides a detailed discussion of the utilization of funding that Vanishing Treasures has received since FY 1998, the first fully funded year of the program. Including funding provided in FY 2000, the program has received funding for three straight years, and efforts are underway to develop a budget for VT for inclusion in the President's FY 2001 budget.

Table 2.1 provides the total amount and a breakdown of funding that has been allocated to VT since FY 1998 through FY 2000. It identifies the increases that have been provided to VT in FY 1999 and FY 2000 and where funds were distributed to the primary funding components (projects, base increases for personnel, and program management).

As can be seen, VT has enjoyed increases in its budget of approximately \$1 million each year for the last three years. In the last two years, these increases have made available a little over \$1.5 million to address VT needs each year.

With the close of FY 2000, approximately \$4,158,800 has been made available to VT to conduct projects, hire and train personnel, and to manage the program. Of that amount, approximately \$1,947,800 will have been dedicated to completing 30 emergency and high priority projects in 18 parks, \$2,069,000 will have been used to hire 37 preservation specialists, this includes replacing an aging work force and recruiting and training new individuals, \$32,000 will have been used for training staff hired in FY 1998, and \$110,000 will have been devoted to management of the program. This works out to roughly 46.84% of the total VT budget received to date being devoted to conducting projects.

Approximately 49.75% will have been dedicated to the hiring of personnel, 2.64 %

to the management of the program, and .77% to training the personnel hired.<sup>1</sup>

More specific information regarding the personnel hired and the associated costs, and the projects that have been completed specifically in FY 1999 can be found in sections 5 and 6 of this report. The following provides a specific accounting of VT funding in FY 1998 and FY 1999 and what is proposed in FY 2000.

### **FY 1998**

Funding for the first year of the program was \$1.0 million. Of that amount \$505,300 was used to address emergency preservation projects, \$484,700 was used to recruit and train 11 craftspeople and preservation specialists in 8 parks, and \$10,000 was used for program management. Table 2.2 provides a detailed breakdown of the utilization of funds in FY 1998. A summary on state-by-state basis is presented below.

### **NEW MEXICO**

In FY 1998, \$117,000 was used to hire 3 individuals in 2 parks. This included Aztec Ruins (2 positions) and Salinas Pueblo Missions (one position). Approximately \$233,000 was made available to three parks to conduct high priority projects. The benefiting parks included Aztec Ruins, Chaco Culture, and Salinas Pueblo Missions.

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<sup>1</sup>The percent devoted to training is an anomaly. The figure used to calculate that percent represents the training funds used in FY 1998. They were allotted as one-year funds in FY 1998. Subsequent formulations for personnel beginning in FY 1999 included permanent base increases to cover the cost of training for the personnel hired.

## **ARIZONA**

In FY 1998, \$269,000 was used to hire 6 individuals in 5 parks. This included Fort Bowie (1 position), the Flagstaff Areas (1 position), Navajo (1 position), Tonto (1 position), and Tumacacori (2 positions). Approximately \$272,000 was made available to 3 parks to conduct high priority projects. The parks that received project funding included the Flagstaff Areas, Tonto, and Tumacacori.

## **COLORADO**

In FY 1998, \$67,000 was used to recruit and train 2 individuals at Mesa Verde.

## **FY 1999**

Funding for the second year of the program was \$1,534,000, an increase of \$987,000 over the FY 1998 budget. Of that amount, \$585,000 was devoted to hiring 10 individuals in 8 parks, \$40,000 was devoted to the training of personnel hired in FY 1998, \$627,600 was used to complete 13 projects, \$44,400 was used for project management, and \$237,000 was given to two parks as separate base increases.

Base increases that were not directly requested by the VT program, but nonetheless have been tied to the FY 1999 VT budget, were given to Chaco Culture and Salinas Pueblo Missions. These increases occurred as the result of long standing Operating Formulation System (OFS) requests that both parks had on the books for a number of years prior to the existence of VT. In the case of Chaco Culture the request was to provide base funding for preservation specialists. For Salinas Pueblo Missions, the request was to enhance park operations due to career enhancement programs, incidental increases in personnel and operating costs, and cost of living increases. Funding was provided in the NPS

budget at the request of Congress. Because these requests were not part of the FY 1999 NPS priority list and the association of these parks with the VT Program, these increases have been accounted for in VT's FY 1999 budget. Since Chaco Culture utilized the base increase funds to hire staff to work on VT resources, this has been included in the total for number of personnel on staff at the park to conduct VT work. This increase will reshuffle the park's future hiring priorities to a lower position on VT's hiring priority list. As a result of this increase, \$741,000 was devoted to hiring 13 individuals in 8 parks in FY 1999.

In the case of Salinas Pueblo Missions, because the request was clearly not associated with VT, the park was given authorization by the Regional Office Directorate to utilize a portion of the funds as they were originally requested: to restore park operations to historical levels. However, because the park recognized that the funds have been attached to VT, they dedicated a portion of the funds to implement major preservation work at one of their primary VT resources. More detailed descriptions regarding these increases can be found in a section 5 of this report.

Table 2.3 provides a detailed breakdown on the utilization of FY 1999 funds. A summary of the utilization of VT funds in FY 1999 on a state-by-state basis is presented below.

## **NEW MEXICO**

Approximately \$453,000 was used to hire 8 individuals in 4 parks. This included Bandelier (2 positions), Chaco Culture (4 positions), El Malpais (1 position), and Salinas Pueblo Missions (1 position). Approximately \$195,000 was made available to three parks to conduct high priority projects. The parks receiving project funding included Aztec, Chaco, and Salinas Pueblo Missions.

Base increase funds of \$13,000 were provided to Aztec Ruins and Salinas Pueblo Missions to cover the cost of training for personnel hired in FY 1998. In addition, separate base increases totaling \$237,000 were provided to Chaco Culture and Salinas Pueblo Missions. Chaco Culture dedicated their increase towards the hiring of VT personnel. Salinas Pueblo Missions used a portion of the funding to conduct a preservation project on one of the park's primary VT resources. The park used the remaining funds in accordance with the original intent of the OFS request.

### **ARIZONA**

Approximately \$217,000 was used to recruit and train 4 individuals in 3 parks. The parks that hired personnel included Fort Bowie (1), Flagstaff Areas (1), and Montezuma Castle (2). Approximately \$166,000 was made available to 5 parks. The parks that received project funding included Casa Grande, Grand Canyon, Navajo, Tonto, and Tumacacori to conduct high priority projects. Base increase funds of \$23,000 were provided to 4 parks to cover the cost of training for personnel hired in FY 1998. These parks included Fort Bowie, Navajo, Tonto, and Tumacacori.

### **COLORADO**

A base increase of \$4,000 was provided to Mesa Verde to provide permanent funds for training the permanent staff hired in FY 1998. In FY 1999, \$175,000 was made available to Mesa Verde to conduct a high priority project.

### **TEXAS**

In FY 1999, \$71,000 was used to recruit and train 1 individual at San Antonio Missions. Approximately \$10,000 was made available to Big Bend National Park to conduct a high priority project.

### **UTAH**

In FY 1999, \$65,000 was made available to Glen Canyon and Hovenweep to conduct high priority projects.

### **WYOMING**

In FY 1999, \$12,700 was made available to Fort Laramie National Historic Site to conduct a high priority project.

### **FY 2000**

In FY 2000, the VT budget requested an increase of \$994,000 over the FY 1999 enacted level. Of that amount, approximately \$795,000 will be devoted to hiring 13 individuals in 9 parks, \$814,600 will be devoted to completing projects, and \$56,400 will be used for program management. The projected budget for FY 2000 is presented in Table 2.4.

### **NEW MEXICO**

In FY 2000, \$113,000 will be used to hire 2 individuals in two parks. The parks include Salinas Pueblo Mission (1 position) and El Malpais (1 position). Approximately \$235,000 will be made available to conduct high priority projects in 3 parks. The parks include Chaco Culture, Fort Union, and Salinas Pueblo Missions.

### **ARIZONA**

In FY 2000, \$256,000 will be used to hire four individuals in four parks. The parks include the Flagstaff Areas (1 position), Grand Canyon (1 position), Navajo (1 position), and Tumacacori (1 position). Approximately \$345,000 will be made available to 4 parks to conduct high priority preservation projects. The parks that will receive project funding

include Canyon de Chelly, the Flagstaff Areas, Grand Canyon, and Tumacacori.

### **COLORADO**

In FY 2000, \$261,000 will be used to recruit and train 4 individuals at Mesa Verde. Approximately \$110,000 will be made available to Mesa Verde to conduct one high priority project.

### **TEXAS**

In FY 2000, \$166,000 will be used to hire three individuals at San Antonio Missions (1 position) and Fort Davis (2 positions).

### **UTAH**

In FY 2000, approximately \$125,000 will be made available to Canyonlands, Glen Canyon, and Zion to conduct high priority preservation projects.

## **FY 2001 and Beyond**

Since FY 1998, VT has made significant progress both in securing project funds and acquiring base increases to hire necessary staff, but it is moving more slowly than originally planned. Based on projections in VT's Long-Range Plan, at the end of FY 2000 a little over \$5.3 million would have been devoted to conducting projects, and roughly \$3.3 million should have been devoted to hiring a little over 60 personnel.

We are significantly behind the original projections. At this juncture and optimistically assuming that funding levels will remain consistent with what we have seen for the last three years, we are looking at a program that will last a minimum of 15 years. This raises concern as to whether support for the program can be sustained for that length of time. This has led to discussion about bringing the program back in line with its

original 10-year projection beginning in FY 2001.

Unfortunately, it does appear as if the support for VT already is wavering. Although we were initially optimistic that VT would receive an increase in the FY 2001 budget consistent with what has been seen for the last three years, it does not appear that this will happen. Although VT will indeed receive an increase, it will be far less than originally projected and it will have a serious impact on our ability to hire personnel. The majority of funds provided in the increase will significantly improve our ability to conduct projects, but it diminishes our ability to hire staff. In fact, the projections for the FY 2001 budget will likely show an increase of \$310,000 to VT's budget. With that increase, roughly \$940,000 of the total will be available to conduct projects and only \$181,000 will be made available to hire personnel. That amount of funding will only allow us to address VT's top three hiring priorities for FY 2001. This is significantly less than the increases in the last 3 years and has serious implications for the long-term projects of the program. In fact, it will more than likely add 2 to 3 years to the program.

If VT is to meet the goals in its Long Range Plan, funding levels to hire personnel and to conduct projects must be increased on a yearly basis. There is strong interest in seeing that the program has a terminus within the originally projected 10-year timeframe and well before interest and support for the Program are depleted. Any reductions in funding will mean that emergency and high priority projects will not be addressed and, just as importantly, there will not be an appropriate level of personnel sufficient to address the continuing preservation needs of the Nation's Vanishing Treasures.



**Table 2.1 Vanishing Treasures Budget, FY 1998-FY 2000  
(In Thousands of Dollars)**

	FY 1998	Increase	FY 1999	Increase	FY 2000
Total Authorized Budget	1000	987	1987	994	2981
Projects	505	123	628	187	815
Training	32	8	40 (1)		[40] (2)
Management	10	34	44	12	56
Personnel FY 98	453 (1)		[453] (2)		[453] (2)
Additional Base Increase for 2 parks in FY 99		237	237 (1)		[237] (2)
Personnel FY 99		585	585 (1)		[585] (2)
Personnel FY 00				795	795 (1)
Total	1000 {547} (3)	987	1534 {672} (3)	994	1666 {871} (3)

**Notes:**

**(1) Costs for base increases for selected parks**

**(2) Costs transferred to selected parks as base increases**

**(3) Enacted budget after base increases have been transferred to benefiting parks. Represents the sum of the project and program management funds**

**Table 2.2 FY 1998 Operating Budget**

<b>Personnel</b>	<b>Base Increase Amount</b>
Aztec Ruins - 2 positions	\$ 84,000
Fort Bowie - 1 position	\$ 34,000
Mesa Verde - 2 positions	\$ 67,000
Navajo - 1 position	\$ 33,000
Salinas - 1 position	\$ 33,000
Tonto - 1 position	\$ 51,000
Tumacacori - 2 positions	\$ 91,000
Flagstaff - 1 position	\$ <u>60,000</u>
<b>Subtotal</b>	\$453,000

  

<b>Projects</b>	<b>Funding Amount</b>
Aztec Ruins	\$ 75,000
Chaco Culture	\$133,300
Flagstaff	\$125,000
Salinas	\$ 25,000
Tonto	\$125,000
Tumacacori	\$ <u>22,000</u>
<b>Sub Total</b>	\$505,300

  

<b>One-Year Training Funds</b> (Allotment to 6 Parks)	\$ 31,700
<b>Program Management</b>	\$ 10,000
<b>Total Operating Budget</b>	\$1,000,000

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**TABLE 2.3 FY 1999 OPERATING BUDGET**

**Personnel**

	<b>Base Increase Amount</b>
Chaco Culture - 1 position	\$ 58,000
Salinas Pueblo Missions - 1 position	\$ 58,000
San Antonio Missions - 1 position	\$ 71,000
Montezuma - 2 positions	\$106,000
El Malpais - 1 position	\$ 68,000
Flagstaff - 1 position	\$ 58,000
Fort Bowie - 1 position	\$ 55,000
Bandelier - 2 positions	<u>\$113,000</u>
<b>Sub Total</b>	<b>\$585,000</b>

**Training Costs for Personnel Hired in FY 1998**

	<b>Base Increase Amount</b>
Aztec	\$ 4,000
Fort Bowie	\$ 2,000
Mesa Verde	\$ 4,000
Navajo	\$ 4,000
Salinas Pueblo Missions	\$ 9,000
Tonto	\$ 4,000
Tumacacori	<u>\$ 13,000</u>
<b>Sub Total</b>	<b>\$ 40,000</b>

**Additional Increases**

	<b>Base Increase Amount</b>
Chaco Culture - 3 positions	\$156,000
Salinas Pueblo Missions	<u>\$ 81,000</u>
<b>Sub Total</b>	<b>\$237,000</b>

**Total Personnel/Base Increase Costs** \$862,000

**Projects**

	<b>Funding Amounts</b>
Hovenweep	\$ 10,000
Glen Canyon	\$ 45,000
Chaco Culture	\$125,500
Mesa Verde	\$175,000
Tonto	\$ 46,100
Tumacacori	\$ 25,300
Aztec Ruins	\$ 63,000
Navajo	\$ 20,000
Casa Grande	\$ 20,000
Grand Canyon	\$ 55,000
Glen Canyon	\$ 10,000
Big Bend	\$ 10,000
Fort Laramie	\$ 12,700
Salinas Pueblo Missions	<u>\$ 10,000</u>
<b>Total Project Costs</b>	<b>\$627,600</b>
<b>Program Management</b>	<b>\$ 44,400</b>
<b>TOTAL OPERATING BUDGET</b>	<b>\$1,534,000</b>

**TABLE 2.4. FY 2000 OPERATING BUDGET****Personnel****Base Increase Amounts**

Mesa Verde - 1 position	\$ 56,000
Tumacacori - 1 position	\$ 63,000
Fort Davis - 1 position	\$ 55,000
Flagstaff - 1 position	\$ 55,000
Salinas Pueblo Missions – 1 position	\$ 55,000
San Antonio Missions – 1 position	\$ 55,000
Fort Davis – 1 position	\$ 55,000
Mesa Verde – 1 position	\$ 55,000
El Malpais – 1 position	\$ 58,000
Grand Canyon – 1 position	\$ 58,000
Navajo – 1 position	\$ 80,000
Mesa Verde – 1 position	\$ 49,000
Mesa Verde – 1 position	<u>\$ 101,000</u>

**Total Personnel Costs****\$ 795,000****Projects****Funding Request**

Canyon De Chelly	\$ 75,000
Chaco Canyon	\$ 110,000
Mesa Verde	\$ 110,000
Flagstaff Areas	\$ 110,000
Tumacacori	\$ 34,600
Grand Canyon	\$ 125,000
Canyonlands	\$ 100,000
Zion	\$ 5,000
Glen Canyon	\$ 20,000
Fort Union	\$ 30,000
Salinas Pueblo Missions	<u>\$ 95,000</u>

**Total Project Costs****\$ 814,600****Program Management****\$ 56,400****Total Operating Budget****\$1,666,000**

## SECTION 3, VT PROJECTS AND PROJECT FUNDING

This section provides a discussion on the utilization of the one-year funding components of the FY 1999 Budget.

Specifically, it addresses the use of funds allotted for completing projects and for management of the VT program. More detailed descriptions of the accomplishments of the individual VT projects can be found in Section 6 of this report

### FY 1999 Projects

In FY 1998, \$505,300 was used to conduct preservation treatment projects in 6 parks. The parks included Aztec Ruins National Monument, Chaco Cultural National Historical Park, Flagstaff Area National Monuments, Salinas Pueblo Missions National Monument, Tonto National Monument, and Tumacacori National Historical Park. In FY 1999, \$627,600 was dedicated to conducting projects in 13 parks. In FY 1998 and FY 1999, a total of \$1,132,900 has been used to conduct high priority projects in 14 VT parks. The specific projects that were implemented in FY 1999 included the following:

**Aztec Ruins National Monument:** Implement Backfilling Plan, \$63,000.

**Big Bend National Park:** Documentation and Condition Assessment of Prehistoric and Historic Structures, Sublett Farm Historic District, \$10,000.

**Casa Grande Ruins National Monument:** Maintain Backfilled Sites, \$20,000.

**Chaco Culture National Historical Park:** Continue Partial Back Fill and Repair Drainage at Sites, \$125,500.

**Fort Laramie National Historic Site:** Stabilization of Ruins HS-13, 17, 18, 19, 20, and 21, \$12,700.

**Glen Canyon National Recreation Area:** Preservation Treatment at Mistake Alcove, \$45,000 and Conduct Condition Assessment at Highboy House, \$10,000.

**Grand Canyon National Park:** Ruins Preservation and Stabilization of Clear Creek Ruin, \$55,000.

**Hovenweep National Monument:** Square Tower Bedrock Stabilization, \$10,000.

**Mesa Verde National Park:** Assess Condition of Backcountry Sites, \$175,000.

**Navajo National Monument:** Documentation and Assessment of Inscription House Ruin, \$20,000.

**Salinas Pueblo Missions National Monument:** Emergency Replacement of Scaffolding, \$10,000.

**Tonto National Monument:** Catalog and Store Collections from Upper Ruin Excavations, \$46,100.

**Tumacacori National Historical Park:** Preservation of Missions Tumacacori, Calabazas, Guevavi, \$25,300.

For anybody comparing what was proposed for funding in FY 1999 with what was done, it will be apparent that we were able to accomplish more projects than were originally planned. A number of things contributed to this including: (1) a park determining that they were unable to complete a project as planned and requested that the project be deferred to the next fiscal year, (2) a park completing a project under budget, and (3) the availability of program management funds for emergency projects.

Based on funding levels allotted to VT at the beginning of FY 1999, funding was distributed to the top 9 high priority preservation projects on the VT SEPAS FY 1999 Project Priority List.<sup>2</sup> The parks that were targeted for project funding include

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<sup>2</sup>Projects were prioritized using established criteria defined in the **Special Emphasis Program Allocation System (SEPAS)**. SEPAS is the system that the Intermountain Region uses for prioritizing, allocating, and administration of project funding to over 25 different "one-year" funding sources. VT project funding is considered one of those funding sources.

Hovenweep National Monument, Glen Canyon National Recreation Area, Chaco Culture National Historical Park, Canyon de Chelly National Monument, Mesa Verde National Park, Tonto National Monument, Tumacacori National Historical Park, Aztec Ruins National Monument, and Navajo National Monument.

Because of temporary vacancies in the permanent cultural resources staff in FY 1999 at Canyon de Chelly National Monument, park managers felt that they were not in a situation to judiciously use the awarded project funds. The park felt that once they were able to complete the hiring of replacement staff, probably in late FY 1999 and early FY 2000, they would be in a better situation in FY 2000 to implement the project. A request was made to the VT Leadership Committee to defer the project to FY 2000. This request was granted and the available FY 1999 project funds were awarded to the next priority projects. Canyon de Chelly's \$75,000 was awarded to Casa Grande (\$20,000) and Grand Canyon (\$55,000) to implement their requested projects.

A different scenario occurred with project funding provided to Glen Canyon National Recreation Area. The outcome was similar with project dollars being made available for distribution to other priority projects. The park's project to conduct preservation treatment at Mistake Alcove was originally estimated to cost \$85,000. Due to a number of cost saving actions implemented by the park, the actual cost to complete the project was \$45,000. As a consequence, the park requested that of the surplus funds, \$10,000 be retained by them to complete a condition assessment at Hi-Boy House Ruin. The remaining funds could then be distributed for other needs as deemed appropriate by the VT Leadership. Completing this assessment was considered a high priority by the park due to the recent collapse of one of the walls within the ruin. The Leadership Committee approved this request, and most of the

remaining project funds were distributed to the next priority projects. Parks that were provided project funding include Fort Laramie National Historic Site and Big Bend National Park. Salinas Pueblo Missions National Monument was awarded funding in response to an emergency request. The rest of the funds were retained by the VT Program Coordinator and used to cover some of the costs of the VT workshop as well as some other program management expenditures.

## **FY 2000 Projects**

In FY 2000, \$814,600 will be used to conduct high priority projects in 11 parks. Again, the SEPAS process was used to evaluate project request submittals and to establish project priorities. The authorized projects in priority order include the following:

**Canyon de Chelly National Monument:** Conduct Architectural Documentation/Condition Assessment in Canyon del Muerto, \$75,000

**Chaco Culture National Historical Park:** Continue Partial Back Fill and Repair Drainage at Sites, \$110,000.

**Mesa Verde National Park:** Assess Condition of Backcountry Sites, \$110,000.

**Flagstaff Area National Parks:** Conduct Ruins Preservation Actions on Selected Sites, \$110,000.

**Tumacacori National Historical Park:** Preservation of the Park's Primary Resources, \$34,600.

**Grand Canyon National Park:** Condition Assessment of Masonry Archeological Sites, \$125,000.

**Canyonlands National Park:** Emergency Site Stabilization, Salt Creek Archeological District, \$100,000.

**Zion National Park:** Condition Assessment Report for Cable Mountain, \$5,000.

**Glen Canyon National Recreation Area:** Emergency Stabilization at Hi-Boy House, \$20,000.

**Fort Union National Monument:** Assess Prior Stabilization; Bracing of Unstable Walls, \$30,000.

**Salinas Pueblo Missions National Monument:**

Ruins Stabilization/Documentation, \$95,000.

A graphic depiction of the parks that have received project funding since FY 1998 can be found in Table 3.1. Since FY 1998, a total of \$1,947,500 has been distributed to 18 parks to complete high priority preservation projects.

**FY 2001 and Beyond**

Formulation of the FY 2001 budget is currently under way. It is expected that a request will be submitted that makes available \$940,000. This has the potential for an additional 8 to 12 projects to be conducted. Future requests for project dollars will include increases to the amount of funding that would be made available to conduct projects.

**Program Management Funds**

Approximately \$44,400<sup>3</sup> was used for the operations of the Vanishing Treasures Program. Meetings, workshops, and other program support activities that were conducted using this fund source included the following:

**Leadership Committee Meetings:** travel to Albuquerque, New Mexico to attend the Annual Leadership Committee meeting conducted in January 1999. This involved members of the Leadership Committee and Advisory Group, and staff from the Santa Fe Support Office and the Regional Director's Office.

**Advisory Group Meetings:** travel to Denver, Colorado to attend two work sessions in April 1999 to complete the prioritization of SEPAS project submittals, and to develop the second VT personnel hiring priority list.

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<sup>3</sup> The initial authorization for the Program Management funds was \$48,000. This amount was decreased to \$44,400 with the transfer of funds to Salinas Pueblo Missions to cover a portion of the cost of their emergency request.

**Vanishing Treasures Workshop:**

organization of the second VT Workshop held in Albuquerque, New Mexico and Salinas Pueblo Missions in August 1999.

**Workshops, Consultation, Park**

**Assistance, and Employee Training:** travel funds to cover the cost of (1) contracted OSHA instructors for a scaffolding safety workshop held in Mesa Verde National Park in July 1999, (2) a mini-ruins preservation workshop put on by the VT Program Coordinator for the staff of Grand Canyon National Park, (3) assistance provided by the exhibit specialist at Tumacacori National Historic Park to other VT parks in planning and implementing projects and in training and mentoring new and previously hired VT staff members.

**WASO Meetings:** travel to Washington in February and again in September 1999 by the Chair, Program Coordinator, one member of the Leadership Committee, and selected Superintendents. The purpose of the trips were to provide information to NPS Washington Office staff and Congressional members and their staff on the activities and accomplishments of VT.

**Program Support:** limited amounts of funds were used to purchase supplies and materials used by the Program Coordinator and Budget Analyst to support day-to-day operations. This included products developed by the various Workgroups (project and personnel hiring priority lists, VT's inventory and condition assessment database, the Web page development and production, development of VT poster boards etc.) and the production of the Year-End Report.

**Table 3.1 Summary of Project Funding, FY 1998-2000 (In Thousands of Dollars)**

Running Total		Total		FY 2000				Running Total		Total		FY 1999				Total		FY 1998				Fiscal Year
Funds	Parks	Funds	Park	S A P U	F O U N	C H C U	Funds	Parks	Funds	Parks	T U M A	G R A	F L A G	C A C H	S A P U	A Z R U	C H C U	S A P U	A Z R U	Funding		
666.8	4	235	3	95	30	110	431.8	3	198.5	3	10	63	125.5	233.3	75	133.3	25	75	133.3	75	New Mexico	
783	7	344.6	4	125	110	75	438	6	166.4	5	20	55	272	125	125	22	125	22	125	125	ARIZONA	
190	4	125	3	5	20	100	65	2	65	2	10	55									UTAH	
285	1	110	1			110	175	1	175	1											Colorado	
10	1						10	1	10	1											Texas	
12.7	1						12.7	1	12.7	1											Wyoming	
1947.5	18	814.6	11				1132.9	14	627.6	13											GRAND TOTAL	
									505.3	6												



## SECTION 4, PERSONNEL HIRING PRIORITIES

This section provides a complete description of the personnel hiring activities of VT that began in FY 1996, two years in advance of the first year that the program received funding. It includes a description of how previous and current existing hiring priority lists were developed and what hiring has been completed to date. It presents the list of hiring priority needs that have been identified for the next 3 to 4 years. Finally, it provides a description of some of the professional support positions that are being filled and utilized by the Program and the justification used for placement of the positions.

### Development of VT's Staffing Needs

In late 1996 and early 1997, the Vanishing Treasures Program sought and received input from all identified VT parks on the type and number of personnel that were dedicated to conducting ruins preservation work. In addition, information was sought on the number of staff that were needed to address the goals of VT on a long-term basis. This survey resulted in the formulation of a **Skills and Capability List** that was used to develop the staff needs component of the **VT Long-Range Plan** produced in early 1998. The Long-Range Plan currently supplies the skeleton planning and implementation framework, including staffing and funding needs, for the Program over the next 10-15 years. The plan was shared with Congress as the VT Leadership began to seek consistent and long term funding for the Program. Estimates provided in the Plan indicate that VT personnel and related workload deficits could be eradicated if 150 technical craftspersons, archeologists, or other ruins preservation specialists were recruited over the next 10-15 years. Total projected Vanishing Treasures costs can be found on page 11, in Table 5 of the Long-Range Plan. Strategies for

addressing the long-range staffing needs included **Competitive Conversions** for long-term employees who had been working in term or repeated temporary jobs, and an **Intake Program** for new hires to augment the existing workforce.

### The First VT Personnel Hiring Priority List

Shortly after development of the Skills and Capability list, a call was issued in late 1997 requesting VT parks provide a list of personnel that would be needed to address their ruins preservation needs in the first two years of the program (FY 1998 and FY 1999). Overall staffing was to be oriented towards implementing treatment activities, documenting architectural fabric, and collecting condition information on archeological sites with standing architectural remains.

Results suggested that during the beginning stages of the Program, the ruins preservation workforce should be divided into two general kinds of employees: craft specialists (wage grade (WG), masonry workers, etc.), and preservation specialists (general services (GS) archeologists, exhibit specialists, architectural conservators, etc.), positions traditionally associated with this type of work. The ultimate goal of the conversion and intake program was to develop a cadre of ruins preservation specialists that were diversified, multi-skilled, and could perform a variety of tasks. Through time this program is to serve to graduate incumbents into an all encompassing GS series **Ruins Preservation Specialist**, which would combine the necessary professional elements into a professional specialty.

All requests submitted as a result of the 1997 call, with a few exceptions, were considered and made part of **The First VT Personnel**

**Hiring Priority List. Competitive Conversion** positions were prioritized based on the length of time the position had been established and functioning as a ruins preservation position. The **Intake** positions were prioritized based on the perceived VT needs (nature and extent of VT resources), and current staffing available to address the needs. The results were compiled by the Vanishing Treasures Career Development Workgroup and shared with the identified VT parks late in 1997. The resulting hiring priority list has been used to determine the distribution of base increase funding for the hiring of permanent staff that began in FY 1998. Due to shortfalls in the amount of funding that has been made available to hire staff, this list will continue to be used to establish hiring priorities through FY 2001.

A brief summary of the completed hiring and what is projected in FY 2000 is presented below. Table 4.1 presents a depiction on a state-by-state basis of the hiring accomplishments.

### **Hiring Accomplishments in FY 1998 and FY 1999**

In the first two years of the Program (FY 1998 and FY 1999), approximately 24 individuals have been recruited and trained to specifically address VT needs. These hires have been handled by increasing park operating bases, along with funds for training the new permanent employees. The above-mentioned personnel hiring priority list was used to select the benefiting parks.

In FY 1998, \$453,000 went to eight parks as base increases to hire 11 permanent individuals. The benefiting parks included:

**Aztec Ruins National Monument** (2 conversion positions, craft specialists)

**Fort Bowie National Historic Site** (1 conversion position, craft specialist)  
**Flagstaff Area National Monuments** (1 intake position, preservation specialist)  
**Mesa Verde National Park** (2 conversion positions, craft specialists)  
**Navajo National Monument** (1 intake position, preservation specialist)  
**Tonto National Monument** (1 intake position, preservation specialist)  
**Tumacacori National Historical Park** (2 intake positions, 1 preservation specialist and 1 craft specialist).

More detailed information regarding the staff that was hired and the work that they have accomplished can be found in Section 5.

In FY 1999, \$741,000 was used to hire 13 individuals in eight parks. The benefiting parks included:

**Bandelier National Monument** (2 intake positions, preservation specialists)  
**Chaco Cultural National Historical Park** (1 intake position, preservation specialist, and 3 conversion positions, craft specialists)  
**El Malpais National Monument** (1 intake position, preservation specialist)  
**Flagstaff Area National Monuments** (1 intake position, preservation specialist)  
**Fort Bowie National Historic Site** (1 conversion position, craft specialist)  
**Montezuma Castle/Tuzigoot National Monuments** (1 intake and 1 conversion position, craft specialists)  
**Salinas Pueblo Missions National Monument** (1 intake position, preservation specialist)  
**San Antonio Missions National Historical Park** (1 intake position, preservation specialist).

Again, detailed information regarding the staff hired in FY 1999 and the work they accomplished can be found Section 5

### **Proposed Hiring in FY 2000**

In FY 2000, \$795,000 will be used to hire 13 individuals in 10 parks. This includes the following:

**Table 41 Summary of Personnel Hiring, FY 1998-2000**

Running Total	FY 2000		Running Total	FY 1999		FY 1998		Fiscal Year
	Staff	Park		Staff	Park	Staff	Park	
5		2	5	4	2	2	Arizona	
13	1		11	8	4	3	New Mexico	
7	4	4	6	3	3	6	Arizona	
14	4	4	10	4	4	6	Arizona	
0		0	0	0	0	0	Utah	
0		0	0	0	0	0	Utah	
1	1	1	1	0	0	1	Colorado	
6	4	4	2	0	0	2	Colorado	
2	2	2	1	1	1	0	Texas	
4	3	3	1	1	1	0	Texas	
0		0	0	0	0	0	Wyoming	
0		0	0	0	0	0	Wyoming	
37	15	13	24	13	8	11	GRAND TOTAL	

**El Malpais National Monument** (1 intake position, craft specialist)

**Flagstaff Area National Monuments** (1 intake position, craft specialist)

**Fort Davis National Historic Site** (1 intake, craft specialist and 1 conversion position, preservation specialist)

**Grand Canyon National Park** (1 intake position, preservation specialist)

**Mesa Verde National Park** (1 conversion, preservation specialist and 3 intake positions, 2 preservation specialists and 1 craft specialist)

**Navajo National Monument** (1 intake position, preservation specialist)

**Tumacacori National Historical Park** (1 intake position, preservation specialist)

**Salinas Pueblo Missions National Monument** (1 intake position, craft specialist)

**San Antonio Missions National Historical Park** (1 intake position, craft specialist).

Once hiring has been completed for FY 2000, the total of individuals that have been hired on a permanent basis to address one of the primary goals of the VT Program will stand at 37. Once this has been completed, 15 parks will have benefited by having staff on board to address their VT resource needs. One of the positions filled included VT's first professional support position. Specific information regarding this position and other planned VT professional support positions is presented below.

## **FY 2001 and Beyond**

Although the figures presented above show that notable progress has been made, it is occurring more slowly than originally planned. Utilizing the figures presented in the Long-Range Plan, it was projected that approximately 63 individuals needed to be hired by the end of FY 2000. As the figures presented above indicate, salary and FTE have only been provided to hire a little over half of the original projections. Clearly, this is a high priority for the VT Leadership and is recognized as being critical to the overall success of the VT Program. It is also recognized, however, that given the needs of

equally important and competing interests, the success that VT has enjoyed over the last two years, both in securing project funding and acquiring base increases to hire staff, is significant and by no means should be viewed as being inconsequential. Progress and increases have been made and we are fairly confident that this trend will continue.

## **The Second VT Personnel Hiring Priority List**

As indicated above, we hope to exhaust what remains of the first Personnel Hiring Priority List in FY 2001. The remaining hiring priorities include the following:

**Aztec Ruins National Monument** (1 intake position, preservation specialist)

**Casa Grande Ruins National Monument** (1 intake position, craft specialist)

**El Morro National Monument** (1 intake position, craft specialist)

**Chaco Culture National Historical Park** (2 intake positions, craft specialists)

**Fort Union National Monument** (1 intake position, craft specialist).

In order to be responsive to the formulation of the FY 2001 budget and subsequent budget requests, a call was issued in February 1999 to all VT parks again requesting hiring priority needs. The results of this call were added to the remaining hiring priority list and is being used to assist in prioritizing staffing needs from FY 2001 through the next four years to FY 2005. Of course, the actual lifespan of the list will be dependent upon the amount of funding made available each year for hiring.

## **Call Criteria and Guidelines**

Parks were allowed to submit a request for up to two positions. One of the concerns of VT is insuring that all of the identified VT parks have the opportunity to benefit from both the project funding and base increases to hire needed staff. It is recognized that certain parks are perceived to be capturing a

disproportionate share of the VT budget appropriation each year. More often than not this is a result of having a greater number of VT resources rather than a bias or undue influence in how VT funds are distributed. Instituting a limit on the number of staff that a park could request allowed all parks the same opportunity to compete for positions that will become available in future years.

Parks were required to insure that the requested position(s) would be dedicated to carrying out the kinds of work and tasking that is related to (1) making fabric repairs to VT resources, (2) documenting those resources, including collecting condition assessment data, (3) monitoring VT resources for preservation needs, and (4) conducting specialized studies relevant to preservation needs. Requests would be rejected for generalized cultural resource specialists who conduct general archeological inventories or evaluation, Section 106 compliance, and curation or cataloging, or maintenance staff who do not dedicate 80% or more of their work duties to conducting VT activities and work on VT resources as outlined above. Other staff specialists that would not be considered include interpretive and law enforcement personnel. While it is recognized that these types of positions contribute to a greater understanding and protection of VT resources, they do not directly advance the preservation goals of VT.

Similar to what was done with the first personnel call, consideration was given to the competitive conversion of long-term employees who had been working in term or extended temporary jobs, and the intake of new employees. Clearly, the need to focus on the competitive conversion component of the program will diminish as progress is made in the recruitment process.

### **Prioritization Process**

A number of factors were evaluated in order to develop a hiring priority list based on the requests received from the parks. They included: (1) assessing the nature and extent of a park's VT resources, (2) identifying the number of staff that a given park would need to address its ruins preservation needs based on the extent of VT resources it contains, and (3) determining a park's existing staffing levels for doing VT work. Following previous approaches for competitive conversion, both the length of time that an incumbent had been in the position, and the length of time the position had been on the books was taken into consideration.

**Nature and Extent of VT Resources:** The **Preliminary Database Summary Report** developed in August 1997 by the Database Management Workgroup was used for determining a park's relative "size" based on the nature and extent of its VT resources. A preliminary reporting of the size classification for the identified VT parks was presented on page 12 of the Long-Range Plan. Because these data were gathered in 1996 and were not considered as a totally complete or exhaustive assessment, the professional and institutional knowledge of the review panel members was used to further refine the classifications for each park. An evaluation of the numbers of VT sites/structures in a park and exposed architectural square feet were generally used to assign a ranking size for a park. The size categories that were developed are as follows:

- Small Park
- Small- to Medium-Sized Park
- Medium Park
- Medium- to Large-Sized Park
- Large Park

Generally, a park that contains less than 20,000 square feet of exposed architecture, or

less than 50 structures was considered a small park. A park that contains VT resources with 100,000 square feet of exposed architecture or 350 or more structures was considered a large park. To put this into some perspective, a park such as Chaco Culture or Mesa Verde is considered a large park. Wupatki and Hovenweep are considered medium to large parks. Walnut Canyon and Natural Bridges are considered medium parks. Aztec and Navajo are considered small to medium sized parks. El Morro and Petrified are considered small parks.

**Staffing Levels:** The review panel members attempted to match staffing levels with the extent of VT resources using the park size classifications described above. In general, a rough approximation of the staffing level was developed for each “park size” class. This approximation was not designed to place an artificial ceiling on staffing needs for each park but only to develop a relative scale that would be useful for assessing staffing needs for the entire group of VT parks. The staffing range or average size scale that was developed includes the following:

- Small Park - 1 to 3 staff
- Small- to Medium- Sized Park - 2 to 4 staff
- Medium Park - 4 to 8 staff
- Medium- to Large- Sized Park - 6 to 12 staff
- Large Park - 10 to 17 staff

**Staffing Needs:** The **Skills and Capability List** developed in 1997 was the principle document used in determining a park’s requisite staffing level. The information presented in the survey included not only information on a park’s existing staffing levels but provided information on future staffing needs. This list was updated by the review panel with the list of new hires that have occurred over the last two fiscal years and those projected to occur in FY 2000, and in FY 2001 from what remained of the first hiring priority list. Again, the data presented in the skills and capability list survey were not

considered complete or exhaustive, thus the review panel relied on the professional and institutional knowledge of its members to augment the information.

**Position Prioritization:** Once the park size and the staffing levels and needs were identified it was then possible to rank the personnel requests based on the percentage that a park was staffed. Parks that had low staffing levels were ranked the highest. Conversely, those parks that had a high number of staff on duty relative to their size, or number of VT resources, were ranked the lowest. This process allowed small parks to compete on an equal footing with larger parks.

### **Hiring Priority List**

Utilizing the data derived from the position prioritization process the second hiring priority list for VT was developed in May 1999. Again, the list that was developed was based on requests submitted by participating VT Parks in response to the call issued on February 10, 1999. Members of the VT Advisory Group and Leadership Committee established the priorities during two work sessions that were held in Denver the week of April 12, and Santa Fe the week of April 26, 1999. The resulting list and a description of the prioritization process, in slightly more detail than what is presented above, were provided to all VT parks in June 1999. Table 4.2 presents the second hiring priority list for VT. It does include as the highest priorities the positions that remained from the first personnel hiring priority list.

In reviewing the list, it should be kept in mind that what is presented always has the possibility of changing. It is our intention to maintain the fidelity of the list, and every effort will be made to insure that the list sees little or no change. However, it is not out of the realm of possibility that changes will occur

as a result of circumstance beyond the control of VT's Leadership.

Formulation of the FY 2001 budget for VT is currently underway. It is expected that a request will be submitted that makes available \$181,000 to recruit and train personnel in FY 2001. That amount of funding will allow us to reach the top 3 on the list presented. This means that in FY 2001 approximately 3 individuals would be hired in 3 parks.

### **Work Force Diversity**

The recruitment and training of quality employees has been a top priority for all personnel involved in Vanishing Treasures. The progressive nature of the Program, the continuing need to recruit and train personnel to achieve the goals of VT, and the need to begin addressing the replacement of a vast amount of historical knowledge and expertise that is disappearing, has meant that extraordinary efforts are needed to seek a highly professional and culturally diverse workforce to be effective in sustaining the program. To date we have had great success in the recruitment and training of a cadre of well qualified employees that ultimately will represent the changing workforce of tomorrow. The recently hired workforce of VT is composed of 8 American Indian males, 7 Hispanic males, 1 Hispanic female, 3 Anglo males, and 5 Anglo females. They are individuals with diverse educational backgrounds and work histories. All of them represent the type of highly qualified employee that is committed to accomplishing high quality work, and they will no doubt contribute to the effectiveness of the Program and the NPS both today and in the future. We certainly expect that future VT recruitment and training efforts will continue to reflect this trend.

### **Professional Support Positions**

Beginning in FY 2000, VT will be hiring personnel that provide professional support services to all or most of the VT parks. The positions include a structural engineer to be duty stationed at Mesa Verde in FY 2000, and a historical architect to be duty stationed at Montezuma Castle/Tuzigoot in FY 2001 or FY 2002. With the establishment of these two positions, the VT Program is moving into a position where it will have the capability to provide limited professional, expert, and highly specialized advice and assistance to VT Parks to assure appropriate requirements and needs are met. It is expected that additional VT professional support positions will be identified and personnel recruited to fill them as the program's capabilities improve, and our sophistication in addressing the goals and objectives of the VT program become more refined. A brief description of the responsibilities for each of the new positions is presented below.

#### **Structural Engineering**

The primary purpose of this position is to develop a program of engineering and structural monitoring evaluation of problems in prehistoric and historic ruins, and hazardous rock and soil masses. This is a highly specialized position that will provide assistance to most, if not all, of the VT parks. Some of the primary tasks performed would include assessing the structural soundness of VT resources, developing systems to detect movement and settlement of individual structures and the environment that they are built within, developing effective and efficient monitoring systems, assessing the effects of ground and air vibrations on VT resources, and developing, designing, and installing bracing systems for unsupported walls. This position will work directly with park preservation specialists and managers to inspect resources to determine needs, project

planning, programming, implementation, and training.

### **Historic Architect**

The primary purpose of this position is to serve as a specialist in the science and art of architecture with advanced training in the principles, theories, concepts, methods, and techniques of preserving historic and prehistoric structures. This is a specialist position that will provide consultative professional advice and develop collaborative relationships with all VT parks in Arizona to insure compliance with historic preservation legislation and to coordinate and advise on mutual work efforts and research. Similarly, this position will work directly with park preservation specialists and managers to inspect resources to determine needs, project planning, programming, implementation, and training. The historical architect position has a slightly reduced area of responsibility because the primary focus is on the VT parks in Arizona, and that is reflected in the grade of that position.

### **Selection Criteria**

There were a number of criteria that were used to determine the placement of the positions. They included the following: (1) consistent with the original intent of the VT Program, any new position is to be established in a recognized VT park; (2) the position is to be placed in a location that will allow services to be provided to all VT parks in a fairly cost effective and timely manner; (3) the selected park must have the space/facilities to support the position; (4) the selected park location must have the capability to provide the administrative, technical, and professional support capabilities.

Additional stipulations were identified that included the following: (1) the duty station superintendent or a designated staff member

of the benefiting park will provide the immediate supervision to the position; (2) the benefiting park will be required to insure that the position provides services to all or most of the VT parks through a planned coordinated effort; (3) the benefiting park will cover the salary and most infrastructure costs for the position, however, the park requesting services of the position will be required to cover travel costs and other project support costs as deemed appropriate; (4) the VT Program Coordinator will provide input into the work schedule of this position and will insure that a specified amount of program management funds are made available to support the operation of the position; (5) if the position is vacated, consideration will be given to relocating the position if the situation is warranted.

# V ANISHING T REASURES



## Table 4.2 VT Hiring Priority List

1.	Aztec Ruins National Monument	1 intake position, preservation specialist
2.	Casa Grande Ruins National Monument	1 intake position, craft specialist
3.	El Morro National Monument	1 intake position, craft specialist
4.	Chaco Culture National Historical Park	2 intake positions, craft specialists
5.	Fort Union National Monument	1 intake position, craft specialist
6.	Canyonlands National Park	1 intake position, preservation specialist
7.	Hovenweep National Monument	1 intake position, preservation specialist
8.	Canyon de Chelly National Monument	1 intake position, preservation specialist
9.	Glen Canyon National Recreation Area	1 intake position, preservation specialist
10.	Canyonlands National Park	1 intake position, craft specialist
11.	Hovenweep National Monument	1 intake position, preservation specialist
12.	Canyon de Chelly National Monument	1 intake position, preservation specialist
13.	Wupatki National Monument	1 intake position, preservation specialist
14.	Salinas Pueblo Missions National Monument	1 conversion position, craft specialist
15.	Salinas Pueblo Missions National Monument	1 conversion position, craft specialist
16.	Montezuma Castle/Tuzigoot National Monument	1 intake position (VT Program Support Position), preservation specialist
17.	San Antonio Missions National Historical Park	1 conversion position, craft specialist
18.	Walnut Canyon National Monument	1 intake position, preservation specialist
19.	Mesa Verde National Park	1 conversion position, craft specialist
20.	San Antonio Missions National Historical Park	1 intake position, preservation specialist
21.	Mesa Verde National Park	1 conversion position, preservation specialist
22.	Organ Pipe National Monument	1 intake position, preservation specialist
23.	Golden Spike National Historic Site	1 intake position, preservation specialist
24.	Navajo National Monument	1 intake position, craft specialist
25.	Grand Canyon National Park	1 intake position, craft specialist
26.	Grand Canyon National Park	1 intake position, preservation specialist
27.	Casa Grande Ruins National Monument	1 intake position, craft specialist
28.	Fort Union National Monument	1 intake position, craft specialist
29.	Tumacacori National Historical Park	1 intake position, preservation specialist
30.	Fort Union National Monument	1 intake position, craft specialist
31.	Fort Laramie National Historic Site	1 intake position, preservation specialist
32.	Petrified Forest National Park	1 intake position, preservation specialist
33.	Zion National Park	1 conversion position, preservation specialist
34.	El Morro National Monument	1 intake position, preservation specialist
35.	Aztec Ruins National Monument	1 intake position, craft specialist
36.	Tonto National Monument	1 intake position, preservation specialist
37.	Aztec Ruins National Monument	1 intake position, craft specialist
38.	Tonto National Monument	1 conversion position, craft specialist
39.	Fort Bowie National Historic Site	1 intake position, preservation specialist
40.	Chaco Culture National Historical Park	1 conversion position, craft specialist
41.	Chaco Culture National Historical Park	1 conversion position, craft specialist

## SECTION 5, PERSONNEL HIRING REPORT

### **Personnel Hired in FY 1998 (Work Accomplished in FY 1999)**

This section provides a brief description of the work accomplish in FY 1999 by the VT personnel hired in FY 1998. In FY 1998, the Vanishing Treasure program provided eight parks with \$453,000 to recruit and train eleven individuals. The benefiting parks include:

**Aztec Ruins National Monument** (2 positions)  
**Fort Bowie National Historic Site** (1 position)  
**Flagstaff Area National Monuments** (1 position)  
**Mesa Verde National Park** (2 positions)  
**Navajo National Monument** (1 position)  
**Tonto National Monument** (1 position)  
**Tumacacori National Historical Park** (2 positions)

All of the individuals hired continued their employment in FY 1999 and contributed greatly to addressing their parks' backlog of ruins preservation needs. Clearly, significant progress is being made towards achieving the primary goal of the Vanishing Treasures Program. Brief summaries of the accomplishments of these individuals are presented below.

### **Aztec Ruins National Monument**

#### **Raymond Torrivio and Harry Etcitty, Masonry Workers**

Raymond and Harry were involved in four primary projects in FY 1999, three that were completed at Aztec and one that was conducted at Chaco Cultural National Historical Park. They included: (1) Replacing protective roofs over four prehistoric roofs in the West Ruin; (2) Assisting in the backfilling of a portion of the east wing of the West Ruin; (3) implementing general maintenance activities at West Ruin; and (4) Replacing protective roofs over two

prehistoric roofs in the Chetro Kettle Ruin at Chaco Cultural National Historical Park.

### **Roof Replacement in the West Ruin**

Raymond and Harry worked to replace the existing modern roofs that had been installed to protect the completely intact and highly fragile original roofs of four rooms in the West Ruin. Modern roofs had been installed in 1983 using Carlyle EDPM material, a pliable roofing membrane. The material was generally satisfactory but the application of the material to the parapets did not provide an adequate seal. The EDPM roofs were replaced with more conventional rolled roofing techniques and materials.

### **Backfilling of the east wing of West Ruin**

A ruins preservation crew from the Intermountain Support Office, Architectural Conservation Projects Office in Santa Fe worked with the Aztec Preservation Crew consisting of Raymond and Harry, and Aztec preservation crew leader James Brown to implement the continuing backfilling project of West Ruin. Architectural Conservation Projects archeologist Jim Trott supervised the project. The crew filled 43 rooms and 1 kiva in the east wing of the West Ruin. (For more information refer to the FY99 Projects section.)

### **General Maintenance**

Raymond and Harry together stabilized approximately 169 square feet of wall primarily in the area of the West Ruin that was backfilled this year.

## **Roof Replacement at Chaco Culture NHP**

Similar to the project at the West Ruin at Aztec, Raymond and Harry replaced 2 modern roofs over prehistoric roofs at Chetro Kettle Ruin. They were assisted by Chaco's ruins preservation crew and they provided training and guidance to them on the construction and maintenance of these modern roofs.

## **Training**

Raymond and Harry were involved in the following training: Attended the week long Vanishing Treasures Workshop held in Albuquerque, New Mexico and Salinas Pueblo Missions in August 1999. They also received on-the-job training provided by James Brown, the park's ruins preservation work leader, and personnel from the Architectural Conservation Projects Program in Santa Fe. The training was specifically tied to the park backfilling project and included learning about backfilling techniques, materials, and equipment.

## **Flagstaff Area National Monuments (Wupatki, Sunset Crater Volcano, and Walnut Canyon)**

### **Al Remley, Archeologist**

In FY 1999, Al performed a variety of duties including research, report writing, report editing, database maintenance, technical support, various field projects, and VT program support. Research and writing tasks included assisting in document preparation and editing of research and work reports for Walnut Canyon Island Trail Sites, Wukoki Ruin at Wupatki National Monument, and the FY98 Ruins Preservation activities at WUPA and WACA. In addition, Al has been editing Ruins Preservation Reports from FY 1996 for final completion.

Field projects that Al has worked on include photographic and architectural documentation of Antelope House and New Heiser Ruin at WUPA. In addition, he is supervising the ongoing photographic annotation of architecture at Wupatki Pueblo, Wukoki, Citadel Ruin, the Box Canyon sites, and Nalakihi Ruin. Al is also participating in an intensive mapping project of the Lomaki and Box Canyon ruins. Finally, Al worked on an architectural documentation project of Inscription House Ruin at Navajo National Monument. Working with other archeologists from the FLAG areas, Mesa Verde, Canyonlands, and Canyon de Chelly, over two thirds of Inscription House was mapped, photographed, and documented (including wall elevations and unit maps).

In FY 1999, Al provided logistical support to the Vanishing Treasures program management. He is presently serving on Workgroup D, the database workgroup, and is working on developing a stand-alone version of the VT database. In addition to serving on the database workgroup, Al, along with others from the database workgroup, has worked with Valletta Canounts, Terry Childs, and Larry Karr on beta testing ASMIS 2.00 which is the archeology resource tracking program for the National Park Service. In addition, Al, with cooperation from Terry Childs and Valletta Canounts, helped create the Vanishing Treasures web page. Finally, Al, along with Mike Schneegas, Dabney Ford, and David Yubeta, was a member of the planning team that organized the 1999 Vanishing Treasures Workshop in Albuquerque, New Mexico and Salinas Pueblo Missions.

Al participated in various training opportunities in FY 1999. In March, Al attended ArcView Spatial Analyst training in Phoenix. In August, Al attended the 1999 Vanishing Treasures Workshop and presented a history and summary of work for the database workgroup. In addition, he participated in the conference planning and

attended many of the work sessions. Finally, Al is participating in a mapping project at WUPA, in conjunction with archeologists from Northern Arizona University and GeoMap, Inc. Archeologists working for the FLAG areas, and archeology students from NAU are utilizing a variety of mapping techniques including GPS total stations to map architectural features around Lomaki and Box Canyon ruins at WUPA.

## **Fort Bowie National Historic Site**

### **Fernie C. Nunez, Masonry Worker**

Fernie and their second VT employee hired in FY 1999 (refer to Personnel Hired in FY 1999 section below) were extremely busy in FY 1999. Beginning in October 1998, work was begun on the Chiricahua Apache Indian Agency Building. Several encroaching mesquite trees were removed and existing layers of plaster removed down to the original adobe. The remaining wall stubs were then covered with lime plaster. The drainage problem that caused run-off to enter the ruins and lay along the walls was also corrected. The first Fort Bowie ruins were next on the priority list. Mesquite had encroached upon the site, in some cases completely obscuring the ruins, and was threatening foundation walls. The trees were removed from the ruins to protect the stone foundations. The stone ruins were then pointed with soil cement to match existing fabric.

After completing stabilization on the first fort ruins, priority shifted to several ruins at the second fort. Portions of the post traders building, officers' quarters, and cavalry barracks all received stabilization treatment. These treatment strategies were based upon guidelines presented in the park's soon-to-be completed Historic Structures Preservation Guide.

In May, Fernie assisted Organ Pipe National Park with ruins stabilization projects at the

Victoria Mine. In July, he traveled to Mexico for a Lime Workshop. In August, he attended the Vanishing Treasures Workshop in Albuquerque, New Mexico and Salinas Pueblo Missions National Monument. In September, he assisted Tonto National Monument in addressing their ruins stabilization needs at the upper cliff dwellings.

## **Mesa Verde National Park**

### **Willie Begay and Kee John, Masonry Workers**

A substantial amount of ruins preservation work was accomplished by Willie and Kee, and the rest of the park's ruins preservation crew that includes masonry workers Arnold John and Mark Johannsen. Their accomplishments are enumerated below:

#### **Housekeeping**

General housekeeping activities were conducted at the park's front country, cliff dwelling sites including Cliff Palace, Spruce Tree House, Balcony House, Long House, and Step House. These activities are generally conducted twice a year. Housekeeping activities include sweeping trash and organic debris, vegetation removal, checking and cleaning drainage in and around each site more than four times per year due to the wet spring conditions and the late summer monsoons, and treating the ladders used by visitors with linseed oil.

General housekeeping activities were conducted at the park's front country, open sites including Sun Temple, Far View House, Coyote Village, Far View Tower, Pipe Shrine House, Cedar Tree Tower, and Mummy Lake. Housekeeping activities performed include vegetation removal in the late spring, and checking and cleaning the drainage systems at each site.

General housekeeping was done at the park's open sites that are protected with modern constructed shelters. The sites include Pithouse B, Deep Pithouses, Twin Trees, Site 16, Sun Point Pueblo, Megalithic House, 5MV1644, 5MV1676, Two Raven House, and Badger House. Housekeeping activities include lowering curtains or setting up panels in the fall; this protection was removed in the spring. General housekeeping was done at each site as needed in the spring and fall and included sweeping the sites, removing unwanted vegetation, and spreading mothballs throughout the sites for rodent control.

General house keeping was also completed at the park's mid-country cliff dwelling sites including Square Tower House, Oak Tree House, Fire Temple, and New Fire House. Housekeeping activities include the removal of vegetation and the spreading of moth balls for rodent control. The drainage and water pour-off systems at each site were checked, cleaned, and, where necessary, reestablished.

### **Preservation Maintenance**

General preservation maintenance activities were completed at the following sites:

**Cliff Palace:** Preservation maintenance work at this site consisted of removing the concrete flooring in four areas along the trail within the site. It was removed because it was causing moisture problems in surrounding walls of the ruin. A new surface was created using mixed caliche and sandy soil with water that was packed down to create a new floor surface. This surface worked great and effectively dealt with the moisture problem.

**Step House:** Work at this site focused on completing a major upgrade of the trail within the site. It required in-kind replacement with concrete since the trail is wheelchair accessible.

**Spruce Tree House:** Preservation work at this site was concentrated on Kiva F, a structure that the public enters. Treatment consisted of replacing the broken-up stabilization flooring with a caliche/sand mixture that was mixed with water and packed into place.

**Far View House and Coyote Village:** At these sites, a total of three weeks was spent repointing walls with deeply eroded mortar joints. The walls were repointed using a Rhoplex amended mud mortar.

**Twin Trees and Site 16:** Rodent holes were filled at these sites.

**New Fire House:** Work at this site consisted predominately of repairing the front walls of the site by replacing eroded stones and mortar. These included Rooms 15-19, 21, and Kiva C.

**Backcountry Sites:** At the park's backcountry sites, moisture was the major cause of the damage to the standing architectural fabric. Preservation treatment was conducted at five sites that included repointing eroded joints and replacing eroding stone masonry.

In June, the crew attended two days of advanced scaffold safety training that was held and sponsored at the park. In August, the crew attended the Vanishing Treasures Workshop in Albuquerque, New Mexico and Salinas Pueblo Missions National Monument.

## **Navajo National Monument**

### **The VT Archeologist Position is currently vacant**

Last year we reported that Kathi Kramer, an archeologist, had filled this position. Kathi came on board on January 3, 1999 and worked through June 23, 1999. She left the

position due to personal reasons. During her tenure, she spent the majority of the time arranging the logical components and aspects of the funded FY 1999 VT Inscription House Documentation and Condition Assessment Project. (Refer to Section 6 for further details and accomplishments of the project.) This included arranging the project camp location and support facilities and equipment/gear that would be used by the project's crewmembers. In addition, she worked with staff members from Mesa Verde National Park and the Flagstaff Area National Monuments in the development of the project's architectural documentation packages. She also developed the budget, and arranged with a number of parks and the Santa Fe Support Office to provide crewmembers to implement the project.

In addition to the above, Kathi provided the logistical coordination for a contractor that had been hired to complete photographic documentation of Inscription House Ruin. This was the final phase of a cultural cyclic funded project at the site that had been initiated in FY 1998. During this project, Kathi assisted the photo-documentation crew by transporting necessary equipment to the site and working with them to complete the necessary photographic coverage. During her tenure, Kathi attended the April 1999 Society for American Archeology meetings held in Chicago, Illinois. She also attended training on Wildland fires and PMIS. In addition, Kathi attended several training sessions with staff members from Mesa Verde and the Flagstaff Areas gaining knowledge regarding architectural documentation systems and databases.

After Kathi's departure, the park initiated an "emergency hire" that allowed the short-term employment of archeologist Jim Mayberry in August. Jim had recently completed a four-year term appointment at Mesa Verde where he was involved in their architectural documentation program. Jim's primary

responsibilities at Navajo were providing the on-the-ground logistical coordination of the Inscription House Documentation Project. Jim's temporary appointment expired in mid October 1999, allowing a minimal amount of time to coordinate the logistics of the Inscription House project and provide a brief description of the accomplishments of the project.

With the expiration of Jim's appointment, the park is now faced with the challenges of filling the vacant position on a permanent basis. They are currently in the process of putting together the necessary paperwork to complete that task, hopefully in the next couple of months.

## **Tonto National Monument**

### **Miguel R. Estrada, Exhibit Specialist**

During Miguel's first year at Tonto significant progress was made in developing the park's ruins preservation program. Miguel is developing a program that focuses on the protection and preservation of significant architectural features, components, and attributes. With this program, emphasis is placed on (1) the utilization of techniques and materials that are compatible with and duplicate the original construction methods and existing structural fabric, (2) minimizing all ground-disturbing activities to reduce the likelihood of impacting buried cultural remains, and (3) insuring that adequate data are retrieved from the areas that will be subject to preservation interventions. Prior to the implementation of any prescribed preservation treatment, intense analysis is completed including condition assessments, investigative studies, and archeological and architectural documentation.

The preservation maintenance of the Upper Cliff Dwelling at the park was the primary focus for Miguel and the seasonal

preservation staff. This included implementing a successful rodent control program, creating proper slopes to the floors of a number of rooms, stabilizing deteriorated walls by sealing cracks and voids using natural mud mortar, capping wall tops, resetting and repointing loose and displaced stone masonry, and documenting the work completed including the use of digital photography.

During this year Miguel also advised, instructed, or provided technical assistance to a number of parks. These included Organ Pipe Cactus National Monument, Casa Grande Ruins National Monument, Fort Bowie National Historical Site, Tuzigoot National Monument, and Kinishba National Landmark. Miguel also conducted a stabilization workshop at Tonto with participants from Tuzigoot, Fort Bowie, and the White Mountain Apache Tribe.

In June, Miguel attended NEPA/106 training in Phoenix, Arizona. He also attended a two-day advanced scaffold safety training session that was held at Mesa Verde National Park. In August, he attended the Vanishing Treasures Workshop in Albuquerque, New Mexico and Salinas Pueblo Missions National Monument. In September, he attended Safety Officer training in Albuquerque, New Mexico.

## **Tumacacori National Historical Park**

### **David Yubeta, Exhibit Specialist**

In FY 1999, David directed the preservation efforts at Tumacacori's three mission units of San Jose de Tumacacori, San Cayetano de Calabazas, and Los Santos Angeles de Guevavi. This included wall and capping stabilization and preservation. (Refer to Section 6 for more information). Ongoing training of VT Masonry Worker Ramon Madril was also accomplished during FY 1999.

David has been actively involved in providing services to other VT parks and other agencies and organizations that have ruins preservation needs. David conducted preservation efforts at the fire damaged Blankenship Ranch and Victoria Mine Site at Organ Pipe Cactus NM's. He directed and trained Lake Mead's staff and volunteers in the preservation efforts at Tassi Ranch. He participated in the preservation treatment of a number of historic structures at Casa Grande Ruins National Monument. David also participated in the lime plaster/adobe preservation efforts at Fort Bowie's barracks, and a hands-on workshop at the U.S. Forest Service's Kentucky Camp.

David provided consultation and completed condition assessments at the following sites: the Clarke House, Florence, Arizona; U.S. Forest Service's Kentucky Camp, Greaterville, Arizona; the Bureau of Land Management's Terranate Presidio Site on the San Pedro River; the Bureau of Land Management's Fairbank Mercantile located in Fairbank, Arizona; the Bureau of Land Management's Empire/Cienega Ranch located in Sonoita, Arizona; Victoria Mine and Blankenship Ranch at Organ Pipe; Tassi Ranch, the town of Tubac's 1870 Hererra property; Death Valley's Harmony Borax Works adobe and maintenance yard adobe wall; Channel Islands 1800's stone adobe structures on the Santa Cruz Island; Nevada State Park's 'Lost City Museum adobe' in Overton, Nevada; Missions in Sonora Mexico at Cocospera and San Ignacio and Mission Los Cinco Santos Senores de Cusarare, Chihuahua Mexico; and the Old Mud Meeting House, Harrodsburg, Kentucky.

David gave a presentation to students at the international HACU Conference (Hispanic American College and Universities) held in San Diego, California in March 1999, regarding Vanishing Treasures and the opportunities of the program. He developed

VT exhibits that were displayed at the Arizona Archeology Fair in Tubac, Arizona in April, and the Intermountain Superintendents Conference that was held in Santa Fe, New Mexico in May.

David assisted in the planning of the Vanishing Treasures Workshop that was in Albuquerque, New Mexico in August, and he conducted an adobe making workshop for Arizona State Parks and the Arizona Historical Society in Tucson in May 1999.

David was the recipient of the INAH (Instituto Nacional de Antropología y Historia) Directors' award for preservation efforts in Sonora, Mexico. He was also the recipient of NPS Director's Special Achievement Award, National Park Service Intermountain Field Area, and the National Appleman-Judd Cultural Resources Award for VT related preservation and conservation efforts.

### **Ray Madril, Masonry Worker**

As one of Tumacacori primary ruins preservation staff members, Ray worked alongside David in the completion of all of the preservation actions described above, and the numerous training sessions that were held throughout southern Arizona. As David has indicated "...I believe this guy is one heck of an example of a VT success story..." A more complete description of the preservation activities that were completed by David and Ray can be found below in the FY 1999 Project Session.

Despite the exhaustive level of preservation work that Ray was involved in, he was able to complete some training. In July, he attended a workshop on cleaning historic paints on plastered surfaces and utilizing native stone colors. This workshop was sponsored by INAH in Chihuahua, Mexico. In August, he attended the Vanishing Treasures Workshop in Albuquerque, New Mexico and Salinas

Pueblo Missions National Monument. In August, he also attended a Lime Plaster workshop in Las Cruces, NM (Cornerstones) where he also presented a paper on earth-brick building. Ray also received training at Aztec Ruins in October, in the repointing of stone masonry walls.

### **Personnel Hired in FY 1999**

This section provides a brief description of the personnel that were hired using FY 1999 VT funds. Brief summaries are also provided on the work that was accomplished by the individuals hired before the end of the fiscal year. Also included are summaries on the use of the lapse salaries for the positions that were filled after the end of FY 1999.

In FY 1999, \$741,000 was provided to eight parks to recruit and train 13 individuals. The benefiting parks include:

- Bandelier National Monument** (2 positions)
- Chaco Cultural National Historical Park** (4 positions)
- El Malpais National Monument** (1 position)
- Flagstaff Area National Monuments** (1 position)
- Fort Bowie National Historic Site** (1 position)
- Montezuma Castle/Tuzigoot National Monuments** (2 positions)
- Salinas Pueblo Missions National Monument** (1 position)
- San Antonio Missions National Historical Park** (1 position).

Brief descriptions of the individuals hired in each of these positions and parks are presented below.

### **Bandelier National Monument**

#### **Angelyn Bass Rivera, Architectural Conservator**

Angelyn Bass Rivera will begin her new appointment as the VT program director (GS-11 Architectural Conservator) in Bandelier on January 18, 2000. Angelyn is currently a term



appointment Architectural Conservator and Project Director at Mesa Verde. She has been associated with the Intermountain Support Office, Architectural Conservation Projects Office in Santa Fe as an Exhibit Specialist (Architectural Conservator) since 1993. Angelyn has also been a Research Fellow, Special Projects, and Consultant with the Getty Conservation Institute. Angelyn has an undergraduate degree in Art History from the University of California, Santa Barbara. She attended graduate courses in architectural conservation at the University of Texas and the University of Pennsylvania. She received her Master of Science degree in 1998 from the University of Pennsylvania Graduate Program in Historic Preservation. She is an acknowledged expert in Southwestern prehistoric earthen architecture and plaster conservation.

#### **Mary E. Slater, Exhibit Specialist**

Mary E. Slater accepted her new VT position on September 13, 1999. She began her permanent career as a GS-07 Exhibit Specialist (Restoration) at Bandelier National Monument on October 25, 1999. She has experience as a research and teaching assistant within the University of Pennsylvania Graduate Program in Historic Preservation and was employed at Mesa Verde from May-October 1999 as an Exhibit Specialist where she assisted in supervising the graduate program field school in historic preservation. Mary has an undergraduate degree in English Literature from the University of Virginia, Charlottesville. She received her Master of Science degree from the University of Pennsylvania in materials conservation in 1999. Mary has also worked in the field of historic preservation at Casa Grande Ruins National Monument, at historic ranches on White Sands Missile Range, and at Monticello, home of Thomas Jefferson.

#### **Use of Lapse Salary from the FY 1999 VT Positions**

Bandelier National Monument just recently completed the hiring of the positions that they were given funding for in FY 1999. In spite of the park's inability to fill the permanent VT positions during FY 1999, significant progress on VT resources was made.

With the lapse salary the park was able to hire three seasonal American Indian students with traditional ties to the park (from the San Ildefonso Pueblo, San Juan Pueblo, and Cochiti Pueblo in north central New Mexico) to assist in field work that was conducted under the direction of Jake Barrow, Supervisory Exhibit Specialist, Kaisa Barthouli, Archeological Technician, Angelyn Bass Rivera, Architectural Conservator, and Ron Winters, Archeologist from the Intermountain Support Office, Architectural Conservation Projects Office. The American Indian students were in training throughout the season learning from the professionals listed above. The park also hired a Jordanian archeology student through ICOMOS in September to work on VT projects. The accomplishments of the staff funded with the lapse salaries are summarized below.

#### **Monitor the effectiveness of pilot resource impacts mitigation treatments conducted in 1998:**

This project consisted of implementing selected conservation treatments and testing fragile or damaged architectural finishes in two cavates on North Mesa, and at the Tsankawi Unit. The 1999 conservation treatment program was successful in its objectives to conduct pilot treatments to test the efficacy of selected conservation materials and methods to stabilize imperiled prehistoric architectural finishes and to train project interns (the three American Indian students) in documenting and conserving prehistoric earthen materials.

**Develop a condition assessment strategy and treatment program for the Frijoles Canyon cavates:**

The purpose of this project was to evaluate the condition assessment process performed on the Frijoles Canyon cavates. Another objective was to continue to assess the condition of cavates at Tsankawi, but with improved techniques so that treatment could be prescribed. Lessons learned in Frijoles Canyon will be used at Tsankawi in future years.

Work in FY 1999 resulted in the completion of the condition assessment and photo-documentation of the 158 cavates in Group D. Within the 158 cavates, 299 square meters of earthen finishes were recorded. In addition, photo-documentation of the 83 cavates in Group E was completed.

Finally, plan view and profile maps were drawn of 158 cavates in Group B, an area that had never been fully mapped. Seventy-five cavates in group A were also documented, which completes the mapping of group A. This season's work in combination with the Bandelier Archaeological Survey provides the park with complete plan and profile maps of cavate groups A-M located in Frijoles Canyon.

**Initiate Public Scoping for a Tsankawi**

**Resource Management Plan:** An editorial assistant, Joe Mundy, was hired in the spring to work part-time on the Tsankawi Resource Management Plan (TRMP). Background information for the draft plan was compiled. The park initiated public scoping by holding consultation meetings with the Bandelier Tribal Consultation Committee. The majority of this planning and consultation effort is being funded by fee demo, although some VT lapse salary funds were used in FY 1999. The park plans on hiring local Native Americans to do most of the work in FY 2000 and FY 2001, including stabilizing Tsankawi Pueblo.

**FY 2000 Field School:** The remainder of the VT lapse salary money was allocated to a major training effort for their soon-to-be-hired VT positions, local puebloan students, and other VT employees (if interested) in FY 2000. To accomplish this training the park took advantage of an existing cooperative agreement with the University of Pennsylvania to conduct a six-week field school that is scheduled in June and July 2000.

**Chaco Culture NHP**

**Rachel Anderson, Archeologist**

Rachel, a new employee to the NPS, has a B.A. in Anthropology from San Diego State University. She volunteered for several years at Chaco prior to being hired as a seasonal in 1998.

While at Chaco, Rachel has worked closely with the preservation staff to organize the condition assessment, architecture, and preservation documentation they collect for each site. She implemented the ASMIS and VT databases and is in the process of developing methods to collect the required data for each site. Also as part of data entry, all of the sites in the park are being reassessed for inclusion as VT sites and the appropriate data collected so that the park has a more accurate accounting of the VT resources within the park.

As part of developing new condition assessment forms, Rachel polled other parks for information on the forms and methods they use to collect condition assessments for sites and structures. She used this information, along with the park's old condition assessment form, the New Mexico Laboratory of Anthropology Site Forms, the VT data form, and the ASMIS data fields to develop a condition assessment form that integrates condition assessment and site data collection. The form was field tested while

Rachel assisted with the condition assessment and inventory of the community sites associated with Pueblo Pintado, an outlying Chacoan greathouse and the greathouse itself. Rachel is also working closely with the preservation staff developing new forms for recording condition assessment data for walls and preservation treatment information and refining older forms. These new and revised forms are more closely aligned with the types of data needed in the ASMIS and VT databases and are also tools for collecting data that will become layers in the park's GIS. Rachel is also assisting with the preparation of the yearly preservation reports which include the documentation and related photographs of the preservation treatment being done at each site.

Rachel also assists with the preparation of the scopes of work and prepares the compliance documents for the backfilling projects the park is currently working on. She has also been involved with updating the park's Resource Management Plan, including adding and writing projects related to VT sites.

Rachel attended the following training sessions: National Historic Preservation Act Section 106 and 110 Compliance, Revised Section 106 regulations, and Archaeological Resources Protection Act. In August, she attended the Vanishing Treasures Workshop in Albuquerque, New Mexico and Salinas Pueblo Missions National Monument.

## **El Malpais National Monument**

### **Rory Gauthier, Archeologist**

Rory came to duty April 25, 1999. He has 15 years of experience with the NPS in the fields of protection, interpretation, resource management, and curation. He also has 13 years of experience in archeology. Rory came to the park from Chaco Culture National Historical Park where he served as Chief Ranger. Prior to that, he was employed at

Glen Canyon National Recreation Area as an archeologist.

El Malpais is a new park, established only eleven years ago, and many of its programs are still in the formative stage. The initial focus began with an assessment of the records of known archeological sites within the park's boundaries. Most of these records contain out-of-date and missing information. The park continued to collect existing site data from the Laboratory of Anthropology and the Bureau of Land Management. This project was started several years ago. It is now felt that most of the existing information for sites on NPS property has been collected. This number now stands at 192 sites.

The primary thrust of the first year of the Vanishing Treasures Program at El Malpais has been to document VT sites and assess their condition. This included relocating the sites, assessing condition, establishing a permanent site marker, using GPS to document the site's location and boundaries and instrument mapping of the site. Photo-monitoring points were also established at most of these sites. A total of 20 sites were documented in this manner.

The park began using ASMIS 2.0 with the VT module for its database. All sites documented during this first year were entered into ASMIS as well as sites with sufficient levels of information. In all, the park entered and updated 28 sites. Assistance was also provided to Petrified Forest National Park and El Morro National Monument in the form of writing project statements for PMIS and the parks' RMP.

The park found that most of El Malpais' sites cannot be treated using traditional stabilization methods. Only two sites were documented that have standing sandstone masonry walls with adobe mortar. All of the Pueblo ruins encountered so far are reduced to rubble mounds. Erosion was documented

as being the most common threat to these sites. However, the most common site type was found to be dry-laid, basalt block ring structures which do not require substantial wall fabric stabilization. Our major VT strategy is, for now, documentation and monitoring.

An inventory survey of El Malpais' cultural resources is scheduled to begin in 2000 using non-VT funds. It is expected this survey will add 3,000 sites to the park's list of known cultural resources. This has the potential for increasing the number of VT resources. This high number of resources will require the development of an efficient but detailed preservation strategy.

The lapse monies were used to appropriate much needed equipment, but just as important, they provided seasonal support to the archeologist. The seasonal spent a great deal of time collecting much needed historical records and data.

In August, Rory attended and served as an instructor at the Vanishing Treasures Workshop in Albuquerque, New Mexico and Salinas Pueblo Missions National Monument.

## **Flagstaff Area National Monuments**

### **Lloyd Masayumtewa, Archeologist**

Lloyd, hired in April 1999, is the new VT hire for the Flagstaff Area National Monuments. Lloyd is a member of the Hopi tribe and is from the village of Old Oraibi. Lloyd graduated from Northern Arizona University (NAU) in 1998, with a B.A. in Anthropology and minor in Sociology. Lloyd is presently enrolled in the graduate anthropology program at NAU earning a Masters degree in Anthropology.

Lloyd already has extensive work experience documenting architecture and conducting ruins preservation work prior to being hired

for the VT position through a SCEP appointment. Lloyd started working in the FLAG Areas as a student involved in a ruins preservation training program for Hopi youth in 1997. He has since worked either through cooperative agreements with NAU or in a student temporary employment program (STEP) position documenting Vanishing Treasures resources at Walnut Canyon (WACA) and Wupatki (WUPA) National Monuments. In addition to architectural documentation, Lloyd has conducted ruins preservation treatments at these same sites, accomplishing tasks such as identification and testing of mortar sources, conducting preservation maintenance, documenting preservation work, and compiling completion reports.

Lloyd's work in FY 1999 included compilation and writing of a preservation history report for previously treated front country sites at WACA. The information Lloyd compiled has since been used to develop an interpretive display explaining ruins preservation activities at WACA. In addition, Lloyd worked on photo and architectural documentation projects at Antelope House and New Heiser ruins in Wupatki National Monuments. He also worked on documentation projects at Wupatki Pueblo, Wukoki Ruin, the Box Canyon sites, Citadel Ruin, and Nalakiu pueblo at WUPA. He is presently mapping architectural sites and features in the Lomaki and Box Canyon area at WUPA.

Prior to being hired in his present position, Lloyd received ruins preservation training in 1997 and 1998 through two workshops sponsored by the Flagstaff Area National Monuments, in cooperation with NAU and SWCA Environmental Consultants, plus he attended scaffold safety training at AZRU in 1998. In 1999, his training consisted of attending graduate courses at NAU, and he has also participated in a mapping training workshop taught by NAU Department of Anthropology in collaboration with GeoMap,

Inc. of Tucson, Arizona. This mapping workshop has provided training in a variety of mapping techniques ranging from GPS base station use to trilateration tape mapping. Finally, Lloyd attended the 1999 Vanishing Treasures Workshop in New Mexico.

Lapse salary was used to purchase a computer for Lloyd's use, camera equipment and supplies for our ruins documentation program, and 4 months of GSA vehicle rental and mileage (for exclusive use by the ruins preservation crew).

## **Fort Bowie National Historic Site**

### **Phil Tapia, Masonry Worker**

Phil Tapia joined the National Park Service in 1989. As a seasonal maintenance worker at Chiricahua National Monument, he assisted Fort Bowie personnel with the annual ruins stabilization program. In 1991, he was hired to fill a permanent maintenance position at Chiricahua National Monument and continued to assist and gain experience in ruins stabilization and adobe work at Fort Bowie. In FY 1999, thanks to the Vanishing Treasures Initiative, he was converted to a masonry worker position at Fort Bowie. Phil entered duty on May 16, 1999. He now devotes his time and expertise to the ruins stabilization program at Fort Bowie. Because of his expertise with adobe and ruins stabilization, he has assisted other parks with their projects. Mesa Verde National Park, Coronado National Memorial, the Town of Mesilla, Arizona, and Organ Pipe Cactus, Tonto, and Fort Union National Monuments have all benefited from his experience. Lapse salary for Phil's position was used to purchase supplies, materials, and equipment to complete the park's preservation treatment activities. This included the purchase of cameras and film, a dedicated preservation computer, and four months of GSA vehicle rental and mileage.

Phil, and our other VT employee, Fernie Nunez, were quite busy in FY 1999. Phil and Fernie concentrated their efforts on the maintenance of the Chiricahua Apache Indian Agency Building. Work included vegetation removal, treatment of original adobe walls, and drainage control. Work was also completed on the first Fort Bowie Ruins and included vegetation control and repointing the walls of the ruin.

Additional preservation activities were focused on several ruins at the second fort. Portions of the post traders building, officers' quarters, and cavalry barracks all received preservation treatment this year.

In January, Phil assisted Organ Pipe Cactus National Monument with preservation work on an historic ranch house. In June, he traveled to Mesa Verde National Park for advanced scaffolding training. In August, he attended the Vanishing Treasures Conference in Albuquerque, New Mexico and in September, he assisted Tonto National Monument with ruins stabilization at the Upper Cliff Dwellings.

## **Montezuma Castle and Tuzigoot National Monuments**

### **Ruben Ramirez, Masonry Worker**

Ruben was transferred from the position of Maintenance Worker to Masonry Worker on February 3, 1999, filling the first of two VT positions at Montezuma Castle /Tuzigoot National Monuments (MOCA/TUZI). Ruben has for many years been the primary worker in the stabilization and preservation of ruins throughout the parks, and has shown a high level of interest in these resources. He has attended several work/training groups on various aspects of the discipline. When special funding allowed, supplemental crews were hired, and Ruben's expertise in hands-on

stabilization was put to good use. When the Vanishing Treasures Program provided the opportunity to field a full-time program in this area, Ruben was a logical choice to fill one position.

The Vanishing Treasures Program crew for FY 1999 consisted of Ruben, Alex Contreras (the second permanent masonry worker hired with VT funds in FY 1999), and three seasonal laborers. Ruben provided Alex and the crew on-the-job instruction, with a great deal of input from Southern Arizona Office Archeologist Scott Travis and VT Exhibit Specialist Mickey Estrada from Tonto National Monument. Both Ruben and Alex attended the Vanishing Treasures Workshop in Albuquerque.

Accomplishments for the program in FY 1999 greatly exceeded expectations, completing 3566 square feet of wall surface repair and repointing, with 88 lineal feet of basal erosion repair. A work plan and assessment program developed by Scott Travis served as a template and guide for setting needs priorities.

A failing drainage system was removed from the ruins complex, existing drains were rehabilitated, and vegetation control was increased to minimize rodent activity. Two separate areas of eroding support materials under critical walls were stabilized and riprapped, insuring the integrity of the walls.

The VT program for MOCA/TUZI has proven to be a huge success, with the park now able to provide year-round maintenance and stabilization efforts. They have received help on several occasions from staff at Tonto, and in return have sent the MOCA/TUZI crew to Tonto for assistance in a special stabilization project there. The program has greatly reduced the need for the park to request Cultural Cyclic funding for other than hiring supplementary crew members or

special functions such as periodic high level documentation.

Funding for the program was received well after the start of FY 1999. Filling of vacancies of permanent positions also resulted in additional lapse monies available. Funds from both Ruben's and Alex's lapse were used to purchase over 100 tons of suitable soil materials, and fund communication equipment for the crew. Also, Regional Permanent Change of Station program requires a mandated assessment regardless of moving costs. This assessment was funded from lapse money.

A crew of three seasonal laborers was hired to assist the permanent staff. In addition, Maintenance Worker John Sevier served on the crew in a temporary capacity during the hiring and while awaiting the EOD of Alex Contreras. He also served to guide the crew as leader when Alex and Ruben were attending the Vanishing Treasures Conference.

### **Alex Contreras, Masonry Worker**

Alex Contreras was hired on May 9, 1999, from a vacancy announcement to fill the second of two VT positions. Alex has a background in preserving prehistoric structures from special assignments while serving as a utility worker at Grand Canyon National Park. During those projects he demonstrated an aptitude and interest in this type of work, which prompted his application for the position.

The Vanishing Treasures crew for FY 1999 consisted of two permanent Masonry Workers (Alex and Ruben Ramirez), and three laborers. Alex fit in very well, and learned quickly, taking "on-the-job" instruction from Ruben, Scott Travis, and Mickey Estrada. He is currently enrolled in the Preservation And Skills Training Program, with Mickey serving as mentor. Alex contributed greatly to the

overall accomplishments of the program and crew, which as noted above, greatly exceeded expectations.

## **Salinas Pueblo Missions National Monument**

### **Philip W. Wilson, Archeologist**

Phil Wilson, graduated with honors from Fort Lewis College in Durango, Colorado with a B.A. in Anthropology and Southwest Studies, and received his M.A. in Anthropology from Northern Arizona University.

Phil's professional experience includes two seasons working on the Grand Canyon Trail Crew and three seasons at Mesa Verde National Park. At Mesa Verde, he spent his first season working as an interpretive ranger before working the next two seasons as an archeologist with Kathy Fiero and the Ruins Preservation Crew. During this time he participated in preservation projects at Mesa Verde, Chimney Rock, and Hovenweep and, along with several others, worked on developing Mesa Verde's backcountry Condition Assessment Program. Prior to arriving at Salinas, Phil was working as an archeologist at Grand Canyon National Park. At GRCA, his duties included developing a GIS based documentation and assessment program for the historic and prehistoric trail systems, archeological survey and recordation, grant writing, and assisting in the development of the Park's Ruins Preservation Program.

Phil began work at Salinas in late May. His accomplishments since arriving at Salinas include co-directing a GPS mapping session at the Vanishing Treasures Workshop and initiating base-line architectural documentation of the 19<sup>th</sup> Century structures at the Abo and Quarai Units. This documentation included medium format photography, topographic mapping and

establishment of survey control points to reference hand-drawn profiles and plans. He also began planning for implementation of a range of backfilling and surface contouring treatments at the Gran Quivira Unit.

This year Phil also spent time at Colorado National Monument, working on the preservation assessment and photographic documentation of the historic Serpents Trail, and assisted Grand Canyon National Park in their preservation assessment of a large prehistoric alcove site. Phil was nominated to the Cultural Resources Advisory Team (C.R.A.T.) for the Colorado Plateau and will be serving as the Leader of the Vanishing Treasures Career Development Workgroup.

Training Phil received this year included NEPA and Section 106 Compliance, Proposal Writing For Resource Stewardship, and Archeological Resource Protection Act.

## **San Antonio Missions National Historical Park**

### **Susan Snow, Archeologist**

Susan Snow will begin her new appointment with the National Park Service on January 3, 2000. She has worked for the past 8 years as Project Archeologist in the Office of the State Archaeologist at the University of Iowa. In this position, she conducted and performed surveys and archeological excavations on historic and prehistoric sites throughout Iowa.

Susan is a Ph.D. candidate in archeology at the University of California, Los Angeles. She received her M.A. in archaeology from the University of Calgary in 1986, and her B.A. in anthropology from the University of Chicago in 1984. Susan's résumé contains many academic achievements and awards. While with the University of Iowa, she was an instructor in anthropology and archeology for several years. Susan has presented many

papers publicly, and has an extensive listing of publications.

### **Use of Lapsed Salary from the FY 1999 Position**

As a result of a number of hiring problems, the VT Archeologist position was lapsed for all of FY 1999. Nonetheless, the monies dedicated to this position were utilized toward Vanishing Treasure needs as follows:

The majority of the lapse salary was used to cover the cost of two masonry workers to complete preservation treatment of seven ruins at Mission Espada. Consequently, these ruins have now been brought up to a good condition and should need no more than routine maintenance. Funds were also used to cover the cost of sending three of the park's current preservation crew to the Vanishing Treasures Workshop that was held in Albuquerque, NM and Salinas Pueblo Missions National Monument. Lapse salary was also used to purchase a computer for use by the new VT Archeologist. Finally, funding was used to assist in the evaluation of the historic significance of property proposed for addition to the park, including potentially new Vanishing Treasures resources.

### **Separate VT Base Increases**

As discussed in Section 2 of this report, base increases that were not directly requested by the VT program, but nonetheless tied to the FY 1999 VT budget, were given to Chaco Culture and Salinas Pueblo Missions. These increases occurred as the result of long standing Operating Formulation System (OFS) requests that both parks had on the books for a number of years prior to the existence of VT.

Funding was provided in the NPS budget at the request of Congress. Because these requests were not part of the FY 1999 NPS

priority list and the association of these parks with the VT Program, the NPS Budget Office consigned these increases to VT's FY 1999 budget.

More detailed information regarding these non-VT related increases, including how the acquired funds were utilized, is presented below.

### **Chaco Culture National Historical Park**

During 1995 Chaco Culture National Historical Park updated the funding request for Operation of the National Park System. The park placed a request for \$156,000 to fund three or more WG-8 preservation specialists. This request remained far down the national priority list until 1998. During that year's national budget cycle, at the request of the New Mexico Delegation, this particular request was selected and funded as a base increase during the final days of the budget cycle. This request was not on the National Park Service priority list, and for that reason the NPS budget office earmarked the funds as a Vanishing Treasure Initiative request.

These funds have been used exclusively to hire three full time preservation specialists, and pay for their training. This will continue to be the case in the future. Brief summaries of the accomplishments of these newly hired individuals are presented below.

### **Jack Trujillo, Leo Chiquito, and Paul Tso, Masonry Workers**

Three subject-to-furlough, masonry worker positions were filled with the FY 1999 base increase to Chaco Culture National Historical Park. Jack Trujillo began working for the National Park Service in 1966, and has spent nearly 30 years as a seasonal preservation specialist. Leo Chiquito began his career in the National Park Service as a masonry



worker in 1970, and has completed his 29<sup>th</sup> year with the park. Paul Tso has worked primarily as a seasonal for the park since 1975, working almost exclusively in ruins preservation. These three masonry workers, all graded at WG08/05, have extensive training and skill working with prehistoric and protohistoric masonry, wood, and earthen architecture. The majority of their experience has been with architectural documentation and preservation treatment of structures in the Four-Corners region. Their special skills include condition assessment, treatment alternatives, matching original stone and mortars, backfilling and drainage design and implementation, and design and construction of protective structures.

This Fiscal Year, Jack, Leo, and Paul completed the backfilling in the east wing of Chetro Ketl, installing a drainage system and filling approximately 30 rooms. They completed emergency repairs on vertical wall surfaces and capping in 8 major interpretive structures in the park.

### **Salinas Pueblo Missions National Monument**

On August 13, 1996, Salinas Pueblo Missions National Monument submitted via the OFS process a request for a park base funding increase in the amount of \$81,000. The request, entitled "Enhance Park Operations," had a justification attached which read "Due to career enhancement programs and the incidental rising personnel costs, increases in GSA vehicle costs, utility costs and general inflation, the park's operating funds have been severely eroded. This increase would allow the park to restore operations to historical levels."

Early in FY 1999, the park was informed that an \$81,000 increase had been granted but that the increase had been funded through the Vanishing Treasures Initiative. Fully aware

that if this were the case, 100% of the increased funding would have to be expended only on Vanishing Treasures resources, Park Superintendent Glenn Fulfer immediately contacted Deputy Regional Director John H. King and informed him of the situation. John then contacted Regional Comptroller Deryl Sabin and asked for clarification on the increase. After reviewing the subject, Sabin determined the increase was not strictly Vanishing Treasures funds and thus expenditures could be made for other park needs as well.

While this remains the case, the Washington budget office insisted the increase be shown as part of the FY 1999 allocation to Vanishing Treasures. It is shown as such in the NPS FY 1999 budget.

In FY 1999, the park expended \$56,000 (69%) of the \$81,000 increase on park operational needs as it stated in the original request. The remaining 31% or \$25,000 funded a major stabilization project at the park's Quarai unit. These funds allowed the stabilization crew to stabilize 9,719 square feet of wall.

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## Section 6, FY 1999 Project Completion Report

In FY 1999, the Vanishing Treasures Program dedicated \$627,600 to conducting emergency and high priority projects in 13 parks. They included the following:

**Aztec Ruins National Monument:** Implement Backfilling Plan, \$63,000

**Big Bend National Park:** Documentation and Condition Assessment of Prehistoric and Historic Structures, Sublett Farm Historic District, \$10,000

**Canyon De Chelly National Monument:** Conduct Architectural Documentation, Canyon del Muerto, \$75,000 (Project not implemented)

**Casa Grande Ruins National Monument:** Backfill Exposed Prehistoric Walls, \$20,000

**Chaco Culture National Historical Park:** Continue Partial Back Fill and Repair Drainage at Sites, \$125,500

**Fort Laramie National Historic Site:** Stabilization of Ruins HS-13, 17, 18, 19, 20, and 21, \$12,700

**Glen Canyon National Recreation Area:** Preservation Treatment at Mistake Alcove, \$45,000 and Conducted Condition Assessment at Highboy House, \$10,000

**Grand Canyon National Park:** Ruins Preservation and Stabilization Clear Creek Ruin, \$55,000

**Hovenweep National Monument:** Square Tower Bedrock Stabilization, \$10,000

**Mesa Verde National Park:** Assess Condition of Back Country Sites, 175,000

**Navajo National Monument:** Documentation and Assessment of Inscription House Ruin, \$20,000

**Salinas Pueblo Missions National Monument:** Emergency Replacement of Scaffolding, \$10,000

**Tonto National Monument:** Catalog and Store Collections from Upper Ruin Excavations, \$46,100

**Tumacacori National Historical Park:** Preservation of Mission's Tumacacori, Calabazas, Guevavi, \$25,300

Brief summaries of the accomplishments of these VT projects are presented below.

### Aztec Ruins National Monument

#### Implement Backfilling Plan, \$63,000

Crews from both the park and the Intermountain Support Office, Architectural Conservation Projects Office in Santa Fe, backfilled 43 rooms and one kiva in the east

wing of West Ruin. The monument crew consisted of James Brown, Harry Etcitty, Raymond Torrivio, and Alejandro Ramirez. The Santa Fe crew consisted of Taylor Tsosie, Lyle Stewert, and Patrick Kinlicheene. The work was done under the supervision of archeologist Jim Trott from the Architectural Conservation Projects Office in Santa Fe. Backfilling consisted of the following: removing vegetation in target rooms, placing a geotextile on the ground as a horizon marker, putting fill dirt in the rooms to the desired level, tamping the fill at various increments, and installing drainage devices where needed.

Target rooms adjacent to others that were to remain open (where the interpretive trail runs) needed special treatment to counter the differential fill problem between them. In these rooms, geoweb was layered next to the wall and filled, effectively creating another "wall" that would take the weight of the fill behind it. The ruin wall between the two rooms is supporting no weight from the room on one side, and very little weight from a slim column of soil next to it on the other side. The geoweb wall is supporting the remaining fill weight.

VT funding was only able to support the actual backfilling part of the project. We used other funding sources (NAGPRA and Cultural Cyclic Maintenance) to complete other project objectives such as photography and architectural documentation.

VANISHING  
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## **Big Bend National Park**

### **Documentation and Condition Assessment of Prehistoric and Historic Structures, Sublett Farm Historic District, \$10,000**

This project will produce original source research and measured drawing documentation of extant structures within Big Bend National Park. The project will focus on the Sublett Farm Historic District. Funding became available late in FY 1999 and was obligated to this project. The University of Texas, Austin, will complete work under a cooperative agreement with the NPS. Work will begin in late Fall 1999 and will continue to completion by September 30, 2001.

The project models the Historic American Building Survey (HABS) level of detail with products conforming to HABS standards. Products under this agreement include one set of measured drawings on Vellum, to HABS standard scale, to be supplied to the Superintendent, Big Bend National Park. In addition, a copy of each drawing in digital format will be supplied to the Park. An archival set of drawings on mylar will be provided to the HABS office in Washington, D.C. for filing in the Library of Congress archives.

The measured drawing set for each building in a package includes the following:

- Four elevations from each cardinal direction
- All floor plans
- Sections, longitudinal and transverse
- Site Plan
- Details of significant architectural elements
- Title sheet

Final drawing sets will be completed and submitted. Digital copies of the final drawings in AutoCAD R13/14-compatible .dwg format

will be submitted on a CD-ROM with the final drawings.

## **Canyon De Chelly National Monument**

### **Conduct Architectural Documentation, Canyon del Muerto, \$75,000**

This project was not implemented, but is scheduled to be completed in FY 2000. Due to temporary vacancies in the park's permanent cultural resources staff in FY 1999, the park felt that they were not in a situation to judiciously use the awarded project funds. Once hiring of replacement staff is complete, Canyon de Chelly will be in a better situation to implement the project in FY 2000. A request was made to the VT Leadership Committee to defer the project to FY 2000. This request was granted and the available FY 1999 project funds were awarded to the next priority projects on the VT FY 1999 Project Priority List. Canyon de Chelly's \$75,000 was awarded to Casa Grande (\$20,000) and Grand Canyon (\$55,000) to implement their requested projects.

## **Casa Grande Ruins National Monument**

### **Backfill Exposed Prehistoric Walls, \$20,000**

The purpose of this project was to protect exposed prehistoric walls at Compounds B, C, G, and the Ball Court. These walls had been previously covered with backfill material, but in the last five years have become exposed by rodent activity, and the loss and erosion from heavy monsoon rains and related weather. After years of research, the backfill process was found to be the best alternative for protecting the walls. The coving of soil serves to protect the walls from the erosion activities of weathering elements. Without this

protective cover, the compounds would lose irreplaceable original material. Similar work was last completed in 1993; however, many of the walls have since been re-exposed and were actively deteriorating.

The VT project was completed between June and September of 1999 using four seasonal laborers to move stockpiled soil to cover the walls of the compounds and the ball court. Approximately three tons of soil devoid of organic debris was purchased to cover and protect the exposed walls. Because of the sensitive nature of the compounds and the ball court, the soil was moved from the staging/stockpile area by wheel barrel to the work locations and physically placed by hand to completely cover the exposed walls. An approximate five-inch layer of soil was used to cover the exposed walls. Additional activities included rodent and vegetation control, and restoration of proper surface drainage.

## **Chaco Culture National Historical Park**

### **Continue Backfilling in Ruins, \$125,000**

The project to continue backfilling exposed structures in Chaco Canyon was divided into four major segments. Three of these focused on the completion of partial backfilling and emergency assessment and repair in Chetro Ketl, and the fourth involved planning and designing backfill and drainage at Pueblo del Arroyo.

#### **Chetro Ketl East Wing**

After reviewing the condition assessments conducted in the early fall, the east wing of Chetro Ketl was identified as having the most urgent backfilling needs. Committing one additional year of backfilling at Chetro Ketl will complete all the planned drainage installation and other backfilling work at the site. Further, logistics were relatively simple,

and the existing haul road and staging areas where fill stockpiles were placed could be used for this additional year, then restored at the end of the season.

All documentation was completed for 20 rooms, 1 kiva, and the east exterior wall of the structure, following the standard documentation format developed as part of the park-wide backfilling program. Architecture documentation forms were completed for each room affected by backfilling, including all second story remnants. All walls were photographed using a perspective corrective lens, black and white film, and archival processing. A complete set of color photographs was taken as well.

Based on the condition assessments, most of the rooms required fabric treatment prior to backfilling. This treatment was mostly mortar replacement on basal sections of the walls, repair of some loose, bulging masonry in the midsections of walls, and minor capping repair. All treatment was documented and included in the records. All the existing architectural wood in the east wing was documented and sampled. Approximately 200 dendrochronological samples were submitted to the Laboratory of Tree Ring Research in Tucson for dating, species identification, and age determination. Several viga fragments were removed from their sockets, sampled, and curated, in order to use these wall penetrations for drainage pipes. Original mortar encountered was sampled and will be analyzed as part of an ongoing study.

As outlined in the park's backfilling plan, the existing ground surface was marked with permeable geotextile. The same material was used to wrap all architectural wood that was covered with fill. Fill dirt from a BLM soil quarry northeast of the park was used to fill each room up to the level of the drains. Fill was placed with electric portable "mini-" and "maxi-veyors", and hand tamped to compact.

Drainage pipes were all 6" PVC-SDR 35 gasketed sewer pipe. The placement of the pipes was determined by the level of wood in the rooms, the locations of viga seats in the exterior wall through which the exit pipes could be placed, and the level of the east arroyo where the pipes drain. Two of the exit pipes had to be installed in trenches in order to maintain adequate slope. These trenches were excavated by hand with archaeologists present to screen all backdirt and monitor the excavation. The trenches were mostly situated in fill disturbed and/or deposited during the field school excavations in the 1930s-1940s. No intact cultural remains were identified. Finally, considerable fill was placed on the exterior of the east wall in order to contour the surface away from the structure, and equalize the fill levels on either side of the main exterior wall.

### **Chetro Kettle Protective Roofs**

During the fall of 1998 and winter of 1999, two protective roofs that cover original roofing, flooring, and painted wall plaster in Rooms 106 and 93 began to leak. The park consulted with the Aztec Ruins preservation staff, who have been replacing protective roofs in West Ruin for several years. The staff from Aztec inspected the leaking roofs, determined that the roofs needed to be completely replaced, and designed new roofs. Prior to the Aztec staff work on the roofs, the western wall of Room 106, which had cracked and shifted 4"-6" out of plumb, was jacked back into plumb. A masonry buttress was constructed against this west wall to prevent further slumping. The Aztec's crew worked for four weeks with assistance from the Chaco crew. They removed the old roofs and constructed new ones.

### **Chetro Kettle Kiva G**

Kiva G in Chetro Kettle is actually a series of 18 kivas built over a 150-year period in the central room block. This complicated

structure was excavated in the 1920s-1930s and stabilized in place as the excavations continued in order to provide a interpretive exhibit. After 60+ years, the complex of timbers, masonry piers, railroad rails, and poured cement installed to support this feature seems precarious at best. A geophysicist and a structural engineer were contracted to conduct a thorough condition assessment of the stabilization supports, evaluate stresses operating on these features, determine any observable changes through time, and analyze seismic vibration data to determine stability of the walls and supports. Additionally, they will make recommendations for immediate and long-term treatment of this structure. Their report is due back to the park in early 2000.

### **Pueblo del Arroyo Backfilling Planning and Design**

The planning and designing of partial backfilling and drainage installation at Pueblo del Arroyo will articulate with an ongoing and extensive erosion control study of Chaco Wash from Pueblo del Arroyo to Penasco Blanco. Initial scoping for this erosion study began in 1999, with input from the Corps of Engineers, Bureau of Reclamation, independent researchers, and park staff. The complexity and enormity of this project was greater than expected, and an additional year of planning, compliance, and design is required. The backfilling plan, particularly the drainage design, must be developed in conjunction with the erosion study scope of work. The planning and design for the next site to be partially backfilled, Kin Kletso, were initiated, and backfilling will begin in FY00 if work at Pueblo del Arroyo is delayed.

## **Fort Laramie National Historic Site**

### **Stabilization of Ruins HS-13, 17, 18, 19, 20, AND 21, \$12,700**

The objectives of the project were to repair or replace-in-kind deteriorated or missing lime concrete in the walls, wall caps, jambs, sills, and foundations; and scrape and repaint the metal door and window frames of the following ruins: HS-13, Hospital; HS-17, Admin. Building; HS-18, Officer's Quarters "D"; HS-19, Officer's Quarters "C"; HS-20, Officer's Quarters "B"; and HS-21, N.C.O. Quarters.

The project was initiated on July 18, 1999, and began with the repair of the walls and sills of HS-17 with one seasonal employee. A week later, two more seasonal employees were hired and began the repair, scraping and painting of the door and window frames of HS-17. On August 3, 1999, all work on HS-17 was completed and treatment was initiated on HS-18. Work completed included repairing the walls, jambs, and sills and painting the repaired frames on each structure. Work was also started on the wall caps of HS-18. About half of the wall caps on the structure were treated before funding and the weather terminated the project. The wall caps are not as critical to the immediate durability of the structures as the other components of the project and were not given as high a priority. However, caps will be installed on these structures with ONPS or SEPAS funds in the summer of 2000.

This project will ensure that the walls of the ruins that were treated will remain standing for at least another five and possibly ten years with little or no maintenance. With continued routine maintenance they should remain standing indefinitely. The project was completed on September 30, 1999.

## **Glen Canyon National Recreation Area**

### **Preservation Treatments at Mistake Alcove Ruin, \$45,000**

Mistake Alcove, an unstabilized, multi-structure site in Slickrock Canyon, had been receiving ever-increasing amounts of unsupervised visitation from Lake Powell visitors. On-going deterioration had taken its toll, and the site was in danger of degrading to a point where all integrity would be lost. With a scope-of-work and consultation completed in 1998, the Vanishing Treasures Initiative provided FY 1999 funds to undertake preservation treatments.

During two weeks in February, Glen Canyon NRA maintenance crews hauled materials, rock elements, water, and sand 400 feet up into the site. In late March, a stabilization crew from Mesa Verde, under the direction of Kathy Fiero, came on site and performed the actual preservation. Approximately 11,200 pounds of sand, 170 large sandstone slabs, 5 gallons of mortar mix, and 10 gallons of water were used in the treatment activities, along with fencing material and various other materials. More than 800 person hours were expended.

The following specific treatment activities were accomplished:

#### **Pretreatment Documentation**

Completed pre-treatment baseline architectural documentation and assessments using narrative and photographs.

#### **Structural Stabilization**

Structures 1 and 6: Rebuilt a 4.2m long by 1.7m high section of collapsed, dry-laid retaining wall (Structure 6) in front of Structure 1 so that backfill inside the structure

could be brought up to the basal courses of walls to prevent further collapse. Wedged and repointed areas on east and west walls of Structure 1 where masonry elements had been knocked out.

Structure 2: Reset and relaid masonry elements to clean up visitor-laid upper portions of walls.

Structure 4: Stabilized the roof and adjacent retaining wall. Backfilled behind the retaining wall to bring fill level up to basal courses of Structure 4.

### **General Clean-up**

Repointed and relaid masonry elements at the remaining structures at the site. Cleaned up fill in a number of areas throughout the site, and added backfill material to eroded and deflated areas.

### **Graffiti Removal**

Removed graffiti from the alcove wall.

### **General Protection Actions**

A fence enclosing the site was constructed to prevent further access until the issues of site protection can be addressed.

A wayside was produced that will be placed at the base of the site and outside the fence, comparing the former, degraded site condition with its current, stabilized condition and addressing the access issue and requesting that visitors respect the prohibition against entering.

The site has been placed on a quarterly monitoring schedule to assure that the fence is preventing access and the stabilization investment is intact.

### **Post Treatment Documentation**

Completed post-stabilization baseline condition assessments and photo-documentation. A detailed report documenting the completed treatment activities is in preparation.

### **Utilization of Remaining Funds**

The Preservation Treatment of Mistake Alcove was originally estimated to cost \$85,000. Due to a number of cost saving actions implemented by the park, the actual cost to complete the project was \$45,000. Consequently, the park requested that \$10,000 be made available to complete a condition assessment of Hi-Boy House Ruin. Completing this assessment was considered a high priority due to the recent collapse of one of the walls within the ruins. The Leadership Committee approved this request. The remaining project funds were made available to the next priority projects on the VT FY 1999 Project Priority List. This included Fort Laramie (\$12,700) and Big Bend (\$10,000). Salinas Pueblo Missions was awarded \$10,000 in response to an emergency request, and the remaining \$7,300 was used by the VT Program Coordinator. A complete description of the utilization of these funds can be found in various sections of this document.

### **Condition Assessment and Treatment Plan at Hi-Boy House, \$10,000.00**

Hi-Boy House is a large, open Anasazi structural site located on an exposed, prominent point overlooking Moqui Canyon. As of FY 1999, nine structures had been documented, several with intact, two story walls. Three of these structures are on the GLCA List of Classified Structures (LCS).

Sometime in the winter of 1997-1998, a 20-foot long segment of wall collapsed and inspection of other walls revealed dangerously degraded basal courses as well as other

impacts with the potential to affect the existing integrity of the structures. Vanishing Treasures funding was used to map the site, do a complete condition assessment and architectural documentation, and produce a treatment plan in preparation for stabilization activities. Glen Canyon NRA contracted with the Intermountain Support Office, Anthropology Projects Office in Santa Fe to perform necessary fieldwork and write the treatment plan. During the course of fieldwork, two additional structures were identified and described, bringing the total number of structures at the site to 11. Information gathered included current condition, type of construction, stone type, mortar type, features, recommendations, etc. A treatment plan, in anticipation of future VT funding, was produced.

## **Grand Canyon National Park**

### **Ruins Preservation and Stabilization of Clear Creek Pueblo, \$55,000**

The Clear Creek Vanishing Treasures project was conducted in September of 1999. The objectives were to record and complete a site condition assessment for the multi-room pueblo and its associated midden and roaster features. The pueblo dates to the late Pueblo II occupation of the Grand Canyon. The site is located on the north side of the Colorado River, in a remote area in the inner canyon, in proposed Wilderness. South Rim NPS facilities functioned as communication, medical and logistical support for the project. The project required mule and helicopter support and coordination among the Branch of Fire and Aviation, the Science Center (Div. of Resource Mgmt), the Divisions of Maintenance and Visitor and Resource Protection, and other National Park Service Units. Project personnel totaled 18 individuals representing multiple parks, divisions, volunteers and private contractors.

Backcountry visitation to the site appears to have begun in the 1930's and has continued through the present. Grand Canyon archaeological staff updated records for the site in 1966, 1983, and 1987. In 1983, cumulative natural and visitor impacts resulted in the park staff performing emergency stabilization treatments to the site. The site has continued to be threatened by visitor and natural impacts. Due to the continuing threats and the deterioration of the site this project was proposed with the objective of completing detailed, baseline records and a condition assessment to develop stabilization strategies for the site.

The documentation and condition assessment involved the recording of detailed wall profiles, plan maps of rooms, narrative information, collection of mortar and plaster samples, a video, photographic documentation, and the creation of an accurate baseline topographic/architectural site map utilizing a total station. The project accomplished all of the objectives and the crew discovered an unrecorded rock art site and a site with multiple granaries.

In addition to the park's condition assessment for the Clear Creek Pueblo, the Zuni Tribe's Preservation crew was contracted to complete an assessment and recommendations for stabilization treatment for the midden and roaster features of the site. Also, project funds allowed park personnel to be trained in the use of total station survey equipment; and attend a three-day Preservation and Stabilization Workshop at the park. The workshop included a hands on class exercise on completing condition assessment documentation. The total station training class was held at Tusayan Ruins.



## **Hovenweep National Monument**

### **Square Tower Bedrock Stabilization, \$10,000**

Two principal activities at Square Tower, Hovenweep National Monument took place in FY 1999: a meeting of the Square Tower Advisory Group, and cyclical monitoring and maintenance of the site.

### **Square Tower Advisory Group Meeting**

A meeting of the Square Tower Advisory Group convened from June 21-22, 1999 to assess the present condition of the tower, evaluate previous research and preservation actions, and make recommendations for future research and intervention.

Representatives from Hovenweep, Mesa Verde, the Southeast Utah Group, and a professional group of geologists, hydrologists, civil engineers, and conservators who have worked at Square Tower composed the Advisory Group.

Discussion focused on environmental issues associated with deterioration and erosion of the foundation boulder supporting Square Tower and the structural stability of the tower. Doug Oliver, Hydrologist, presented the results of his hydrology study, which indicate an upward gradient of moisture, suggesting that capillary action may be responsible for most of the water in the foundation boulder. The flow of the water is controlled stratigraphically, discharging along less permeable formations to end up at the base of Square Tower. The alcove spring at the head of the canyon is independent, and is not responsible for moisture at the base of the tower.

Anne Oliver, Architectural Conservator, discussed the 1995 condition survey. The primary forms of deterioration are friability,

flaking, biological growth, and salt deposits. Wind erosion and freeze/thaw cycling exacerbate these conditions. The casehardened sandstone is stable, but it contributes to water runoff eroding areas depleted of the calcium carbonate cementing material.

A general discussion focused on the problems associated with the Portland Cement stabilization wall and the possible results of removing the stabilization wall to inspect the void behind it. Regarding structural stability of the tower, Todd Rutenbeck, Civil Engineer from the Bureau of Reclamation in Denver, suggested that no new monitoring programs should be initiated until a problem presents itself. He also suggested that Hovenweep have emergency bracing materials on hand in the event of a structural failure.

Project Priorities for FY 2000 and FY 2001 were developed and include: create saturated groundwater models to determine the effect of dewatering and lowering the water table; install more piezometers; investigate evergreen vegetation; conduct seismic study; generate topo map; investigate stabilized wall; conduct cyclical monitoring and make necessary repairs; assess permeability with air instrument (Air Mini Permeameter); and develop emergency bracing system for the Tower.

### **Cyclical Monitoring and Maintenance**

From September 28, to October 1, 1999, NPS Architectural Conservators Angelyn Rivera and Mary Slater conducted cyclical monitoring and maintenance at Square Tower, Hovenweep National Monument. Work included:

1. Removing a 1993 repair infilling an undercut void in the east face of the boulder, treating the re-exposed rock with a stone consolidant, and partially refilling

the area with a 3:1 sand/hydrated hydraulic lime mix.

2. Measuring permeability of the rock in selected areas using a RILEM tube to determine the rate of water absorption.
3. Measuring erosion of the boulder by using a depth gauge to record the distance between the monitoring pin and the rock face.
4. Conducting a visual condition assessment of the boulder, the stabilization wall and the tower and comparing the condition with photographs from 1995 and 1998 to determine change (e.g. structural movement or deterioration) over time.
5. Photographing the interior and exterior of the tower, including the boulder and stabilization wall for future monitoring.
6. Pruning vegetation that rubbed against and abraded the surface of Square Tower and the boulder and clearing brush and debris from the drainage next to Square Tower that impeded the flow of water.
7. Inspection of the gabion and revetment supporting the arroyo embankment.
8. Removing aeolian deposits and debris which trap moisture on the interior of the tower and clearing drains leading from the interior southeast corner to the exterior.
9. Measuring ten soil moisture probes placed at different locations in Little Ruin Canyon.
10. Measuring depth and water levels of five 1999 piezometers located near Square Tower.
11. Completion of field report with recommendations for future work.

## **Mesa Verde National Park**

### **Assess Condition of the Back Country Alcove Sites, \$175,000**

The Condition Assessment Project was established in 1996 in order to update the

documentation of backcountry alcove sites, gain a better understanding of site deterioration factors effecting prehistoric fabric, and prioritize sites for further documentation and treatment.

Although this program has been in existence since 1996, project money has not been consistent enough to allow for a documentation standard to be established, nor for a database to be created. Consequently, a significant portion of the FY 1999 budget was spent on developing a complete form package, as well as building a comprehensive database that was compatible with all of the data collected at each site. In addition, the budget allowed for a crew of 5 field personnel and 3 office personnel. The office crew worked on cataloging a backlog of stabilization and condition assessment photos and entered this information into a database.

All of the sites visited during FY 1999 were recorded following current survey documentation standards. In addition, sites containing standing architecture were documented using an 8-page Condition Assessment Package, every wall face in the site was photographed, and a scaled planimetric map was produced for each site that had not been mapped previously. Recommendations were then made according to the site's needs for further documentation and/or treatment. All of the field data has been entered into an Access database, and the maps will be digitized into AutoCad Map.

During FY 1999, the field crew visited 41 sites along the west boundary of the park. Thirty-one of these sites had not been documented since they were first recorded during the Wetherill Mesa Project in 1959. The remaining 10 were documented and stabilized after they were involved in the 1989 Long Mesa Fire.

The Condition Assessment Package was completed for 25 alcove sites. Fourteen of these sites were recommended for additional

documentation and stabilization. In addition to documentation, the Condition Assessment field crew also installed silicone driplines at 5 sites that were being impacted by water runoff from the cliff face above. This task was assigned to this crew because in order to reach the high cliff faces, it was necessary to set up a rappel system, a skill that the Condition Assessment crew possesses. As a result of this project, some serious condition problems as well as loss of original fabric have been discovered. Lancaster House and site 5MV1218 have each lost 3 meters of wall sections since 1959 when they were last documented. A third site, 5MV1195 was stabilized in 1989 following the Long Mesa Fire. Unfortunately, a stabilized wall has since fallen due to the failure of the cliff face that served as the wall's foundation. This information indicates that stabilization efforts are not always effective. However, because of this program, we may be able to recognize when such fabric loss is inevitable, and thoroughly document the site before such irreparable damage occurs.

## **Navajo National Monument**

### **Documentation and Assessment of Inscription House Ruin, \$20,000**

In FY 1999, Navajo National Monument began an intensive documentation project for Inscription House Ruin, an 80-room late thirteenth century cliff dwelling that composes one of the park's primary resources. It is a unique site in that it uses a combination of construction materials including masonry, jacal, and adobe bricks.

Work began in the spring when a team was contracted to do preliminary photo documentation of the site. These photos were used to help conduct the architectural and condition assessments of the site at later dates.

In addition, a comprehensive condition assessment program was designed and implemented for 1999 by the Architectural Conservation Projects Program, IMR-SF directed by Architectural Conservator Anne Oliver and a team of conservators. The fieldwork for the condition assessment took seven days and involved the completion of condition assessment survey forms for 367 walls, floors, fill, ceilings, and roofs, and 9 rock art panels at Inscription House. The conditions of any surface finishes and/or stabilization treatments on the walls were also surveyed.

In the late summer and early fall, archeologist Jim Mayberry, was hired on an emergency appointment to coordinate a field project at Inscription House to document and record the standing architecture and open spaces. Archeologists from Canyonlands National Park, Canyon De Chelly National Monument, Mesa Verde National Park, and the Flagstaff Area National Monuments volunteered time and material to document and record over two thirds of the site. Documentation included detailed condition/architectural forms, planimetric maps, wall elevation drawings, and additional photography.

This project is an important step in creating baseline information for Inscription House. Baseline information is needed to enable site managers to correctly implement any further stabilization projects and also develop a monitoring program for the site. While the site has been studied in the past the information available is patchy and does not cover the whole site. The descriptions include information about past stabilization efforts, what materials were used, and if they seem to be helping or hurting the original wall material. This is information that will help determine future stabilization materials and application processes. The information gathered this last summer will be put into electronic format so future use of the data will be accessible by the site managers.

## **Salinas Pueblo Missions National Monument**

### **Emergency Replacement of Scaffolding, \$10,000**

It had come to the attention of park managers that the scaffolding that the park had been using failed to meet Occupational Safety and Health Administration (OSHA) scaffolding codes. In 1983 when the scaffolding was originally purchased OSHA had no established regulations covering scaffolding. The new regulations established in 1995 do not approve the lightweight scaffolding the park was currently using. Ruins preservation work is dependent upon the use of scaffolding to maintain the high walls that make up a significant amount of the architectural inventory. To meet OSHA safety regulations, provide a safe work environment for the park's visitors and employees, and to continue their efforts to preserve the ruins within the park, new scaffolding was needed. The park made an emergency request to the VT leadership Committee and was subsequently provided with \$10,000 to cover the cost of purchasing a portion of their scaffolding needs.

## **Tonto National Monument**

### **Catalog and Store Collections Recovered from Upper Ruin Excavations, \$46,100**

This was a two fold project: (1) Complete a report documenting the results of excavation conducted in FY 1998 to facilitate the stabilization treatment of a number of rooms at the Upper Cliff Dwelling, and (2) implement prescribed stabilization treatment. Staff members at the Western Archeological and Conservation Center (WACC) completed the report production. The stabilization treatment was completed by park staff. A summary of the work completed is presented below.

WACC's portion of the VT funding in FY 1999 (\$14,000) was focused on completing the report on the 1998 excavations of rooms 15 and 16 of the Upper Cliff Dwelling. To that end, all chapters of the report were written and all contracts for specialized analysis were completed. The draft manuscript was submitted to a professional editor and all editing is complete and the purchase order closed out. The manuscript is now in the production phase and will be sent to SHPO for review before publication. The park portion of the project (\$32,100) consisted of the redistribution of excess fill/soils from the excavated rooms to other rooms in the Upper Cliff Dwelling. Primarily fill/soil removed by the excavation process was utilized to minimize the differential fill problem with adjacent rooms. Additional fill/soil remaining was redistributed along the wall bases of other rooms to assist with drainage problems and to minimize rodent activity. All walls exposed during excavation were subsequently stabilized. The last step identified in the research design was to dig a trench two feet away from the walls of room 16, add hardware cloth between the trench and the base of the wall and cover with mud. The trench was then filled with sand to minimize rodent activity around the wall base. The park also conducted a one-week training session for other parks and the White Mountain Apache Tribe. All work identified to be accomplished after the excavation was completed.

## **Tumacacori National Historical Park**

### **Preservation of Missions Tumacacori, Calabazas, Guevavi, \$ 25,300**

The purpose of this project was to implement high priority stabilization treatment at Tumacacori's three mission units of San Jose de Tumacacori, San Cayetano de Calabazas,

and Los Santos Angeles de Guevavi. This included wall and capping stabilization and preservation. Approximately 1,800 square feet of wall fabric was treated. Project funding allowed the park to hire one seasonal masonry worker to assist the park's ruins preservation staff. A summary of the work that was implemented is presented below.

### **Mission San Jose de Tumacacori**

Stabilization treatment was implemented on the Franciscan Church north wall, canales on north and west walls, mortuary chapel, granary, corridor, convento, interior and exterior of dome, northeast wall, vault interior base and pulpit area, cemetery wall, and repair of north wall cornice brick.

### **Mission San Cayetano de Calabazas**

Work at this site included repairing the roof over ruins, and stabilizing the basal area of east and west walls.

### **Mission Los Santos Angeles de Guevavi**

The treatment of this site included the recapping of the extant ruin walls and repair of the eroding basal course of all standing walls. Additional work included in-filling the interior west wall with adobe blocks.

### **Funding Support for Ruins Preservation, \$5000**

This funding source was utilized to support Vanishing Treasures activities associated with travel for Tumacacori's VT positions. Travel was to accomplish training, consultations, and site assessments.



# VANISHING TREASURES



## SECTION 7, ADVISORY AND WORKGROUP ACTIVITIES

This section provides a brief update on the activities and accomplishments of VT's Advisory and Workgroups. It should be noted that most of the effort devoted to these groups is done by a number of individuals as a secondary or collateral duty. The Program Coordinator is the only exception and is required to dedicate a least 50-70% of his time to performing program management duties.

There have been minor changes in the personnel involved in some of the workgroups. These include a change of workgroups leaders for the Database and Career Development Workgroups. Al Remley, Flagstaff Area National Monuments and VT personnel hire in FY 1998, has been designated as the Workgroup Leader for the Database Workgroup. He replaces Mike Schneegas, Salinas Pueblo Missions. Al has technically been performing this job for the last year, but it has only been formalized in the last couple of months. Mike will continue to serve as a member of the workgroup and on VT's Advisory Group.

Phil Wilson, a newly hired VT employee at Salinas Pueblo Missions in FY 1999, is replacing Larry Nordby as the Career Development Workgroup Leader. Larry will continue his involvement in VT, which includes being a member of VT's Advisory Group and the Guidelines and Standards Workgroup.

There has also been a minor shuffling of members on the various workgroups. A complete listing of the personnel involved in VT can be found in Table 7.1.

### Database Workgroup

#### Status of Goals

As outlined in the Long Range Plan and reiterated elsewhere, the latest being the FY 1998 Year End Management Report, there were four identified goals for the Vanishing Treasures Database Workgroup. These include: 1) develop a standardized system to gauge inventory and condition assessment, and to track accomplishments and deferred work load, 2) develop an electronic method for submission of the resource data gathered in goal one and work toward interfacing related software systems, 3) design a system to prioritize funding requests, and finally, 4) develop management systems that will aid planning future work.

Since the last Year-End report, there have been changes to goals and significant progress made. The most notable change is to Goal 3. Due to the necessity of incorporating the VT program into SEPAS, the Advisory Group assumed completion of this goal. Pending changes to the SEPAS program and until accurate inventories are completed, the database workgroup will not be directly fulfilling this goal. The workgroup will, however, keep the objectives of this goal in mind in subsequent database developments, that, if called upon, the workgroup will be in a position to address this goal in the future. Progress on the remainder of goals is reported as follows with expectations of what will be accomplished in FY 2000.

Goal 1 has consumed most of the workgroup's time since the VT Program began, with significant accomplishments towards meeting its end. In FY 1999, the database workgroup completed and finalized data elements for the VT inventory database.

The VT data elements were then incorporated into the final version of the Archeological Sites Management Information System (ASMIS 2.0). For the first time parks have a medium to input VT resource data into a database system.

The success of incorporating the VT inventory database with ASMIS also partially satisfied Goal 2. At least a mechanism is in place to record VT inventory data that can be readily transmitted electronically. However, with this said there is much work to be accomplished in this goal. Presently there is not a stand-alone version of the VT inventory database for parks' use. Many parks have designed their own data management systems that incorporate the 30 required ASMIS data fields and so do not use ASMIS. To address this problem there are two approaches being worked on that both may be potentially implemented. The first is developing a stand-alone version of the VT database that can be given to parks for incorporation into their own systems or maintained separately. Currently, the FLAG areas are beta testing a stand-alone system that will be distributed to selected parks for input. The second approach, which can be implemented quickly, is for those parks who currently have data management systems in place to incorporate the data elements from the VT database (data element definitions are available in ASMIS 2.0 documentation – get from WASO's ftp site at ftp.asmis.cr.nps.gov) into their own system.

Regardless of whichever approach a park takes, there needs to be a consistent method for calling and collecting data to be incorporated into one management system. This will entail developing a procedure for a data call. This, along with the development of the standalone database system, will encompass the majority of work for the database workgroup in FY00.

Progress towards Goal 4 will largely be based on work accomplished this year with regards

to data collection. Developing the master inventory database coincides with the development of the stand-alone version of the inventory database.

### **VT Web Page**

The other significant progress for the database workgroup is the development of the VT web page. The database is hosted by the Archeology and Ethnography web site and can be accessed at <http://www.cr.nps.gov/aad/vt/vt.htm>. The database serves two functions. The first is to provide the public and other interested parties an introduction into the Vanishing Treasures Program describing the initiative and our plans and actions to remedy the specific problems the initiative is addressing. Examples include definitions of VT resources and demonstrations of VT projects. Second, it serves as a clearinghouse of information for parks to keep up to date with the current status of the program. Examples include the Standards and Guidelines report and the electronic version of the year-end report.

### **FY 2000 Goals**

This fiscal year holds additional challenges for the VT database workgroup. Of top priority is the completion of the stand-alone database and developing a data call procedure. While completion of the stand-alone database is near, developing a data call procedure will require careful consideration and some experimentation. Members of the workgroup will probably contact parks to get their input and suggestions for ideas to fulfill this goal. Perhaps a survey will be issued to canvas for ideas, suggestions, or comments.

In conjunction with this development there will probably be some sort of a data call for information collected to date on VT resources. The initial idea is to have this be a voluntary data call to help sniff out the bugs

in the system and then make it a required event the next fiscal year. Information collected helps in assessing the success of the VT program. The goal is not to develop a complete inventory – though this is highly desirable - rather it is to provide accountability in identifying work that has been completed, and more importantly, give us solid estimates on what work needs to be completed in the future.

### **Career Development Workgroup**

The efforts of this workgroup in FY 1999 have been somewhat limited and focused on working with the Advisory Group in the development of the latest VT hiring call and the development of the hiring priority list. This included development of prioritization criteria, standards for size classification of parks based on the nature and extent of VT resources, staffing requirements based on a park's size, and criteria for placement of the professional support positions.

Efforts in FY 2000 will focus on two specific topics: development of appropriate pre-recruitment and recruitment strategies to insure that we are able to hire the best qualified personnel, and the development of training modules for the personnel that have already been hired.

### **Pre-Recruitment and Recruitment Strategies**

Efforts will be focused on pre-recruitment and recruitment options and tools, and evaluating candidates for positions. The Workgroup will begin this process by working with the appropriate central office personnel and park staff and to further refine the existing VT position descriptions. This effort will involve working towards the creation of series exclusive Ruins Preservation position description that combine the necessary profession elements required of VT into a

professional specialty. Additional efforts will be focused on the development of KSA's and crediting plans.

Mechanisms that will be looked at to recruit interested applicants both within the organization and from external sources will include: (1) developing recruitment packets that will effectively advertise or announce vacant positions and promote interest in an NPS career, (2) identifying the appropriate tools of communication such as the internet, career fairs, use of recruiters or recruitment teams, etc., to insure that all potential applicants are aware of the job vacancies, and (3) establishing contacts with agencies, organizations, and colleges and universities to broaden the career fields that could potentially compete for a vacant position.

### **Employee Training and Development**

The success of VT will require well-trained, effective employees. We have identified the need to augment and transform the workforce associated with the ruins preservation program. This goal is being accomplished using position **conversions** from less-than-permanent to permanent career status, as well as an **intake program** that targets individuals with raw capabilities to make a contribution in the area of site repairs and documentation. Since part of this program includes an improved standards/guidelines package for making the repairs in an effort to do a better job, a true training program will be necessary. While some progress has been made, a more concerted effort will be made this year and will focus on the formal development of training modules according to the following:

**On-the-Job Apprenticeship:** This type of training is designed primarily for new Wage Grade technicians who are expected to focus on making repairs, but will also supply cross-over training for new and existing GS employees such as archeologists, architects, or



engineers. Work will be carried out at those Vanishing Treasures parks with appropriate mentors and a workforce of enough size to supply logistical support. A long-range goal is the inclusion into this apprenticeship program of all GS employees who carry out repair and documentation work, but the initial focus is likely to be WG technicians.

**Academic Course Work:** This type of training is designed to reach talented and interested advanced students in those fields traditionally linked with preservation work, i.e. archeology and architecture. Unfortunately, very few institutions have in the past offered the applicable background dealing with Vanishing Treasures resources, even though they may have educated specialists in these fields. Northern Arizona University (Flagstaff, Arizona) is an exception, and prototype courses that articulate NPS staff members with their faculty have already occurred; NAU has committed to continue involvement. Future strategies include the use of qualified NPS staff, working within this academic framework. A long range goal would be the participation of all Vanishing Treasures staff in academic training, but it is likely that this will occur only when some of the elderly technical workforce retires, and is likely to be phased in over the next decade.

**Workshops:** Workshops are the primary link between wage grade and general service workforces. Over the past 20 years, these have been carried out sporadically by individual NPS staff workers, generally archeologists. Training at workshops has involved masonry repair techniques, assessing damage, wood preservation, controlling water movement, photography, and other documentation and recording techniques. These workshops are thus a hybrid between classroom and technical applications sessions, and were generally attended by both kinds of workers. Other agencies also sent attendees. As the last two decades have progressed, the original attendees have retired, instructors

have moved into other areas and management positions, or funds have not been available to conduct the workshops. The workshop template, as used in the past, would be both resurrected and updated to include better technology such as computers, digital cameras, and potentially more durable mortar additives.

### **Vanishing Treasures Workshop**

In addition to a number of small training sessions and ongoing mentoring programs, we were able to put together a structured workshop that drew together a large number of staff involved in VT, including most of the personnel that had been hired specifically for VT purposes since FY 1998.

In August, representatives from Vanishing Treasures Parks throughout the Southwest met in Albuquerque, New Mexico, to plan and develop strategies for the future, and to share and exchange programmatic and technical information about Vanishing Treasures programs. The workshop also provided an opportunity to celebrate accomplishments and to welcome and meet twenty-one new base funded, permanent employees. The workshop portrayed a diverse mosaic of southwestern society, all of whom shared an excitement, and a spirit to contribute. They all truly grasp the importance of their work and their mission.

A recurring theme of the conference was the need for support and involvement from all of the VT parks to keep the initiative strong and progressing forward. Attendees were reminded that Vanishing Treasures is a grass roots initiative, managed by people like themselves and that the survival of the initiative is dependent upon all players contributing and sharing the workload.

Conference speakers pointed out the need to forge strong partnerships, within and outside the service, and to share professional and

technical skills. Following up on this theme, the staff from Mesa Verde National Park discussed their research program and provided an insightful review of their documentation programs. Other presentations covered topics such as photographic documentation, plaster preservation, compliance, GIS programs and GPS mapping, condition assessments, capping and protective structures, mortar and adobe work, backfilling and employee safety. Informative discussions regarding the Special Emphasis Project Allocation System, the new Vanishing Treasures Inventory and Condition Assessment Database, and the importance of program accountability rounded out the agenda.

The last day of the conference was devoted to field workshops at the Quarai site of Salinas Pueblo Missions National Monument. The conference proved to be time well spent and plans are underway for a 2000 conference at Aztec Ruins National Monument.

The conference was planned and coordinated by members of VT's Advisory Group, specifically Dabney Ford, Al Remley, and David Yubeta, with Mike Schneegas taking on the lead planning responsibilities. It could not have been done without Mike's leadership and the support of personnel from Salinas Pueblo Missions National Monument. This truly was a very informative conference and has set the stage for it to occur on an annual basis.

### **Funding Workgroup**

The efforts of this workgroup were accomplished in conjunction with the VT Leadership Committee and a number of Superintendents from El Malpais National Monument, San Antonio Missions National Historical Park, Natural Bridges and

Hovenweep National Monuments, and Tonto National Monument.

Similar to last year, the efforts of this Workgroup have been focused on securing a specific funding source specifically dedicated to VT. Clearly, these efforts have raised the level of awareness of the Vanishing Treasures Program, and have worked to put into place the appropriate mechanisms to insure consistent and increasing levels of funding over the next 10-15 years.

### **Guidelines and Standards Workgroup**

Unfortunately, very little effort has been made towards finalizing the existing draft VT Ruins Preservation Guidelines. The draft document has been posted on VT's Web Page and it was redistributed at the Vanishing Treasures Workshop in August. The workgroup leader (who also is the program coordinator) takes direct responsibility for the final report not being produced. The pressing business of coordination of the VT program has taken priority.

As we indicated last year, a final draft document is currently in preparation and will be distributed within the next several months for internal NPS review. It is expected that partner and stakeholder review will occur during the summer of 2000. If this time-line can be maintained, it is expected that a final document will be available by the end of the Fiscal Year. A copy of the draft document will be posted on VT's Web Page. Again, the final task of this workgroup will be to develop an amendment to the National Park Service's Cultural Resources Management Guidelines. This amendment will probably take the form of a technical supplement.

## **Table 7.1 Vanishing Treasures Personnel**

### **LEADERSHIP COMMITTEE**

Glenn Fulfer, Superintendent, Salinas Pueblo Missions National Monument – **Chair**  
Jerry Rogers, Assistant to the Director – **Executive Officer**  
Barry Cooper, Superintendent, Aztec Ruins National Monument  
Sam Henderson, Superintendent, Flagstaff Area National Monuments  
Roy Weaver, Superintendent, Bandelier National Monument  
Larry Wiese, Superintendent, Mesa Verde National Park  
Butch Wilson, Superintendent, Chaco Cultural National Historical Park

### **PROGRAM MANAGEMENT**

Todd R. Metzger, Chief, Division of Resources Management, Flagstaff Area National Monuments – **Program Coordinator**  
Jill Edlund, Budget Analyst, Flagstaff Area National Monuments – **Program Budget Analyst**

### **ADVISORY GROUP**

Dabney Ford, Chief, Division of Resources Management, Chaco Culture National Historical Park  
Chris Goetz, Archeologist, Glen Canyon National Recreation Area  
Larry Nordby, Archeologist, Mesa Verde National Park  
Jim Rancier, Archeologist, Lake Meredith National Recreational Area  
Judy Reed, Chief, Division of Cultural Resources Management, Pecos National Historical Park  
Mike Schneegas, Facility Manager, Flagstaff Area National Monuments  
David Yubeta, Exhibit Specialist, Tumacacori National Historical Park

### **DATABASE WORKGROUP**

Al Remley, Archeologist, Flagstaff Area National Monuments – Workgroup Leader  
Dabney Ford, Chief, Division of Resources Management, Chaco Culture National Historical Park  
Sue Eininger, Archeologist, Intermountain Support Office, Santa Fe  
Helen Fairley, Archeologist, Flagstaff Area National Monuments  
Bob Hartzler, Exhibit Specialist, Fort Union National Monument  
Jim Rancier, Archeologist, Lake Meredith National Recreational Area  
Mike Schneegas, Facility Manager, Flagstaff Area National Monuments  
Roy Weaver, Superintendent, Bandelier National Monument

### **CAREER DEVELOPMENT WORKGROUP**

Phil Wilson, Archeologist, Salinas Pueblo Missions National Monument – Workgroup Leader  
Adrienne Anderson, Archeologist, Intermountain Support Office, Santa Fe  
Kaisa Barthuli, Archeological Technician, Intermountain Support Office, Santa Fe  
John Crowley, Assistant Regional Director, Human Resources, Intermountain Region  
Greg Fox, Archeologist, Western Archeological and Conservation Center  
Sayre Hutchison, Historical Architect, Intermountain Support Office, Santa Fe  
Roger Waters, Administrative Officer, Carlsbad Caverns National Park

### **FUNDING WORKGROUP**

Dabney Ford, Chief, Division of Resources Management, Chaco Culture National Historical Park – Workgroup Leader  
Sue Eininger, Archeologist, Intermountain Support Office, Santa Fe  
Jack Burns, Archeologist, Zion National Park  
Kathy Fiero, Archeologist, Mesa Verde National Park  
Regina Heiner, Facility Manager, Fort Davis National Historic Site  
Judy Reed, Chief, Division of Resources Management, Pecos National Historical Park

### **GUIDELINES AND DEFINITIONS WORKGROUP**

Todd R. Metzger, Chief, Division of Resources Management, Flagstaff Area National Monuments – Workgroup Leader  
Adrienne Anderson, Archeologist, Intermountain Support Office, Santa Fe  
Glen Henderson, Superintendent, Tuzigoot and Montezuma Castle National Monuments  
Sayre Hutchison, Historical Architect, Intermountain Support Office, Santa Fe  
Larry Nordby, Archeologist, Mesa Verde National Park  
Scott Travis, Archeologist, Southern Arizona Group Office  
David Yubeta, Exhibit Specialist, Tumacacori National Historical Park

### **EXECUTIVE ADVISORS**

Cec Matic, Public Affairs Officer, Intermountain Support Office, Santa Fe  
Ernst Ortega, Superintendent, Intermountain Support Office, Santa Fe  
Rodd Wheaton, Assistant Regional Director, Cultural Resources, Intermountain Region

**Note: All or most of the effort devoted to the Vanishing Treasures Program is done by a number of individuals as a secondary or collateral duty. The Program Coordinator is the only exception and**