

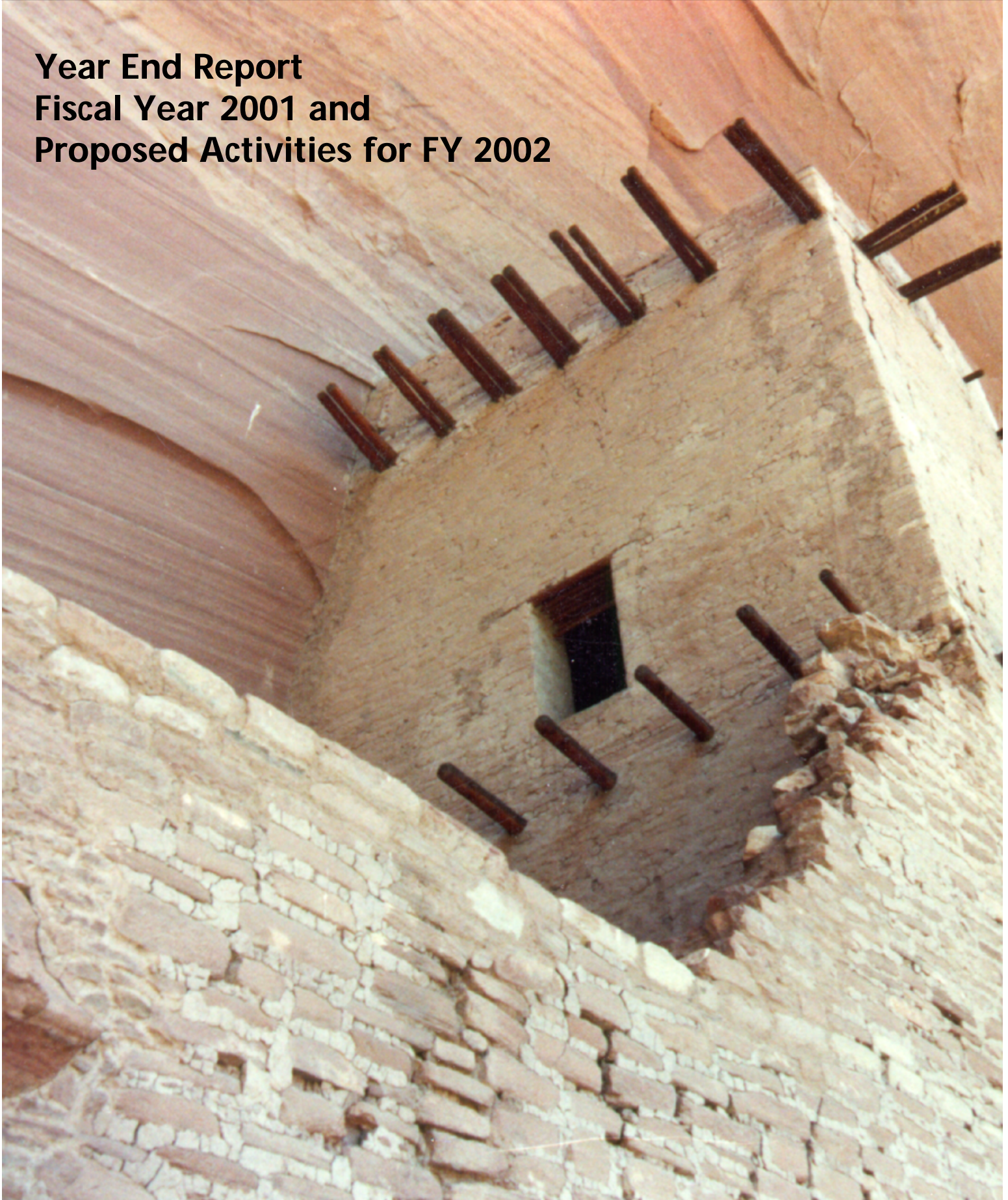
Vanishing Treasures

National Park Service
U.S. Department of the Interior

Vanishing Treasures Program



Year End Report Fiscal Year 2001 and Proposed Activities for FY 2002



CONTENTS

| | |
|--|--------|
| Section 1 Introduction | 1 - 1 |
| Launching the Program..... | 1 - 1 |
| Laying the Foundation for the Next 10 - 15 Years..... | 1 - 2 |
| Accomplishments to Date | 1 - 3 |
| Accountability | 1 - 3 |
| FY 2001/2002 Year End Report | 1 - 4 |
| Report Compilation..... | 1 - 5 |
| Final Thoughts | 1 - 6 |
| Section 2 Program Funding | 2 - 1 |
| Fy 1998 | 2 - 5 |
| FY 1999..... | 2 - 5 |
| FY 2000..... | 2 - 6 |
| FY 2001..... | 2 - 7 |
| FY 2002 | 2 - 8 |
| FY 2003 and Beyond | 2 - 9 |
| Section 3 Projects and Program Management | |
| Funding | 3 - 1 |
| Project Funding..... | 3 - 1 |
| Project Selection Criteria..... | 3 - 1 |
| FY 1998 Projects..... | 3 - 2 |
| FY 1999 Projects..... | 3 - 2 |
| FY 2000 Projects..... | 3 - 3 |
| FY 2001 Projects..... | 3 - 3 |
| FY 2002 Projects | 3 - 4 |
| FY 2001 Program Management Funds..... | 3 - 4 |
| FY 2002 Program Management Funds | 3 - 4 |
| Section 4 Staffing Accomplishments | 4 - 1 |
| Strategies | 4 - 1 |
| Development of VT's Staffing Needs..... | 4 - 2 |
| First VT Personnel Hiring Priority List | 4 - 3 |
| Second VT Personnel Hiring Priority List..... | 4 - 3 |
| Staffing Accomplishments in FY 1998, 1999 And 2000..... | 4 - 6 |
| Staffing Accomplishments in FY 2001 | 4 - 7 |
| Work Force Diversity | 4 - 7 |
| Professional Support Positions..... | 4 - 8 |
| Proposed Staffing in FY 2002 | 4 - 8 |
| FY 2003 and Beyond | 4 - 9 |
| Section 5 Personnel Accomplishments and Staffing Report | 5 - 1 |
| Personnel Hired in FY 1998 | 5 - 1 |
| Personnel Hired in FY 1999 | 5 - 7 |
| Personnel Hired in FY 2000 | 5 - 15 |
| Personnel Hired in FY 2001 | 5 - 24 |
| Section 6 Project Completion Reports | 6 - 1 |
| Definition of Vanishing Treasures | |
| Resources | 6 - 12 |

Section 7 Advisory and Workgroup

| | |
|--|-------|
| Activities | 7 - 1 |
| VT Personnel | 7 - 1 |
| Database Workgroup | 7 - 1 |
| Career Development Workgroup..... | 7 - 2 |
| Funding Workgroup..... | 7 - 5 |
| Guidelines and Standards Workgroup | 7 - 5 |

TABLES

| | |
|--|--------|
| 2.1 Vanishing Treasures Budget, FY 1998 - 2002..... | 2 - 2 |
| 2.2 Vanishing Treasures - Personnel Funding FY 1998 - 2002..... | 2 - 3 |
| 2.3 Vanishing Treasures - Project Funding FY 1998 - 2002..... | 2 - 4 |
| 2.4 FY 1998 Operating Program..... | 2 - 10 |
| 2.5 FY 1999 Operating Program..... | 2 - 11 |
| 2.6 FY 2000 Operating Program..... | 2 - 12 |
| 2.7 FY 2001 Operating Program | 2 - 13 |
| 2.8 FY 2002 Operating Program | 2 - 14 |
| 4.1 VT Staffing Priority List | 4 - 10 |
| 7.1 Vanishing Treasures Personnel | 7 - 6 |

FIGURES

| | |
|--|-------|
| 2.1 Vanishing Treasures Expenditure FY 1998 - 2002..... | 2 - 1 |
| 2.2 Vanishing Treasures FY 2002 Expenditures..... | 2 - 8 |
| 2.3 Actual and Proposed VT Personnel Needs..... | 2 - 9 |

If you have any questions regarding the Vanishing Treasures Program contact Glenn Fulfer (Glenn_Fulfer@nps.gov), Program Chair or Todd R. Metzger (Todd_Metzger@nps.gov), Program Coordinator. Specific questions and comments about the web page should be directed to Al Remley (Al_Remley@nps.gov)

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>



SECTION 1, INTRODUCTION

The Vanishing Treasures Initiative began in 1993, when the National Park Service identified several critical weaknesses that were threatening the existence of unique, rare, and irreplaceable prehistoric and historic ruins. After 20 years of inadequate funding, backlogged treatment needs, and a lack of information on condition, thousands of ruins at 41 National Park Service units in the arid west are threatened with severe deterioration and collapse. These architectural resources, some of which are World Heritage sites, are important to our national heritage, and hold significant meaning for a number of traditional communities as well. In addition, only a few highly skilled preservation craftspeople are employed in the National Park Service today, and many of these are retiring after 30 plus years in the service. The lack of funding has prevented their specialized knowledge from being passed on to a new generation of craftspeople.



Archeologists from Mesa Verde National Park document a 13th century ancestral pueblo cliff dwelling, Mesa Verde National Park, CO.

Launching the Program

Vanishing Treasures is a grass-roots program designed to address both the devastating destruction of irreplaceable historic and prehistoric structures as well as the impending loss of preservation expertise. The Vanishing Treasures Program began when a handful of park managers began comparing notes on the condition of their prehistoric and historic architecture. The consensus was very clear: unique and perishable “**ruins**” important to our national heritage were rapidly deteriorating to a point where there was a “**crisis of care.**” Serious concern was expressed over the continued failure to prevent or even deter increasing destruction and loss of irreplaceable resources. This concern resulted in the production of the 1993 video, “**Vanishing Treasures: A Legacy in Ruins,**” by resource managers from Salinas Pueblo Missions National Monument, Chaco Culture National Historic Park, and Aztec Ruins National Monument. The video prompted the development of the **Vanishing Treasures Strategic Plan** in 1995. The plan was put together by the same park resource managers and other interested resources managers from other Vanishing Treasures parks. It was developed in cooperation and with the full support of resource management professionals from the Intermountain Region’s Southwest and Colorado Plateau System Support Offices¹. Finally, the **Vanishing Treasures Long- Range Plan** was developed by the Vanishing Treasures Advisory Group and Leadership Committee with the expressed intent of presenting the National Park Service’s strategy for dealing

¹ The Initiative actually began and planning for the development of the Strategic Plan occurred prior to the reorganization of the NPS in 1994 and the consolidation of portions of the former Western, Rocky Mountain, and Southwest Regions into the Intermountain. Staff from these three former regions participated in the development of the plan.

with this “*crisis of care*” over the next decade.

Since its inception, the Program has received strong support, input, and direction over the last few years from former National Park Service Directors Roger Kennedy and Robert G. Stanton, former Deputy Directors Denis Galvin and Jackie Lowey, and current Associate Director for Stewardship and Partnerships, Kate Stevenson and her respective staff. The Initiative truly would not have proceeded had it not been for the insightful and forward thinking and leadership of former Regional Directors John E. Cook (former Southwest, Rocky Mountain, and Intermountain Regional Director), and Jerry Rogers (former Southwest Regional Director and Assistant to the Director). The Initiative continues to receive strong support from Karen Wade, Intermountain Regional Director, and her respective staff.

Laying the Foundation for the Next 10- 15 Years

Three primary thrusts define the Vanishing Treasures Program. First, the program seeks to eliminate resource loss by addressing emergency project needs where structures are in immediate and imminent danger from natural erosive factors or the cumulative pressures of visitation. Secondly, the Program focuses on replacement of an aging workforce that often has unique craft skills that will be lost without the addition of new, younger workers who have the opportunity to work with these aging mentors prior to their retirement. Third, throughout its lifespan, the Program strives to move from a posture of dealing with emergency projects and urgent personnel loss to an active preservation program. Structures would be evaluated, ranked, and the best preservation options selected. Skilled craftspersons and other professionals would have career status

with benefits and career development options analogous to other segments of the Federal work force in order to ensure work continuity in the area.

To achieve the long- range goals of the Program, four action items were identified: 1) develop a comprehensive computerized data management system, 2) enact a career development and training program, 3) establish adequate funding levels to achieve specific goals, and 4) establish clear guidelines for planning and accomplishing preservation actions.

Of course, none of these actions can be accomplished without money. The funding needs are two- fold: 1) funding for emergency preservation treatment projects, and 2) adequate funds to train and develop a preservation workforce. It is estimated that approximately \$67 million is required to address all of the needs of the Vanishing Treasures Program. Of that total, approximately \$59 million is needed to address the emergency preservation needs. The remaining \$8 million is needed for developing the preservation workforce.

Estimates from the parks themselves indicate that the Vanishing Treasures personnel and related workload deficits could be eradicated if approximately 25- 30 temporary and/or seasonal positions are maintained in a number of parks and approximately 65- 70 technical craftspersons and 50- 60 archeologists or other specialists are recruited using the intake program over the next decade. In the long run, the boundaries between these two aforementioned groups would become less pronounced, resulting in a new kind of employee: the preservation specialist. These employees will augment the existing workforce, although it should be remembered that many of the most skilled and experienced workers will be retiring before the next decade is completed.



*Quarai Mission, Salinas Pueblo Missions
National Monument, NM.*

To put this into some perspective, this roughly calculates to approximately \$1 to \$1.5 million and 3- 4 new staff for each of the known and potential Vanishing Treasures park units. Certainly, the actual funding amount and the number of personnel that each park would need is dependent upon the size, number, and complexity of the Vanishing Treasures resources within each park.

The duration of the Program is dependent upon the amount appropriated each year. Reduced funding levels in Fiscal Year 1998 through FY 2002, below the original projections, have necessitated adding five to eight years to the original 10- year plan. Given the nature of the resources that are being addressed a significant- - and eventually exponential- - increase in costs can be expected if work is long deferred. There will also be an incalculable and devastating loss of irreplaceable historic and prehistoric structures as well as loss of preservation expertise.

Accomplishments to Date

Vanishing Treasures has been a viable program since FY 1998. With the close of FY 2002, approximately \$7,002,000 will have been used to conduct projects, hire and train personnel, and to manage the program. Of that amount, approximately \$3,958,500 will have been dedicated to completing 65 emergency and high

priority projects in 27 parks, \$2,781,000 will have been used to hire 48 preservation specialists in 22 parks, \$31,700 will have been used for training, and \$230,800 will have been devoted to managing the program.

For the duration of the Program funding will be sought for high priority and emergency projects, to recruit and train crafts specialists, to recruit and train experts such as archeologists, engineers, and historical architects, and for management, oversight, and accountability

Accountability

To insure a full accounting of the use of VT funds, an annual year- end report has been produced each fiscal year since 1998. Each report provides detailed documentation of the activities and accomplishments of the Program. To date, four detailed year- end reports, including this one, have been produced documenting the expenditure of funds, the projects completed, the personnel hired since 1998, and the accomplishments and activities of the individuals hired.

Finally, a second video was produced in FY 2000. Similar to the first video, it is used to emphasize the needs of the program. However, emphasis is given to the accomplishments of the Program to demonstrate that progress is indeed being made.



Casa Grande Ruin, a 14th century Hohokam site, Casa Grande National Monument, AZ.

To further insure the dissemination of the accomplishments and accountability of the Initiative, a VT Web Page has been established on the National Park Service Web site. It can be accessed from the Archeology and Ethnography home page at <http://www.cr.nps.gov/aad/vt/vt.htm>. It includes background information on Vanishing Treasures, why it was started, a description of Vanishing Treasures resources, and which parks are involved. It also contains down-loadable documents that describe the fiscal and program

accounting of the Program. A copy of this report can be downloaded as well.

FY 2001/2002 Year End Report

This document provides a report on the expenditures and accomplishments of the Vanishing Treasures Program in FY 2001. 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 their accomplishments in FY 2001. This document provides information regarding the proposed use of funds in FY 2002 and some projections for FY 2003 and beyond. Finally, it provides an update on the activities of the Program's Leadership, Advisory and Work Groups.

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 Staffing Priorities, provides a description of the hiring accomplishments of the Program and it also presents a list of personnel that is needed beginning in FY 2002. Section 5, Personnel Staffing Report, provides a brief description of the accomplishments of the personnel that were hired in FY 1998, 1999, and 2000. Just as importantly, it includes information on the personnel that were hired in FY 2001. Section 6, Project Completion Report, presents brief summaries of the high priority preservation projects that were implemented in FY 2001. Finally, Section 7,

Advisory Group and Work Group Activities provides a brief update on the activities and accomplishments of VT's Advisory and Work Groups. 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 by the VT Program Coordinator and the Database Workgroup Leader, Al Remley. Section 5 and 6 of the report was compiled and edited by Lyle Balenquah, the Flagstaff Area National Monument's FY 2000 VT hire. Additional proofing of the report was completed by Flagstaff Area Archeologist Ian Hough, and by Pearl Remley. Any errors of omission or inaccuracies in what is presented are the sole responsibility of the VT Program Coordinator.

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 contained in this document include the following:

Brian Culpepper,
Aztec Ruins National Monument
Angelyn Rivera and Mary Slater,
Bandelier National Monument
Don Spenser,
Casa Grande Ruins National
Monument
Eric Brunneman,

Hovenweep National Monument
and Canyonlands National Park
Jim Kendrick,
El Malpais National Monument
Dabney Ford and Rachel Anderson,
Chaco Culture National Historical
Park
Larry Ludwig and Dave Evans,
Fort Bowie National Historic Site
Jeffrey Rust,
Fort Davis National Historic Site
Shawn Bryant,
Fort Laramie National Historic Site
Roger Portillo,
Fort Union National Monument
Amy Horn,
Grand Canyon National Park
Lloyd Masayumtewa and Lyle Balenquah,
Flagstaff Area National Monuments
Chris Goetze,
Glen Canyon National Recreation
Area
Linda Towle, Julie Bell, Kathi Fiero, and
Larry Nordby,
Mesa Verde National Park
Lenny Hempstead,
Montezuma Castle/Tuzigoot
National Monument
Kevin Harper and Melissa Memory,
Navajo National Monument
Bob Bryant,
Organ Pipe Cactus National
Monument
Judy Reed,
Pecos National Historical Park
Phil Wilson and Dwayne Hubbard,
Salinas Pueblo Missions National
Monument
Steve Whitesell, and Susan Snow, and Dean
Ferguson
San Antonio Missions National
Historical Park
Miguel Estrada,
Tonto National Monument
Ann Rasor and David Yubeta,
Tumacacori National Historical
Park

Final Thoughts

It is our hope that you spend some time in reviewing this document and the separate Management Summary that has been prepared. We feel that both documents contain important information on the expenditures and accomplishment of VT.

While we are far from our initial projections, progress has clearly been made and we have most certainly been faithful to our original goals and objectives as there were formulated well over 9 years ago. Clearly however, much work still remains in order to meet our original goals. The next few years will pose new and imposing obstacles both in our ability to hire new personnel in parks, in our ability to retain the staff that has already been hired, and in our ability to insure that funding is available to conduct projects. We are confident however, that the work that is being done and the personnel that have and are proposed to be hired to conduct VT work will be viewed as a “core” and “essential” to the mission of the National Park Service and that the work of the Vanishing Treasures Initiative will be perceived as an “inherently governmental” responsibility.



Bracing a historic adobe wall, Fort Union National Monument, NM.



Ancestral puebloan structure dating to the late 12th to early 13th century, Canyon De Chelly National Monument, AZ.



Section 2, Program Funding

This section is a detailed discussion of expenditures that Vanishing Treasure has received since FY 1998, the first fully funded year of the program. Including funds appropriated in FY 2002, the program has received funding for five straight years, and efforts are underway to develop a budget for VT for inclusion in the President's FY 2003 budget.

Table 2.1 provides the total amount and a breakdown of funding that has been allocated to VT since FY 1998 through FY

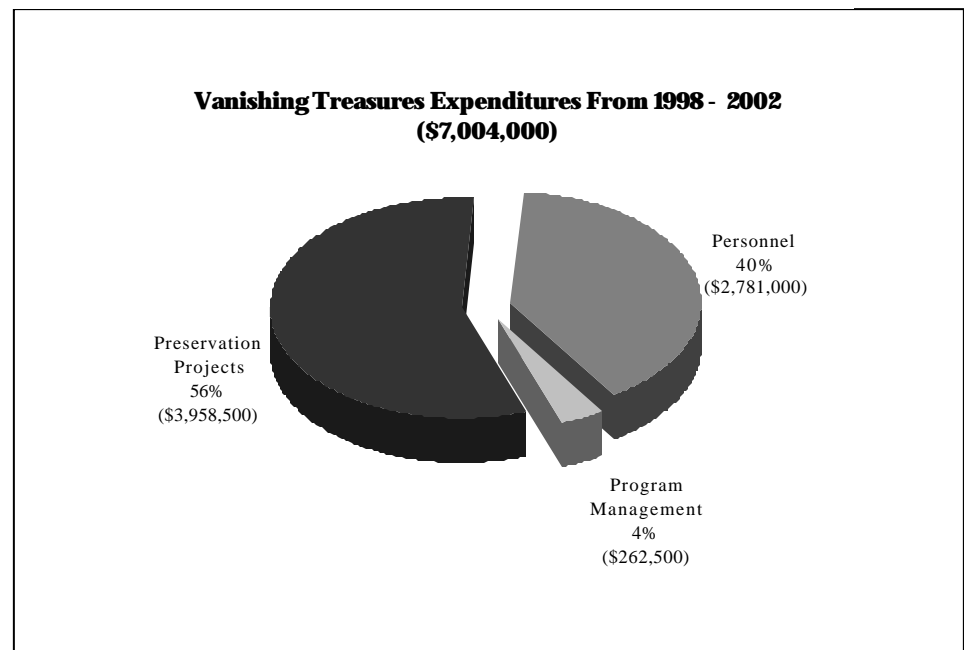
2002. It identifies the increases that have been provided to VT over the last five years and where funds have and will be distributed to the primary funding components (projects, program management, and base increases for personnel).

Vanishing Treasures has enjoyed increases in its budget that average a little over \$775,000 for the last five years. These increase have made available an average annual operating budget of slightly over \$1.1 million.

With the close of FY 2002, approximately \$7,002,000 will have been appropriated to VT to conduct projects, hire and train personnel, and to manage the program. Of that amount, approximately \$3,958,500 will have been dedicated to completing 65 emergency and high priority projects in 27 parks; \$2,781,000 will have been used to hire

48 preservation specialists in 22 parks, this includes replacing an aging work force and recruiting and training new individuals; \$31,700 will have been used for training; and \$230,800 will have been devoted to management of the program. This works out to roughly 56% of the total VT budget received to date being devoted to conducting projects, approximately 40% will have been dedicated to the hiring of personnel, and 4% will have been used for the management of the program.

Figure 2.1. Vanishing Treasures Expenditures FY1998 - 2002



More specific information regarding the personnel hired and the associated costs, and the projects that have been completed, specifically in FY 2001, can be found in subsequent sections of this report. The following provides a specific accounting of how VT funding has been utilized since FY 1998 and what is being proposed for in FY 2002.

Table 2.1 Vanishing Treasures Budget, FY 1998- 2002 (In Thousands of Dollars).

| | FY 1998 Actual | Increase FY 99 Budget | FY 1999 Actual | Increase FY 00 Budget | FY 2000 Actual | Increase FY 01 Budget | FY 2001 Actual | Increase FY 02 Budget | FY 2002 Actual | Total Cumulative VT Budget |
|---|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|--------------------------|-----------------------------|--------------------------|----------------------------------|
| Authorized Budget | 1000 | 987 | 1987 | 994 | 2981 | 398 | 3379 | 500 | 3879 | |
| Projects | 505.3 | 123 | 627.6 | 187 | 814.6 | 158 | 973 | 65 | 1038 | 3958.5 |
| Training | 31.7 | 8 | 40(1) | | | | [40](2) | | [40](2) | 31.7 |
| Management | 10 | 34 | 44.4 | 12 | 56.4 | 4 | 60 | 0 | 60 | 230.8 |
| Personnel FY 98 (base increases) | 453(1) | | [453](2) | | [453](2) | | [453](2) | | [453](2) | |
| Additional Base Increase for 2 parks FY 99 | | 237(4) | 237(1) | | [237](2) | | [237](2) | | [237](2) | |
| Personnel FY 99 (base increases) | | 585 | 585(1) | | [585](2) | | [585](2) | | [585](2) | |
| Personnel FY 00 (base increases) | | | | 795 | 795(1) | | [795](2) | 795(2) | [795](2) | |
| Personnel FY 01 (base increases) | | | | | | 236 | 236(1) | | 236(2) | |
| Personnel FY 02 (base Increases) | | | | | | | 435 | 435(1) | | |
| Total Personnel (base Increases) | 453(2) | | 1315(2) | | 2110(2) | | 2346(2) | | 2781(2) | 2781 |
| Total | {547}(3) 1000 | 987 | {672}(3) 1534 | 994 | {871}(3) 1666 | 398 | {1033}(3) 1269 | 500 | {1098}(3) 1533 | 7002 |

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.
- (4) \$156,000 base increase for one park for personnel. \$81,000 park base increase.
- (5) After 1998, training costs were added to the total costs for personnel and included in base increases.

Table 2.2 Vanishing Treasures - Personnel Funding - FY 1998- 2002.

Table 2.3 Vanishing Treasures - Project Funding - FY 1998- 2002.

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 2.4 provides a detail 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.

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, \$862,000 was devoted to hiring 13 individuals in 8 parks and for the training of personnel hired in FY 1998, \$627,600 was used to complete 13 projects, and \$44,400 was used for project management.

Table 2.5 provides a detailed breakdown on the utilization of FY 1999 funds. A summary of the utilization of VT funds in FY 1999 on state- by- state basis is presented below.

New Mexico

Approximately \$297,000 was used to hire 5 individuals in 4 parks. This included Bandelier (2 positions), Chaco Culture (1 position), El Malpais (1 position), and Salinas Pueblo Missions (1 position). Approximately \$198,500 was made available to three parks to conduct high priority projects. The parks receiving project funding included Aztec, Chaco, and Salinas Pueblo Missions.

Included with the 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 (3 positions). Salinas Pueblo Missions used a portion of the funding to conduct a preservation project on one of the parks 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 \$166,400 was appropriated to 5 parks to conduct projects. The parks that received project funding to conduct high priority projects included Casa Grande, Grand Canyon, Navajo, Tonto, and Tumacacori. 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.



Archeologist Lyle Balenquah, FY 2000 Flagstaff Areas VT hire, mapping Heiser Ruin, a 12th - 13th century ancestral puebloan site at Wupatki National Monument, AZ.

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 was devoted to hiring 13 individuals in 9 parks, \$814,600 was devoted to completing projects, and \$56,400 was used for program management. A detailed breakdown of the FY 2000 budget is presented in Table 2.6.

New Mexico

In FY 2000, \$113,000 was used to hire 2 individuals in two parks. The parks included Salinas Pueblo Mission (1 position) and El Malpais (1 position). Approximately \$235,000 was made available to conduct

high priority projects in 3 parks. The parks included Chaco Culture, Fort Union, and Salinas Pueblo Missions.

Arizona

In FY 2000, \$256,000 was used to hire four individuals in four parks. The parks included the Flagstaff Areas (1 position), Grand Canyon (1 position), Navajo (1 position), and Tumacacori (1 position). Approximately \$344,600 was made available to 4 parks to conduct high priority preservation projects. The parks that received project funding included Canyon de Chelly, the Flagstaff Areas, Grand Canyon, and Tumacacori).

Colorado

In FY 2000, \$260,000 was used to recruit and train 4 individuals at Mesa Verde. Approximately \$110,000 was made available to Mesa Verde to conduct one high priority project.

Texas

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

Utah

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

FY 2001

In FY 2001, the VT budget received an increase of \$398,000 over the FY 2000 enacted level. Of that amount, approximately \$236,000 was devoted to hiring 4 individuals in 4 parks, \$973,000 was devoted to completing projects in 16 parks,

and \$60,00 was used for program management. A detailed breakdown of the budget for FY 2001 is presented in Table 2.5.

New Mexico

In FY 2001, \$168,000 was used to hire 3 individuals in three parks. The parks included Aztec Ruins (1 position), Chaco Culture (1 position), and El Morro (1 position). Approximately \$275,700 was available to conduct high priority projects in 4 parks. The parks included Chaco Culture, Fort Union, Pecos, and Salinas Pueblo Missions.

Arizona

In FY 2001, \$68,000 was used to hire one individual as Casa Grande Ruin. Approximately \$348,800 was available to 7 parks to conduct high priority preservation projects. The parks that received project funding included Fort Bowie, Grand Canyon, Organ Pipe, Tonto, Tumacacori, Tuzigoot, and Wupatki.

Texas

In FY 2001, \$103,500 was used to conduct preservation projects at San Antonio Missions and Fort Davis.

Utah

In FY 2001, approximately \$145,000 was made available to Glen Canyon and Hovenweep to conduct high priority preservation projects.

Wyoming

In FY 2001, \$100,000 was available to Fort Laramie National Historic Site to conduct a high priority project.

FY 2002

In FY 2002, the VT budget received an increase of \$500,000 over the FY 2001 enacted level. Of that amount, approximately \$435,000 will be devoted to hiring 7 individuals in 6 parks, 5 of which have not previously received funding for personnel; \$1,038,000 will be allocated to 18 parks to conduct projects; and \$60,00 will be devoted for oversight and management of the program. A detailed breakdown of the budget for FY 2002 is presented in Table 2.8.

New Mexico

In FY 2002, \$126,000 will be used to hire 2 individuals in two parks. The parks include Fort Union (1 position) and Chaco Culture (1 position). Approximately \$347,285 will be made available to conduct high priority projects in 6 parks. The parks include Bandelier, Chaco Culture, El Malpais, El Morro, Pecos, and Salinas Pueblo Missions.

Arizona

In FY 2002, \$58,000 will be used to hire one individual at Canyon de Chelly. Approximately \$386,397 will be available to 7 parks to conduct high priority preservation projects. The parks receiving project funding include Grand Canyon, Fort Bowie, Navajo Pipe, Tonto, Tumacacori, Walnut Canyon, and Wupatki.

Colorado

In FY 2002, \$125,000 will be used to conduct one high priority project at Mesa Verde.

Texas

In FY 2002, \$87,881 will be used to conduct preservation projects at Big Bend and Fort Davis.

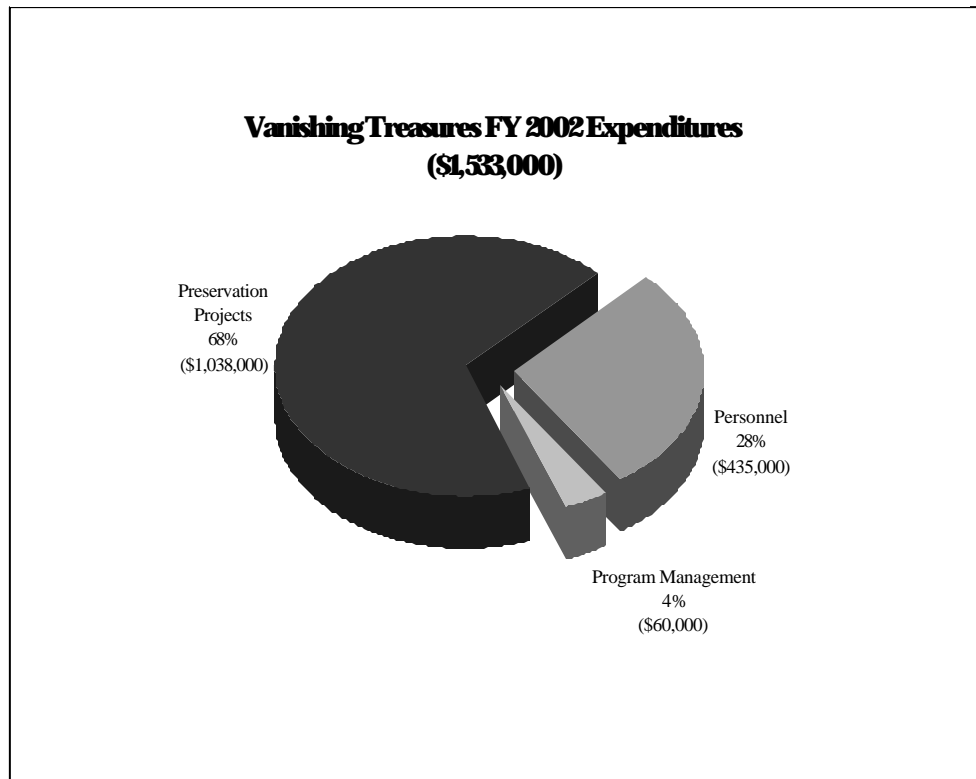
Utah

In FY 2002, \$80,479 is appropriated to Canyonlands and Hovenweep to conduct high priority preservation projects.

Wyoming

In FY 2002, \$12,700 is available to Fort Laramie National Historic Site to conduct a high priority project.

Figure 2.2. Vanishing Treasures FY 2002 Expenditures



FY 2003 and Beyond

Since FY 1998, VT has made significant progress both in completing high priority and emergency projects and in the recruitment and training of much needed staff. It is acknowledged, however, that the program is progressing at rate slower than originally planned. Based on projections provided in VT's 1998 Long- Range Plan, at the end of FY 2002 approximately \$23 million was to have been devoted to conducting projects, and roughly \$6.4 million was to have been used to hire a little over 121 personnel (see Figure 2.3 for projections). Optimistically assuming that funding levels will remain consistent with what was seen in the first five years of the program, we are looking at continuing the need to seek funding for high priority projects, and for the recruitment of a skilled workforce for at least the next 10- 15 years. This prognosis is not viewed as being overly detrimental to the program. Nevertheless, there is immense apprehension about any

extension of a definable terminus to the program. This is due directly to the concern that interest and support for the program may very well be depleted long before the needs of the program are fulfilled.

If VT is to be successful far beyond what we have seen to date, funding levels to hire personnel and to conduct projects, at the very least, needs to be consistent with what was seen in the first five years of the program, if not increased. The continued success of VT and the ability to hire new staff is dependent upon consistent levels of funding for projects and annual increases in order to be able to hire needed personnel. Any reductions in the budget means that the ability to continue to address the already overwhelming backlog of preservation needs will stagnate, and we will cease to have the ability have in place the necessary workforce to address the continuing preservation needs of the Nation's Vanishing Treasures.

Figure 2.3. Actual and Proposed VT Personnel Needs

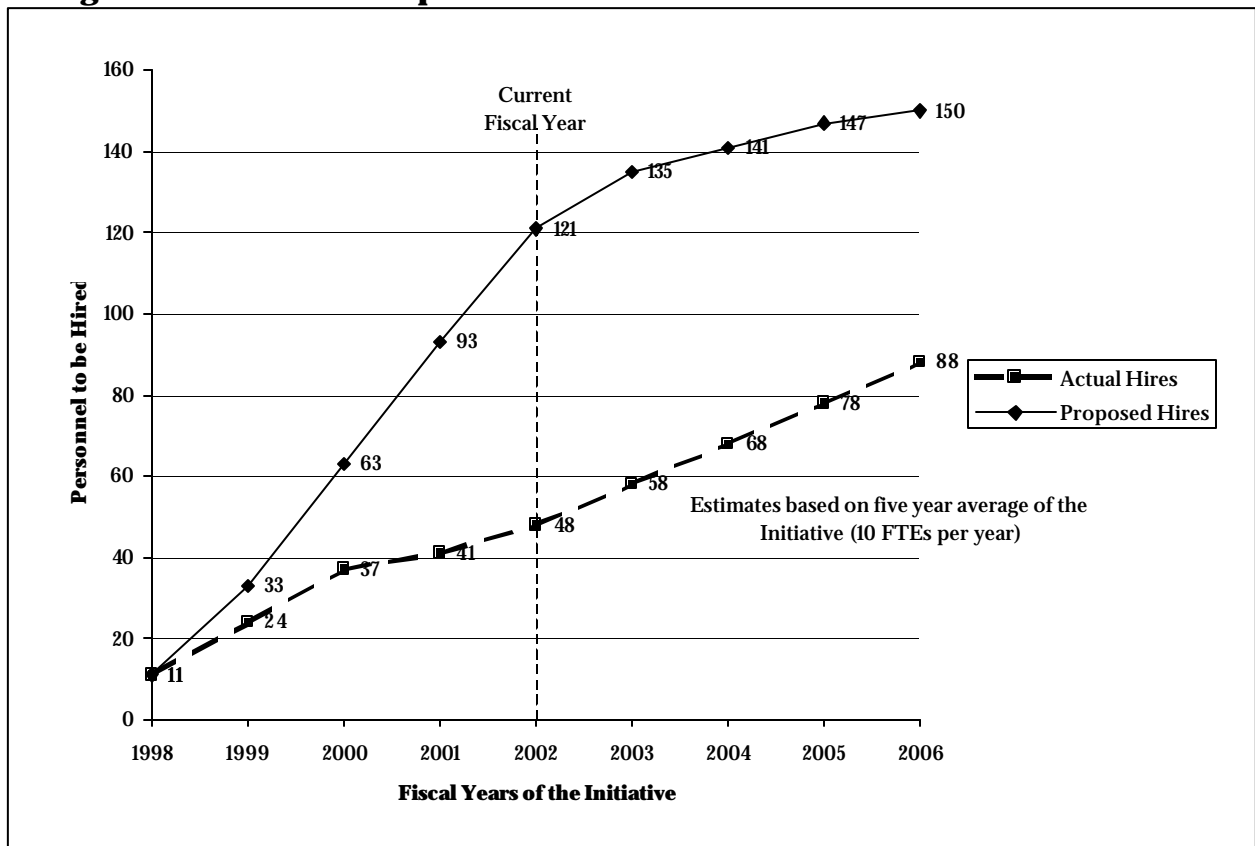


Table 2.4. FY 1998 Operating Program

| Personnel | Base Increase Amount |
|--|-----------------------------|
| 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 Areas - 1 position | \$ <u>60,000</u> |
| Subtotal (8 Parks - 11 Positions) | \$453,000 |
| Projects | Funding Amount |
| Aztec Ruins | \$ 75,000 |
| Chaco Culture | \$133,300 |
| Flagstaff Areas | \$125,000 |
| Salinas | \$ 25,000 |
| Tonto | \$125,000 |
| Tumacacori | \$ <u>22,000</u> |
| Sub Total (6 Parks) | \$505,300 |
| One- Year Training Funds (Allotment to 6 Parks) | \$ 31,700 |
| Program Management | \$ 10,000 |
| Total Operating Budget | \$1,000,000 |

Table 2.5 FY 1999 Operating Budget**Personnel**

| | Base Increase Amount |
|---|-----------------------------|
| 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 Areas - 1 position | \$ 58,000 |
| Fort Bowie - 1 position | \$ 53,000 |
| Bandelier - 2 positions | <u>\$113,000</u> |
| Sub Total (8 Parks - 10 Positions) | \$585,000 |

Training Costs for Personnel Hired in FY 1998

| | Base Increase Amount |
|----------------------------|-----------------------------|
| 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> |
| Sub Total (7 Parks) | \$ 40,000 |

Additional Increases

| | Base Increase Amount |
|--|-----------------------------|
| Chaco Culture - 3 position | \$156,000 |
| Salinas Pueblo Missions | <u>\$ 81,000</u> |
| Sub Total (2 Parks - 3 Positions) | \$237,000 |
| Total Personnel/Base Increase Costs | \$862,000 |

Projects

| | Funding Amounts |
|--|------------------------|
| Hovenweep | \$ 10,000 |
| Glen Canyon | \$ 55,000 |
| 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 |
| Big Bend | \$ 10,000 |
| Fort Laramie | \$ 12,700 |
| Salinas Pueblo Missions | <u>\$ 10,000</u> |
| Total Project Costs (13 Parks/Projects) | \$627,600 |

Program Management **\$ 44,400**

Total Operating Budget **\$1,534,000**

Table 2.6 FY 2000 Operating Budget**Personnel****Base Increase Amounts**

| | |
|---|-------------------|
| Mesa Verde - 1 position | \$ 55,000 |
| Tumacacori - 1 position | \$ 63,000 |
| Fort Davis - 1 position | \$ 55,000 |
| Flagstaff Areas - 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 (9 Parks - 13 Positions) | \$ 795,000 |

Projects**Funding Amount**

| | |
|-------------------------|------------------|
| 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 (11 Parks/Projects) \$ 814,600

Program Management \$ 56,400

Total Operating Program \$1,666,000

Table 2.7 FY 2001 Operating Budget

Personnel

| | Base Increase Amounts |
|--|------------------------------|
| Aztec - 1 position | \$ 58,000 |
| Casa Grande - 1 position | \$ 68,000 |
| El Morro - 1 position | \$ 55,000 |
| Chaco Culture - 1 position | <u>\$ 55,000</u> |
| Total Personnel Costs (4 Parks – 4 Positions) | \$ 236,000 |

Projects

| | Funding Request |
|--|------------------------|
| Chaco Canyon | \$ 125,000 |
| Fort Bowie | \$ 34,300 |
| Glen Canyon | \$ 115,000 |
| Grand Canyon | \$ 125,000 |
| San Antonio Missions | \$ 64,500 |
| Tumacacori | \$ 22,500 |
| Tuzigoot | \$ 15,000 |
| Pecos | \$ 69,000 |
| Fort Larimie | \$ 100,000 |
| Fort Union | \$ 40,000 |
| Organ Pipe Cactus | \$ 20,000 |
| Tonto | \$ 32,000 |
| Fort Davis | \$ 39,000 |
| Wupatki | \$ 100,000 |
| Hovenweep | \$ 30,000 |
| Salinas Pueblo Missions | <u>\$ 41,000</u> |
| Total Project Costs (11 Parks/Projects) | \$ 973,000 |
| Program Management | \$ 60,000 |
| Total Operating Program | \$1,269,000 |

Table 2.8 FY 2002 Operating Budget**Personnel****Base Increase Amounts**

| | |
|-------------------------------|------------------|
| Chaco Culture- 1 position | \$ 55,000 |
| Fort Union - 1 position | \$ 71,000 |
| Canyonlands - 2 position | \$ 118,000 |
| Hovenweep - 1 position | \$ 70,000 |
| Canyon De Chelly - 1 position | \$ 58,000 |
| Glen Canyon - 1 position | \$ <u>63,000</u> |

Total Personnel Costs (6 Parks - 7 Positions) \$ 435,000

Projects**Funding Request**

| | |
|-------------------------|------------------|
| Fort Laramie | \$ 10,958 |
| Canyonlands | \$ 56,378 |
| Navajo | \$ 72,500 |
| Big Bend | \$ 48,761 |
| Bandelier | \$ 50,000 |
| Grand Canyon | \$ 79,500 |
| El Malpais | \$ 7,000 |
| Tumacacori | \$ 40,000 |
| Fort Davis | \$ 39,120 |
| Chaco Canyon | \$ 125,000 |
| Mesa Verde | \$ 125,000 |
| Wupatki | \$ 49,020 |
| Salinas Pueblo Missions | \$ 116,432 |
| Tonto | \$ 27,000 |
| Walnut Canyon | \$ 70,000 |
| Fort Bowie | \$ 48,377 |
| El Morro | \$ 8,853 |
| Pecos | \$ 40,000 |
| Hovenweep | \$ <u>24,101</u> |

Total Project Costs (18 Parks/Projects) \$1,038,000

Program Management \$ 60,000

Total Operating Program \$1,533,000

Table 2.2

| | Personnel FY 98 | Personnel FY 99 | Personnel FY 00 | Personnel FY 01 | Personnel FY 02 | Total No. Of Positions | No. of Parks | Total Funding |
|---|-----------------------------------|--|-----------------------------------|----------------------------------|----------------------------------|------------------------------|--------------------|------------------|
| NEW MEXICO | | | | | | | | |
| Aztec | 84,000 (2 positions) | \$4,000 (training) | | 58,000 (1 position) | | 3 | 1 | 146,000 |
| Bandelier | | 113,000 (2 positions) | | | | 2 | 1 | 113,000 |
| Chaco | | 214,000 (4 positions) | | 55,000 (1 position) | 55,000 (1 position) | 6 | 1 | 324,000 |
| El Malpais | | 68,000 (1 position) | 58,000 (1 position) | | | 2 | 1 | 126,000 |
| El Morro | | | | 55,000 (1 position) | | 1 | 1 | 55,000 |
| Fort Union | | | | | \$71,000 (1 position) | 1 | 1 | 71,000 |
| Salinas | 33,000 (1 position) | 148,000 (58,000 for 1 position; 9,000 training; 81,000 other base increase) | 55,000 (1 position) | | | 3 | 1 | 236,000 |
| TOTAL | 117,000 (3 positions) | 547,000 (8 positions) | 113,000 (2 positions) | 168,000 (3 positions) | 126,000 (2 positions) | 18 | 7 | 1,071,000 |
| ARIZONA | | | | | | | | |
| Flagstaff (Wupatki/ Walnut Canyon) | 60,000 (1 position) | 58,000 (1 position) | 55,000 (1 position) | | | 3 | 1 | 173,000 |
| Canyon de Chelly | | | | | 58,000 (1 position) | 1 | 1 | 58,000 |
| Casa Grande | | | | 68,000 (1 position) | | 1 | 1 | 68,000 |
| Grand Canyon | | | 58,000 (1 position) | | | 1 | 1 | 58,000 |
| Montezuma Castle/ Tuzigoot | | 106,000 (2 positions) | | | | 2 | 1 | 106,000 |
| Fort Bowie | 34,000 (1 position) | 55,000 (53,000 for 1 position; 2,000 for training) | | | | 2 | 1 | 89,000 |
| Navajo | 33,000 (1 position) | 4,000 (training) | 80,000 (1 position) | | | 2 | 1 | 117,000 |
| Tonto | 51,000 (1 position) | 4,000 (training) | | | | 1 | 1 | 55,000 |
| Tumacacori | 91,000 (2 positions) | 13,000 | 63,000 (1 position) | | | 3 | 1 | 167,000 |
| TOTAL | 269,000 (6 positions) | 240,000 (4 positions) | 256,000 (4 positions) | 68,000 (1 position) | 58,000 (1 position) | 16 | 9 | 891,000 |
| TEXAS | | | | | | | | |
| Fort Davis | | | 111,000 (2 positions) | | | 2 | 1 | 111,000 |
| San Antonio | | 71,000 (1 position) | 55,000 (1 position) | | | 2 | 1 | 126,000 |
| TOTAL | | 71,000 (1 position) | 166,000 (3 positions) | | | 4 | 2 | 237,000 |
| UTAH | | | | | | | | |
| Canyonlands | | | | | 118,000 (2 positions) | 2 | 1 | 118,000 |
| Hovenweep | | | | | 70,000 (1 position) | 1 | 1 | 70,000 |
| Glen Canyon | | | | | 63,000 (1 position) | 1 | 1 | 63,000 |
| TOTAL | | | | | 251,000 (4 positions) | 4 | 3 | 251,000 |
| COLORADO | | | | | | | | |
| Mesa Verde | 67,000 (2 positions) | 4,000 (training) | 260,000 (4 positions) | | | 6 | 1 | 331,000 |
| TOTAL | 67,000 (2 positions) | 4,000 | 260,000 (4 positions) | | | 6 | 1 | 331,000 |
| GRAND TOTAL | 453,000 (11 positions) | 862,000 (13 positions) | 795,000 (13 positions) | 236,000 (4 positions) | 435,000 (7 positions) | 48 | 22 | 2,781,000 |

TABLE 2.3

| | Projects FY 98 | Projects FY 99 | Projects FY 00 | Projects FY 01 | Projects FY 02 | Total No. of Projects | No. of Parks | Total Funding |
|--|---------------------------------------|--|--|--|--|-----------------------------|--------------------|------------------|
| NEW MEXICO | | | | | | | | |
| Aztec | 75,000 | 63,000 | | | | 2 | 1 | 138,000 |
| Bandelier | | | | | 50,000 | 1 | 1 | 50,000 |
| Chaco | 133,300 | 125,500 | 110,000 | 125,000 | 125,000 | 5 | 1 | 618,800 |
| El Malpais | | | | | 7,000 | 1 | 1 | 7,000 |
| El Morro | | | | | 8,853 | 1 | 1 | 8,853 |
| Fort Union | | | 30,000 | 40,000 | | 2 | 1 | 70,000 |
| Pecos | | | | 69,000 | 40,000 | 2 | 1 | 109,000 |
| Salinas | 25,000 | 10,000 | 95,000 | 41,700 | 116,432 | 5 | 1 | 288,132 |
| TOTAL | 233,300 (3 projects) | 198,500 (3 projects) | 235,000 (3 projects) | 275,700 (4 projects) | 347,285 (6 projects) | 19 | 8 | 1,289,785 |
| ARIZONA | | | | | | | | |
| Flagstaff (Wupatki/ Walnut Canyon) | 125,000 | | 110,000 | 100,000 | 119,020 (49,020/ 70,000) | 5 | 1 | 454,020 |
| Canyon de Chelly | | | 75,000 | | | 1 | 1 | 75,000 |
| Casa Grande | | 20,000 | | | | 1 | 1 | 20,000 |
| Grand Canyon | | 55,000 | 125,000 | 125,000 | 79,500 | 4 | 1 | 384,500 |
| Montezuma Castle/ Tuzigoot | | | | 15,000 | | 1 | 1 | 15,000 |
| Fort Bowie | | | | 34,300 | 48,377 | 2 | 1 | 82,677 |
| Navajo | | 20,000 | | | 72,500 | 2 | 1 | 92,500 |
| Organ Pipe | | | | 20,000 | | 1 | 1 | 20,000 |
| Tonto | 125,000 | 46,100 | | 32,000 | 27,000 | 4 | 1 | 230,100 |
| Tumacacori | 22,000 | 25,300 | 34,600 | 22,500 | 40,000 | 5 | 1 | 144,400 |
| TOTAL | 272,000 (3 projects) | 166,400 (5 projects) | 344,600 (4 projects) | 348,800 (7 projects) | 386,397 (7 projects) | 26 | 10 | 1,518,197 |
| TEXAS | | | | | | | | |
| Big Bend | | 10,000 | | | 48,761 | 2 | 1 | 58,761 |
| Fort Davis | | | | 39,000 | 39,120 | 2 | 1 | 78,120 |
| San Antonio | | | | 64,500 | | 1 | 1 | 64,500 |
| TOTAL | | 10,000 (1 project) | | 103,500 (2 projects) | 87,881 (2 projects) | 5 | 3 | 201,381 |
| UTAH | | | | | | | | |
| Canyonlands | | | 100,000 | | 56,378 | 2 | 1 | 156,378 |
| Hovenweep | | 10,000 | | 30,000 | 24,101 | 3 | 1 | 64,101 |
| Glen Canyon | | 55,000 | 20,000 | 115,000 | | 3 | 1 | 190,000 |
| Zion | | | 5,000 | | | 1 | 1 | 5,000 |
| TOTAL | | 65,000 (2 projects) | 125,000 (3 projects) | 145,000 (2 projects) | 80,479 (2 projects) | 9 | 4 | 415,479 |
| COLORADO | | | | | | | | |
| Mesa Verde | | 175,000 | 110,000 | | 125,000 | 3 | 1 | 410,000 |
| TOTAL | | 175,000 (1 project) | 110,000 (1 project) | | 125,000 (1 project) | 3 | 1 | 410,000 |
| WYOMING | | | | | | | | |
| Fort Laramie | | 12,700 | | 100,000 | 10,958 | 3 | 1 | 123,658 |
| TOTAL | | 12,700 (1 project) | | 100,000 (1 project) | 10,958 (1 project) | 3 | 1 | 123,658 |
| GRAND TOTAL | 505,300 (6 projects) | 627,600 (13 projects) | 814,600 (11 projects) | 973,000 (16 Projects) | 1,038,000 (19 Projects) | 65 | 27 | 3,958,500 |

Section 3, Projects and Program Management Funding

This section provides a discussion on the utilization of funds from the one- year funding components of the Vanishing Treasures annual budget: Projects and Program Management funds. For tracking purposes a list is provided of the projects that have been implement in various VT parks since FY 1998. The interested reader is referred to the three previous Vanishing Treasures Year End Reports (FY 1998, 1999, and 2000) for detailed description of the accomplishments of each of the projects implemented. This section also presents a list of projects that were implemented in FY 2001 and the projects proposed for implementation in FY 2002. Section 6 of this report provides concise summaries of the projects that were implement in FY 2001.

This section closes with a summary of the use of the funds allocated for management of the Vanishing Treasures Program.

Project Funding

As discussed in the 1998 Vanishing Treasures Long- Range Plan, one of the primary goals of VT is to "...eliminate resource loss by addressing emergency and high priority project needs where structures are in immediate danger from natural erosive factors or the cumulative pressures of visitation." Initial estimates developed in 1998 indicated that a minimum of \$59 million in "project" funding over a 10 year period was needed to address the existing backlog of preservation treatment needs.

This goal is being addressed by seeking increased and sustainable levels of funding for the preservation of these structures.

Between FY 1998 through FY 2001, a total of \$2,920,500 was distributed to 24 parks to complete 46 emergency and high priority preservation projects. In FY 2002, \$1,038,000 will be made available to conduct 19 projects 18 parks. At the end of FY 2002, \$3,958,500 will have been used to implement 65 projects in 27 parks. Table 2.3 presents the distribution of project funds by park and by state since FY 1998 through the current fiscal year (FY 2002). Although the amount of funding for projects is well below the initial estimates, significant progress is being made towards reducing the backlog of emergency preservation needs and towards bringing about an end to the unacceptable loss of the nations significant architectural resources.

Project Selection and Criteria

Since FY 1998, projects targeted for implementation have been selected based on the submission of proposals that are weighed against established criteria as defined in the **Special Emphasis Program Allocation System (SEPAS)**. SEPAS is the process or 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. The SEPAS guidelines can be accessed electronically via: <http://im.den.nps.gov> on the NPS' Intermountain Intranet, RD- Management, Budget and Finance page. The SEPAS criteria for VT was and is currently being used to annually evaluate project requests and establish projects in priority order.



Rod Wheaton, Assistant Regional Director for Cultural Resources and Partnerships, from the Intermountain Regional Office, addresses the 2001 VT Conference at Rio Rico, AZ.

FY 1998 Projects

In FY 1998, \$505,300 was used to conduct 6 emergency and high priority preservation projects in 6 parks. The parks included:

Aztec Ruins National Monument:

Stabilize West Ruin, \$75,000.

Chaco Cultural National Historical Park:

Continue Partial Backfilling and Drainage Repair at Selected Structures, \$133,300.

Flagstaff Area National Monuments:

Conduct Ruins Preservation at Major Interpretive Site, Wupatki and Walnut Canyon, \$125,000.

Salinas Pueblo Missions National Monument: Ruins Preservation, \$25,000.

Tonto National Monument: Stabilization of Ruins for Structural Integrity, \$125,000.

Tumacacori National Historical Park: Preservation of Park's Primary Resources.

FY 1999 Projects

In FY 1999, \$627,600 was dedicated to conducting 13 projects in 13 parks. They included:

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 Conducted 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 Mission's Tumacacori, Calabazas, Guevavi, \$25,300.

FY 2000 Projects

In FY 2000, \$814,600 was utilized by selected VT parks to conduct 11 preservation projects. They included:

Canyon de Chelly National Monument:

Conduct Architectural Documentation/Condition Assessment in Canyon del Muerto, \$75,000.

Chaco Culture National Historical Park:

Continue Partial Backfill 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.

FY 2001 Projects

In FY 2001, \$973,000 was used to conduct high priority projects in 16 parks. The authorized projects in priority order that were implemented in FY 2001 are presented below. Detailed descriptions of the projects

can be found in Section 6.

Chaco Culture National Historical Park: Conduct Fabric Treatment, Backfilling and Mortar Test at Lizard House Ruin, \$125,000.

Fort Bowie National Historic Site: Preserve Primary Park Resources, \$34,300

Glen Canyon National Recreation Area: Conduct Assessment of VT Sites, \$115,000.

Grand Canyon National Park: Preservation Documentation and Treatment of Desert View Pueblo Sites, \$125,000.

San Antonio Missions National Historic Park : Emergency Stabilization of Spanish Colonial Paints and Plaster, \$64,500.

Tumacacori National Historical Park: Preservation of Mission San Jose De Tumacacori, \$22,500.

Tuzigoot National Monument: Baseline Photodocumentation of Tuzigoot Ruins, 15,000.

Pecos National Historical Park: Remove Church Floor, \$69,000.

Fort Laramie National Historic Site: Lime Grout/Lime Plaster Research Program, \$100,000.

Fort Union National Monument: Implement HABS Documentation, \$40,000.

Organ Pipe Cactus National Monument: Repair or Restore Roofing of Historic Structures, \$20,000.

Tonto National Monument: Reconstruct Failing Rock Wall Base, Lower Cliff Dwelling, 32,000.

Fort Davis National Historic Site: Repoint HB- 24 Band Barracks, \$39,000.

Wupatki National Monument: Document Architectural Plan Citadel, Nalakihi, and Wukoki Ruins, \$100,000.

Hovenweep National Monument: Hydrology Study Around Square Tower, \$30,000.

Salinas Pueblo Missions National Monument: Perform Emergency/Sustainable Preservation treatments, \$41,700.

FY 2002 Projects

In FY 2002, \$1,038,000 will be used to conduct 19 projects in 18 parks. Again, the SEPAS process was used to evaluate project request submittals and to establish project priorities. The authorized projects in priority order that are proposed for implementation in FY 2002 include the following:

Fort Laramie National Historic Site:

Complete Lime Grout/Lime Plaster Research Program, \$10,958.

Canyonlands National Park: Conduct Salt Creek Condition Assessment, \$56,378.

Navajo National Monument: Conduct Condition Assessment at Snake House, Owl House, Kiva Cave, and Turkey Cave, \$72,500.

Big Bend National Park: VT Ruins Stabilization – Dorgan House, \$48,761.

Bandelier National Monument: Preserve Frijoles Canyon Cavates, 50,000.

Grand Canyon National Park: Architectural Documentation and Preservation Treatment at 8 Sites, \$79,500.

El Malpais National Monument: Stabilize and Reduce Erosion within Archeological Sites, 7,000.

Tumacacori National Historical Park: of Mission Preservation, \$40,000.

Fort Davis National Historic Site: Cap and Mud Adobe Walls on Four Historic Structures, \$39,120.

Chaco Culture National Historical Park: Implement Backfill Program at 6 excavated Backcountry Structures, \$125,000.

Mesa Verde National Park: Document and Treat Spring House, \$125,000.

Wupatki National Monument: Perform Preservation Activities and Address Drainage Problems, \$49,020.

Salinas Pueblo Missions National Monument: Emergency Repair of Abo Drainage System, \$116,432.

Tonto National Monument: Stabilize Collapsed Rockwall at the Upper Cliff Dwelling, \$27,000.

Walnut Canyon National Monument: Document Ranger Ledge Sites and Develop Site Plans, \$70,000.

Fort Bowie National Historic Site: Primary Resource Preservation, Phase II, \$48,377.

El Morro National Monument: Study Animal Impacts on Archeological Sites, \$8,853.

Pecos National Historical Park: Stabilize and Preserve Ruins, \$40,000.

Hovenweep National Monument: Document and Treat Cutthroat and Hackberry Architecture, \$24,101.

FY 2001 Program Management Funds

In FY 2001, \$60,000 was again used for the operations of the Vanishing Treasures Program. Production of the Year End Report documents, information sharing meetings, workgroup meetings, park support, and other program support activities were conducted using this funding source. Funded management programs and authorities include the following:

Leadership Committee Meeting: Funds were utilized to cover the travel costs of various members of the Leadership Committee to Grants, New Mexico to participate in the Annual Leadership Committee meeting conducted in June 2001. This involved members of the Leadership Committee, Advisory Group, and staff from the Santa Fe Support Office.

Advisory and Workgroup Meetings: Funds were utilized to cover the costs of the Advisory Group to travel to Denver, Colorado in March 2001 to rate and prioritization the FY 2002 VT project submittals. Funds to cover the costs of the Career Development Workgroup to travel to Santa Fe, in December 2000 to continue developing effective methods for the recruitment of new VT employees, and the identification and creation of effective training curriculum for existing staff. Funds were also provided to members of the Advisory and Funding Workgroup to travel

to Gallup, New Mexico to review the criteria used for the selection of VT projects.

Vanishing Treasures Conference: Program Management funds were utilized for the support of the fourth (third annual) VT Workshop held in Tumacacori, Arizona in October 2001 and hosted by the staff of Tumacacori National Historical Park. Funds were provide to help cover the travel costs of a select number of VT park staff and Denver and Santa Fe Support Office staff so that they could attend and participate in the conference.

Presentations and Park Assistance: Funds were utilized by the Program Coordinator to give a presentation at the Cultural Resources 2000 Conference held in Santa Fe, New Mexico in December 2000, and to attend and give a presentation at the Annual Arizona State Historic Preservation Office/National Park Service meetings held in Winslow, Arizona in November 2000. Program Management funds were also provided at the end of the fiscal year to Navajo National Monument and Glen Canyon National Recreation Area to assist in the completion of high priority projects.

VT Briefings: Program Management funds were utilized to cover the travel costs of the Chair, Program Coordinator, and two members of the Leadership Committee to Washington, D.C. in July 2001. The purpose of the trip was to provide information to NPS Washington Office staff and Congressional members and their staff on the activities and accomplishments of VT. Funds were also utilized by the Program Chair and Coordinator to travel to Denver in July 2001 to provide the Intermountain Regional Director with a briefing on VT.

Program Support: A limited amount of funds was used to purchase supplies and materials used by the Vanishing Treasures Program Coordinator and Budget Analyst to

support day-to-day operations. This included the production and distribution of the FY 2000/2001 Year-End Report (printing of the report, 4 page management summary, report mailing and distribution), and the development and production of two posters that were used as displays at a number of conferences and for distribution to the various VT park for continued promotion of the program, and limited products developed by the various Work Groups (project priority lists, VT's inventory and condition assessment database, Web page development, etc.).

Program Management funds we made available to the recently hired VT Structural Engineer to purchase supplies and materials that will be used to assist parks with their structural Engineering needs. In addition, funds were made available for travel to a select number of parks to assist in the evaluation of their needs.

Program support funds were also used for two **Superior Performance** awards. An award was given to Canyonlands Archeologist Eric Brunneman and Former Natural Bridges/Hovenweep National Monument Superintendent Palma Wilson for excellence in hosting and organizing the VT Conference held in Blanding, Utah in October 2000.

FY 2002 Program Management Funds

Program Management funds in FY 2002 will be \$60,000. It is expected that the funds will be utilized in a manner similar as described above.

Program Management

Vanishing Treasures is comprised of two integrated components: the Management Team and Workgroups. Each component has specific role and functions as designed by the Program's ***Strategic and Long Range Plan***. Fundamentally, the management team is responsible for guiding the direction of the Program, identifying fiscal and professional resources, setting priorities for project development, and communicating the results and achievements of the program to a wide and varied audience. Workgroups are brought together to address specific programmatic needs and functions.

MANAGEMENT TEAM

LEADERSHIP COMMITTEE

This committee is composed of seven individuals – Chairman (superintendent representing a VT park), Executive Officer (represents the Regional Directorate), and five additional members (superintendents representing VT parks). The Committee is responsible for definition of policy and articulation with park managers, as well as regional directorate.

PROGRAM COORDINATOR

This position provides day to day management and overall coordination of the Vanishing Treasures Program. The Program Coordinator reports directly to the Chairman of the Leadership Committee and oversees the activities of the VT Budget Analyst and the Advisory Group.

ADVISORY GROUP

Originating from the four workgroups of technical specialists, the Advisory Group is composed of seven individuals representing Vanishing Treasures parks. The Group serves in an advisory capacity to the Leadership Committee and is charged with the responsibility of ensuring program consistency, the existence of parity and representation among parks, high quality craftsmanship and professional competency, and program progress and accountability

WORKGROUPS

In order to achieve the goals of the Program four Workgroups are in existence: Database Management, Career Development, Funding, and Program Guidelines.

DATABASE WORKGROUP

This workgroup has three main goals: (1) develop a standardized system to inventory and evaluate the condition of VT resources, (2) develop an electronic method for submission of the inventory data gathered in goal one and work toward interfacing related software systems, and interface related databases to provide more efficient utilization and improved data tracking, and, (3) coordinate and develop a management system to aid in planning work and tracking accomplishments.

CAREER DEVELOPMENT WORKGROUP

This workgroup is charged with the responsibility of formulating and implementing a plan that will result in (1) the recruitment of a cadre of well qualified and highly skilled workforce, and (2) the retention and continued training of this workforce to insure the effectiveness of the Program and the NPS both today and in the future.

FUNDING WORKGROUP

The purpose of this workgroup is to continue seeking appropriate avenues for providing adequate and consistent funding to insure the long- term success of the Program. This includes: (1) identifying park base funding increase needs and determining the most appropriate method for communicating and presenting those needs, and (2) seeking a cultural resources funding source specifically dedicated to carrying out ruins preservation projects.

GUIDELINES AND DEFINITION WORKGROUP

This workgroup is responsible for the establishment and continued updating of guidelines and technical supplements to provide consistency in strategy and technical application in the ruins preservation process and providing the framework for development of an effective and long term ruins preservation program in all VT parks.

EXECUTIVE ADVISORS

VT also retains the services of a number of individuals on the Regional Directors staff or in Central Offices. They provide input, advice, and assistance on a variety of fiscal, programmatic, and political issues that potentially could influence the long- term objectives of the Program.

SECTION 4, STAFFING ACCOMPLISHMENTS

This section provides a brief narrative of staffing accomplishments of the VT Program since FY 1998. Specifically, we discuss the Program's goals and objectives to retain and augment the existing workforce, and to fulfill short and long term staffing needs. Also included is a brief description of the existing hiring priority list and a discussion of the hiring that has been accomplished since the beginning of the Program in FY 1998. In addition, this section presents the existing hiring priority needs identified for the next 5 years, depending upon future funding levels.

Strategies for Creating and Maintaining a Cadre of Permanent Professional

One of the key objectives of the Vanishing Treasures Initiative is the augmentation and replacement of its existing workforce. At the beginning of the Initiative many of the employees charged with the responsibility of preserving the nation's VT resources were reaching retirement age. Many of these employees did not have permanent positions, and usually worked as seasonal or temporary employees without the benefit of health or retirement compensation. This situation was compounded by the fact that there was not a readily available replacement workforce ready to step in once these experienced professionals retired. Prior to the start of VT, only eight parks were known to have staff addressing their VT needs. The total number of permanent professionals (full time and/or subject- to- furlough) working in the profession totaled less than 30. The number of seasonal or temporary staff ranged anywhere from 6 to over 30 depending upon the availability of funding each year. This situation is the direct result of

the lack of funding for both projects and personnel.

An equal and compelling factor was the lack of interest by the younger generation in pursuing ruins preservation as a career field. This in itself was due to the lack of funding and the perception that only temporary and seasonal jobs were available. Also contributing, however, was the fact that the ruins preservation profession had failed to evolve and keep pace with a number of technological advances and innovation. Contributing to the limited number of professional preservationists is the fact that the ruins preservation process is not something that is currently being taught at the academic level. Presently, there are no colleges or universities that include ruins preservation in the course curriculum either as an individual course or as a component of a Historic Preservation or Cultural Resources Management course. There are no trade or vocational schools that teach the subject. In most cases it is something that is simply viewed as an activity that was mostly performed by a small and exclusive segment of the workforce of the National Park Service¹. Most ruins preservation "teaching" and "training" is the result of informal mentoring programs and small workshops and training sessions put on by a limited and variable number of individuals that have ruins preservation experience. Ruins preservation is not viewed on the same level as other professional track positions. It is not viewed as a satisfying long- term career. The

¹ Limited ruins preservation work is being done by the U.S. Forest Service, Bureau of Land Management, other federal agencies, and some state agencies. None of these agencies, however, have a dedicated ruins preservation workforce principally due to their differing missions. Only a few contracting firms have the staff with the experience and the interest in conducting ruins preservation projects.

ruins preservation discipline needs to recognize changing attitudes and develop ways that will again generate interest in pursuing ruins preservation as a career or profession both within and outside the NPS.

If concerted efforts are not made to seek new and inventive ways to hire a replacement workforce, the outlook for this nation's irreplaceable Vanishing Treasures resources will indeed be dismal. Clearly funding is needed for the retention of VT's existing workforce and to bring on a new generation of long- term permanent professionals preservation specialists sufficient in number to eventually replace those nearing retirement and to adequately address the backlog of preservation needs that has reached staggering numbers.



Jim Garrison, Arizona State Historic Preservation Officer, addresses the 2001 VT Conference in Rio Rico, AZ.

In an attempt to address this issue a clear course of action was developed that included the following: (1) Recognize the uncompensated contributions of the long-term temporary and seasonal employees and

give them the opportunity to compete for any newly created permanent, full time positions; (2) Launch an aggressive recruitment program that would bring on a new generation of preservation specialists that could learn from, be mentored by, and eventually replace the existing aging workforce; (3) Increase the number of preservation specialists in parks to keep up with and eventually bring to maintainable levels, the staggering number of VT resources that required emergency and high priority treatment; and (4) Redefine and broaden the concept of the preservation specialist to insure interest by the younger generation and the formation of a cadre of long- term, permanent preservation specialists.

Development of VT's Staffing Needs

In late 1996 and early 1997, VT sought and received input from all of the identified VT parks regarding 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 was 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. The Plan estimated 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. This includes the conversion of approximately 25-

30 of the existing seasonal or temporary positions, and the recruitment of approximately 65- 70 technical craftspersons and 50- 60 archeologists or other specialists using the intake program over the next decade. Total projected Vanishing Treasures costs for personnel were estimated in 1998 to be approximately \$7.9 million (\$1.5 million for converting existing positions and \$6.4 million for all new intake positions).

The First VT Personnel Hiring Priority List

Shortly after the Skills and Capability list was developed, a call was issued in late 1997 to VT parks to 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). Hiring new staff was to focus on implementing treatment activities, documenting architectural fabric, and collecting condition information on archeological sites with standing architectural remains.

Results of the call suggested that during the beginning stages of the Program, the ruins preservation workforce should be divided into **two general kinds of employees**: craft specialists such as wage grade (WG), masonry workers, etc., and preservation specialists positions such as general services (GS) archeologists, exhibit specialists, architectural conservators, etc., 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 will graduate incumbents into an all encompassing GS series **Ruins Preservation Specialist**, which would combine the necessary professional elements into a professional specialty.

All requests for personnel submitted as a result of the 1997 call, with few exceptions, were considered and made part of **The First VT Personnel Hiring Priority List**. **Competitive Conversion** positions were prioritized for immediate consideration based on the length of time the position had been established and had functioned as a ruins preservation position. The **Intake** positions were prioritized based on the perceived VT needs (nature and extent of VT resources at each park), and current staffing available to address the needs. The results were compiled by the Vanishing Treasures Career Development Workgroup and shared with all VT parks late in 1997. The resulting hiring priority list has since been used to determine the distribution of base increase funding for the hiring of permanent staff that began in FY 1998. Due to short falls in funding that has been appropriated to hire staff, this list continued to be used to establish hiring priorities through FY 2001.

The Second VT Personnel Hiring Priority List

Responding 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 that is being used to assist in prioritizing staffing needs from FY 2003 through FY 2006. Of course, the actual lifespan of the list will depend upon the amount of funding made available each year for hiring.

Call Criteria and Guidelines

Parks were allowed to submit a request for a maximum of 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.

However, certain parks are perceived to have captured a disproportionate share of the VT budget appropriation each year. More often than not this perception 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.



The Inscription House Documentation Project crew comprised of archeologists from Navajo National Monument, Mesa Verde National Park, and the Flagstaff Area National Monuments. Navajo National Monument, AZ.

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 included 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 the most recent request for personnel call, consideration was given to 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 intake process.

Prioritization Process

A number of factors were evaluated in order to develop a hiring priority list from all based

on the requests received from the parks. These factors include: (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 for hiring new staff members.

Nature and Extent of VT Resources: The **Preliminary Database Summary Report** developed in August 1997 by the Database Management Work Group was used for determining a park's relative "size" based on the nature and extent of its VT resources. The size classification of identified VT parks is presented on page 12 of the **Long- Range Plan**. Because this data was gathered in 1996 and was 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 is considered a small park. A park that contains VT resources totaling 100,000 square feet of exposed architecture or 350 or more

structures is considered a large park. For example, Chaco Culture or Mesa Verde are considered large parks. 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 Forest are considered small parks.

Existing Staffing Levels: The review panel attempted to match existing staff 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 included 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 Park - 6 to 12 staff
 Large Park - 10 to 17 staff

Current Staffing Needs: The **Skills and Capability List** developed in 1997 was the principle document used in determining a park's requisite staffing needs. 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 was not considered totally 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 detailed description of the prioritization process was provided to all VT parks in June 1999.

Staffing Accomplishments in FY 1998, 1999, and 2000

In the first three years of the Program (FY 1998, 1999, and 2000), approximately 37 individuals were permanently hired to specifically address VT needs. This included the conversion of 12 positions and the hiring of 25 “new” individuals. One of the positions filled in FY 2000 included VT’s first professional support position. These hires were accomplished by increasing park operating bases.

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

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 specialist), **Navajo National Monument** (1 intake position, preservation specialist), **Tonto National Monument** (1 intake position preservation specialist), and **Tumacacori National Historical Park** (2 intake positions, 1 preservation specialist and 1 craft specialist).

More detailed information regarding the staff that was hired in FY 1998 and the work that they accomplished in FY 2001 can be found in Section 5 of this report.

In FY 1999, \$842,000 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 Caste/Tuzigoot National Monuments** (1 intake and 1 conversion position, craft specialists), **Salinas Pueblo Missions National Monument** (1 intake position, preservation specialist), and

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

More detailed information regarding the staff that was hired in FY 1999 and the work that they accomplished in FY 2001 can be found in Section 5 of this report.

In FY 2000, \$795,000 was used to hire 13 individuals in 9 parks. The benefiting parks included the following:

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)

More detailed information regarding the staff that was hired in FY 2000 and the work that they accomplished in FY 2001 can be found in Section 5 of this report.

Staffing Accomplishments in FY 2001

In FY 2001, \$236,000 was used to recruit and training four individuals in four parks. This included the conversion of 1 position and the

hiring of 3 “new” individuals. The benefiting parks included 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 (1 conversion positions, craft specialist).

Detailed information regarding the staff hired in FY 2001 and the work they accomplished can be found in the Section 5 of this report.

Including the four positions hired in FY 2001, a total of 41 positions in 17 parks have been filled on a permanent basis to address VT needs. This total includes the conversion of 13 positions and the hiring of 28 new intakes. Table 2.2 shows the distribution of personnel that have been hired by park and by state beginning in FY 1998 through the current fiscal year.

Work Force Diversity

As we’ve previously indicated, 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 contribute to the extraordinary need to seek a highly professional and culturally diverse workforce in sustaining the program. Through FY 2001, 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 11 American

Indian males, 9 Hispanic males, 1 Hispanic female, 11 Anglo males, and 9 Anglo females. These 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 began hiring personnel to provide professional support services to all or most of the VT parks. The positions included a structural engineer duty stationed at Mesa Verde and a historical architect duty stationed at Montezuma Castle/Tuzigoot.

The structural engineer position was filled in FY 2000. A number of VT parks benefited from the services of this position in FY 2001. Refer to Section 5 for detailed information regarding the activities of VT's Structural Engineer.

As of the end of FY 2001, the historical architect position has yet to be filled. The position will likely be filled within the next 1-2 years depending upon the success of the Initiative to continue acquiring funding for new staff. The position is currently number 6 on the Initiative's hiring priority list.

As indicated, establishing these two positions allows the VT Program to provide limited professional, expert, and highly specialized advice and assistance to VT Parks. 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.

One significant change in the future of support positions will be the establishment of the VT Coordinator position as a full-time, permanently funded position. The duties of the position are currently being performed as a collateral duty by the Chief of Resources at the Flagstaff Area National Monuments. Recognizing that a full-time commitment is needed to effectively address the day-to-day needs of the Initiative, the Leadership Committee determined that the next hiring priority would be the Program Coordinator position. The leadership committee expects to fill this position through the competitive process as soon as funding becomes available, hopefully in FY 2003. The individual filling this position is expected to have experience in both cultural resources management and ruins preservation. The position will be park-based and a selection process will be conducted to determine which VT park will become the host park. Part of the commitment for becoming the host park is to provide the necessary infrastructure and administrative support for the position.

Proposed Staffing in FY 2002

In FY 2002, approximately \$435,000 will be used to recruit and training 7 individuals in 6 parks. The proposed parks and positions include the following:

Chaco Culture National Historical Park (1 intake positions, craft specialist).

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

Canyon de Chelly National Monument (1 intake position, preservation specialist),

Canyonlands National Park (1 intake position, craft specialist, 1 intake position, preservation specialist),

Hovenweep National Monument (1 intake position, preservation specialist)
Glen Canyon National Recreation Area (1 intake position, preservation specialist).

Once the proposed hiring in FY 2002 has been completed, 48 positions in 22 parks will have been filled since 1998. Table 2.2 shows the distribution of personnel that have been hired by park and by state beginning in FY 1998 through the current fiscal year (FY 2002). This will have included the conversion of 13 positions and the hiring of 35 “new” individuals.

Including funds secured in FY 2002, \$2,781,000 will have been dedicated to seeking new and inventive ways to hire a replacement workforce, and increase the number of personnel available to address the preservation needs of the nation’s VT resources.

FY 2003 and Beyond

Although the figures presented above show that notable progress has been made, it is occurring more slowly than originally planned; and certainly, the funding available to hire new staff in FY 2002 is well below what we have seen in the previous four years of the Program. Utilizing the figures presented in the Long- Range Plan, it was projected that approximately 93 individuals needed to be hired by the end of FY 2002. As the figures presented above indicate, salary and Full Time Equivalent (FTE) have only been provided to hire a little less than 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 four 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.

Staffing Priority List

Table 4.1 presents the existing hiring priority list for VT. The list was created to identify the hiring priority needs for the Program beginning in FY 2001 through FY 2006. It is not reflective of all of the hiring needs of the Program, which is projected to be 150 personnel.

In reviewing the list, it should be kept in mind that changes to priorities may occur. It is the Program’s 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 2003 budget for VT is currently underway. It is expected that a request will be submitted that makes available levels of funding to hire new staff that are consistent with what we have seen in the first five years (FY 1998- 2002) of the Program. It is hoped that we will be able to hire an average of 9 to 10 new staff members on a yearly basis.



Table 4.1. VT Staffing Priority List

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

Section 5, Personnel Accomplishments And Staffing Report

Accomplishments of Personnel Hired in FY 1998 (Work Accomplished in FY 2001)

In FY 1998, the Vanishing Treasures program provided eight parks with \$453,000 to recruit and train eleven individuals. The benefiting parks included:

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)
Salinas Pueblo Missions National Monument (1 position)
Tonto National Monument (1 position)
Tumacacori National Historical Park (2 positions)

With only one exception, all of the individuals hired in FY 1998 continued their employment in FY 2001. All of the individuals hired have contributed greatly to addressing each of the benefiting park's backlog of ruins preservation needs. Clearly, significant progress is being made towards achieving the primary goal of the Vanishing Treasures Program. Brief descriptions are presented below of the work accomplished in FY 2001 by the VT class of FY 1998.

Aztec Ruins National Monument

Harry Etcitty, Raymond Torrivio and Carl Jim, Masonry Workers

Harry worked primarily on the backfill project at the West Ruin up to the moment of his untimely death in January. Harry's service and dedication to the VT Program is greatly appreciated. Carl Jim, an experienced masonry worker, was hired as a

temporary worker using Harry's lapse salary. During the fiscal year, Raymond and Carl repointed 42.85 square meters of wall surfaces and repaired over 125 square meters of walls caps. They backfilled and installed the drainage system in a total of 18 rooms in the northeast corner of the West Ruin. Additionally, they applied over 460 meters of protective coping to the base of walls in previously backfilled rooms in the East Wing of the West Ruin.

Training

Raymond and Harry attended a 40- hour training session in Dry Wall Masonry held at Grand Junction, CO during November 2000. They also attended the 3- day Vanishing Treasures Conference held in Blanding, Utah in early October 2000, where among other things, they learned more about the Vanishing Treasures Program, masonry techniques, and safety considerations. Raymond and Carl attended skid steer loader (Bobcat) training and attended a job safety analysis (JSA) workshop.

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

Al Remley, Archeologist

In FY 2001, Al performed a variety of duties including research, report writing and editing, database maintenance, technical support, various field projects, and VT program support. Office duties were primarily composed of the day- to- day

activities managing the FLAG Areas ruins preservation program. Research and writing tasks included writing scopes- of- work for ruins preservation activities at Wupatki National Monument, and writing and editing chapters for the completed Ruins Preservation Plan for Wupatki National Monument. Other office work completed by AI included writing several SEPAS proposals, developing monitoring forms, updating ASMIS and other databases, and writing various reports.

Fieldwork included mapping numerous architectural features in the Citadel Ruins group at Wupatki National Monument, and the completion of mapping all front country architectural sites at Walnut Canyon National Monument. AI, along with other archeologists form the FLAG areas, Mesa Verde NP, and Navajo NM took part in an ongoing architectural documentation project of Inscription House Ruin at Navajo National Monument.

In December of 2000, AI presented a paper describing the history and decision making process in developing the VT database at the CR 2000 conference in Santa Fe. AI also served a supporting role to the VT program coordinator and assisted in overall program support. Work included assisting the program coordinator in compiling, editing, and printing the FY 2000 Year End Report, the FY 2000 Management Summary, and the FY 2000- 2001 VT poster. Finally, AI attended the 3- day Vanishing Treasures Conference held in Blanding Utah. At the conference AI facilitated a session on the Vanishing Treasures database and how parks can integrate it with ASMIS and GIS.

Fort Bowie National Historic Site

Fernie C. Nunez, Masonry Worker

Fernie, and Fort Bowie's other VT hire, Phil Tapia, were quite busy in FY 2001. Beginning in October, they began spraying and cutting mesquite sprouts from around the ruin walls at First and Second Fort Bowie. Fernie also performed stabilization work on two structures, the Post Trader's Store (HS 032), and the Cavalry Barracks (HS010).

The stabilization work performed placed most of its emphasis on the Post Trader's Building (HS035), while the Cavalry Barracks (HS010) required less stabilization work.

Work at the Post Trader's Building (HS035) included removing failing plaster coats that had been applied beginning in 1988. These layers of plaster are now too thick (up to 4") and no longer securely adhered to the walls of the structure. These plaster layers are now beginning to fall off in square- yard sections, exposing original adobe fabric. Once the failing plaster coats were removed, an unamended mud layer was applied over the original adobe to fill- in uneven areas so that there would be a smooth surface to apply additional plaster coats. After this initial application, two thin layers of unamended lime plaster consisting of a scratch coat and a finish coat were applied to the wall. These coats of plaster were then covered with a breathable lime whitewash that was then covered over with a soil wash to tint the surface. The stabilization work performed at the Calvary Barracks (HS010) was similar in nature to the work performed at the Post Trader's Building, but less extensive.

Training

In October 2000, Fernie attended the 3- day Vanishing Treasures Conference held in Blanding, Utah. From July 16- 21, 2001, Fernie also attended the Seventh Annual International Earthen Architecture and

Lime Plaster Workshop in Hidalgo del Parral, Chihuahua, Mexico.

Mesa Verde National Park

Willie Begay, Kee John and Neill Smith, Masonry Workers

Willie Begay, one of our VT Masonry Workers, retired May 3, 2001. Neill Smith was hired in August to fill the vacant VT Masonry Worker position. Neill had been working with the stabilization crew on a term appointment WG- 5 since 2000. Neill came to Mesa Verde after a season working at Tuzigoot, Montezuma Castle and Tonto National Monuments in Arizona. Prior to that he had worked for the Forest Service and numerous National Parks doing biology/fire and trail projects. He worked at Chiricahua National Monument on a trail crew in the winter/spring of 2000/2001.

Willie Begay, Kee John and Neill Smith worked on the following projects this season.

Housekeeping

Typical maintenance activities were undertaken at several Front Country sites. Work included closing the sites in the fall in order to paint ladders, spread mothballs, lower curtains, etc., as well as opening the sites in the spring which entails raising curtains, removing vegetation, sweeping, and assessing condition.

Preservation Maintenance

Ruins preservation work was undertaken on several key front country sites at Mesa Verde during FY 2001. At Cliff Palace, the second season of repairing the visitor trail in the alcove continued. The Portland cement trail is being removed and replaced with a soil cement trail and packed dirt trail. At

Spruce Tree House, the water diversion system above the alcove was improved, and the three- story wall at the north end of site was stabilized.

Stabilization efforts also took place at Square Tower House, where one kiva and the two- story wall at the north end of site received stabilization work. Work continued at Far View House as the crew repointed walls in this unsheltered site.

Post Fire Site Preservation Activities

Due to the fire in 2000 and the resulting damage to several archeological site shelters on Wetherill Mesa, several weeks were spent in the fall of 2000 putting up temporary curtains, making temporary repairs to the roofs/skylights, checking to make sure these fragile earthen sites were not being impacted by leaking roofs, etc.

Backcountry Sites

The entire crew worked on Lancaster House for two weeks repointing portions of approximately six rooms.

Projects at Other Parks & Monuments

The crew spent three weeks at Grand Staircase National Monument stabilizing five sites in the monument. At Hovenweep National Monument, the crew spent three weeks repointing walls at Horseshoe and Hackberry Units. Work was completed at Horseshoe and only a few more days are needed to complete work at Hackberry.

Training

Willie and Kee, with the rest of the preservation crew attended and participated in the Vanishing Treasures Workshop in Blanding, Utah in early October 2000.

Navajo National Monument

Melissa Memory, Archeological Technician

Melissa Memory joined the staff of Navajo National Monument in January 2001, and since her arrival, she has been instrumental in completing and/or coordinating several projects for Navajo National Monument. Melissa conducted an archeological survey of the Headquarters Unit with Volunteers in the Park, coordinated collections reporting, entered collections data into the Automated National Catalog System (ANCS+), and coordinated the C+ Dimensions for 3D photogrammetric recording at Kiva Cave. Other work Melissa also assisted with include the Monument's General Management Plan and GPRA reporting. Other accomplishments include the coordination of the GIS and geology project and assisting with the condition assessment and architectural recording work at Inscription House.

Melissa, with the assistance of Gwen Gallenstein, brought the Monument up to date in its collections reporting. Melissa's work in collections is vital to the continuation of an archives integration of all resource work conducted at the Monument over the past 100 years. Other work Melissa has performed includes submitting funding proposals, preparing site records for entry in ASMIS, monitoring sites in the Betatakin, Keet Seel and Inscription House Units, and conducting public programming for visitors and school groups. This coming season Melissa will continue fieldwork at Inscription House and begin work at Turkey Cave, Snake House and Owl House.

Training

Soon after arriving at Navajo National Monument, Melissa went to Mesa Verde

National Park to receive training in conducting condition assessments and recording architectural features. Melissa also attended training sessions in ANCS+ held at the University of Texas in San Antonio to further assist the Monument in collections management.

Salinas Pueblo Missions National Monument

Ramona Lopez, Masonry Worker

Ramona was involved in numerous stabilization and preservation projects in FY 2001. The primary projects involved the re-pointing, capping and documentation of the Abo Mission and convento, Quarai Mission and convento, and San Buenaventura Mission II, Kiva J, and five pueblo mounds at Gran Quivira. Ramona also completed extensive vegetation removal at all three units of the Monument. Vegetation control is a crucial preservation action at Salinas due to the destabilization caused by intrusive roots and heavy fuel loads that could cause a catastrophic fire. Ramona completed daily written and photographic documentation of all work completed in FY01. Ramona also played an important role in completing daily work logs and inventorying stabilization equipment.

Although Ramona spent most of her time in the field, she entered information for several hundred photographs into the photographic database and mounted thousands of photographs onto archival information cards. Ramona also participated in the housing of photographic negatives into archival sleeves and binders. Finally, Ramona helped supervised a crew of eight stabilization workers throughout the FY01 season. Ramona also participated in a weeklong stabilization program at Grand Canyon National Park (GRCA). During the project, Ramona served as a

crew chief and assisted in the repointing, capping, backfilling and removal of invasive vegetation at Tusayan Ruin.

Training

In FY 2001, Ramona completed Scaffold User Awareness Training for frame scaffolding. Ramona is one of three stabilization crewmembers qualified as competent in all aspects of scaffold construction. Ramona also completed a Hazard Materials course and First Aid/CPR training. In October 2000, Ramona attended the Vanishing Treasures Conference held in Blanding, Utah.

Tonto National Monument

Miguel R. Estrada, Exhibit Specialist

Miguel continued the task of refining and implementing the parks cultural resource preservation treatment program. This program focused on preserving the significant features, components, and materials of ruin structures, without significantly altering them. The techniques and materials used in the preservation of these sites were compatible with, and duplicate the original construction methods and existing materials. The preservation treatments also included conducting condition assessments, and architectural documentation.

Miguel and park staff conducted preservation treatments to both the upper and lower cliff dwelling sites. Work on the upper cliff dwelling included treating several rooms, as well as the trail running parallel in front of the dwelling. This work entailed digging a footer alongside the trail to reset stones that had come loose and rolled down the embankment. Additional work included stabilizing steps in the dwelling, sealing numerous cracks, crevices,

and voids within numerous rooms and capping some wall tops.

Work on the lower cliff dwelling included removing a cloth barrier from one of the room's floors; repairing deteriorated wall plaster; widening the trail leading up to the dwelling by constructing a new stone wall alongside the old stone wall which was threatening to collapse; installing a new rail alongside the trail and repairing the tread on the trail surface.

Technical Assistance

Miguel advised, instructed, or provided technical assistance to the following:

Tuzigoot National Monument; The White Mountain Apache Tribe at Fort Apache, Arizona with stabilization work on Kinishba Ruins as part of a preservation workshop; provided additional support to the Preservation Program at Bandelier National Monument; assisted Fort Bowie National Historic Site with their photo documentation; coordinated, supervised and completed a final stabilization report for Saguaro National Park; participated in the regional SEPAS rating panel at Denver, CO; participated in a two- week P.A.S.T. (Preservation and Skills Training) Program project at Gulf Islands National Seashore; supervised a whitewash project at Montezuma Castle National Monument and coordinated and supervised a PAST program project at Pecos National Historical park.

In addition, Miguel attended the 3- day Vanishing Treasures Conference held in Blanding, Utah in early October 2000. Miguel is also a mentor in the P.A.S.T. Program

Tumacacori National Historical Park

David Yubeta, Exhibit Specialist

David continues to direct the preservation activities at Tumacacori, as well as the development of the park's VT Program and personnel. In FY 2001, David served as Project Leader for the conservation of original and historic mural paints and plasters in the 18th century Franciscan church. As a part of this project, David provided direction for a highly skilled workforce of conservation specialists from Europe and Mexico.

In addition to these duties, David also maintains an active working relationship with Mexico's cultural resource arm, the Instituto Nacional de Antropología y Historia, and provides project support for the mission sites at Cocospera and San Ignacio in Sonora, Mexico. David also serves as a member of the VT Advisory Committee and participates in the annual SEPAS funding committees.

Technical Assistance

David coordinated efforts at Organ Pipe Cactus National Monument in the preservation and stabilization of Blankenship Ranch and Gachado Line Camp utilizing VT personnel from Tumacacori and Fort Bowie National Historic Site. David also coordinated projects at Lowell Range stations where a major intervention was accomplished for the U.S. Forest Service, as well provided oversight for a training and preservation project at the Bureau of Land Management's Fairbank Mercantile. David continues to be involved in providing training, as well as venues for training, for various educational institutions and agencies, including the Arizona State Parks

Department, U.S. Forest Service, Bureau of Land Management, University of Sonora and the University of Arizona.

Ray Madril, Masonry Worker

Hired in FY 1998 as Tumacacori's first "dedicated" ruins preservation specialist, Ray continues to fulfill the long-term goals of the Vanishing Treasures Program. Ray has developed into a multi-skilled preservation professional who is capable of performing all aspects of the preservation process. Because of this, Ray is highly sought after by other agencies in the southwest. In FY 2001, Ray worked on multiple projects at Tumacacori. Among these were the capping of the convento wall using an unamended lime plaster, as well as lime plastering the historic granary's south wall. Additional work at the mission included beading remaining original plaster in the interior of the convento and the sacristy; repairing basal erosion on the interior of the Franciscan church; replacing badly burnt adobe bricks on the southeast corner of the sacristy. Ray also provided support in the conservation of mural artwork and plasters in the sanctuary dome.

In addition to the work at Tumacacori, Ray also performed stabilization work at other missions. This work included stabilizing the mission of Calabazas by repairing leaking roofs and capping extant ruin walls and lime plastered nichos at the mission Guevavi.

Technical Assistance/Training

True to his multi-faceted skills, Ray has provided technical assistance to many different agencies and projects. These include, the Dos Lomitas Ranch House and Gachado Line Camp project at Organ Pipe Cactus National Monument; Brown Ranch project with the U.S. Forest Service; Mission San Ignacio de Caborica- Mexico; assessment of adobe structures at Oracle

State Park and Tubac Presidio State Park, and assessment/consultation of the McElvoy adobe in Tubac, Arizona.

Ray also served as the project leader in conducting assessments at the Fairbank Mercantile with the Bureau of Land Management and at Sabino's Lowell Ranger Station with the U.S. Forest Service. Ray was instrumental in the training of 10 architectural students from the University of Sonora at Hermosillo, Mexico and 7 preservation students from Cochise College in preservation methods. Ray also provided training in lime plastering to 20 BLM volunteers at Fairbank, Arizona. Finally, Ray attended the 3- day Vanishing Treasures Conference held in Blanding, Utah in early October 2000, as well as the Seventh Annual International Earthen Architecture and Lime Plaster Workshop held on July 16- 21 in Hidalgo de Parral, Chihuahua, Mexico.

Accomplishments of Personnel Hired in FY 1999 (Work Accomplished in FY 2000)

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

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 Caste/Tuzigoot National Monuments (2 positions)
Salinas Pueblo Missions National Monument (1 position)
San Antonio Missions National Historical Park (1 position).

Like the staff members hired using FY 1998 funding, all of the individuals hired in FY 1999 contributed greatly to addressing their park's backlog ruins preservation needs. With this cadre of professionals, significant

progress is being made toward achieving the primary goal of the Vanishing Treasures Program. Brief summaries are presented below of the work accomplished in FY 2001, by the individuals hired in FY 1999.

Bandelier National Monument

Angelyn Rivera, Architectural Conservator

Angelyn began her appointment as Bandelier's VT Program Director on January 18, 2000. Angelyn's accomplishment in FY 2001 included supervising VT projects, defining program goals and leading field school training Site Conservation and Heritage Management.

This field school was held from June-August and focused on developing practical experience in the stabilization and management of cavate structures, with the long- term goal of developing a preservation plan for the sites. This training program brought together Native American students from the Pueblos of Cochiti, San Ildefonso and San Juan, as well as an intern from the Museum of New Mexico from the Pueblo of Santo Domingo, and a seasonal Exhibits Specialist.

In addition to organizing the field school, Angelyn conducted graffiti mitigation in three cavates on Tsankawi Mesa. This included obscuring modern graffiti incised into the earthen plasters and soot- covered tuff by infilling and inpainting these areas with earthen materials and mineral pigments. Similar mitigation treatments were tested and implemented in 1998, 1999, and 2000 and have proven effective at deterring new graffiti.

In 2001, Angelyn conducted a condition assessment at Tyuonyi ruin, a 14th century pueblo located in Frijoles Canyon. The

purpose of this assessment was to identify high priority areas needing stabilization work in 2002. The condition assessment included conducting archival research into the history of excavation and preservation of Tyuonyi ruin; creation of a condition assessment form and Access database; cutting weeds obscuring the walls; completing digital photography; inspection and measurements of each wall and completion of a written condition assessment form followed by database entry.

Angelyn, along with Bandelier's other VT hire Mary Slater, conducted emergency masonry stabilization on walls at Tyuonyi ruin and Big Kiva. They also met with VT Structural Engineer, Preston Fisher, to discuss the implementation of crack monitors at Talus House.

Technical Assistance/Training

During FY 2001, Angelyn was active in providing preservation assistance and training to other VT parks and local preservation organizations. Angelyn assisted Salinas Pueblo Missions National Monument with drainage and backfill issues at Gran Quivira and Abo Mission, and worked with the IMSO- Santa Fe, at Canyon de Chelly National Monument in designing a backfilling strategy, as well as assisting in stabilizing earthen plasters in two kivas at Antelope House. In addition, Angelyn assisted Mesa Verde National Park in training their new Architectural Conservator in documentation and plaster stabilization, as well as assisting the IMSO with stone cleaning at Arches National Park. She also attended Program Management training, an Archeological and Historic Site Shelters Colloquium, Hazardous Communications training and Dupont Safety training. Finally, Angelyn attended the 3- day Vanishing Treasures Conference held in Blanding, Utah in early October

2000, and completed a DOI class in grant writing.

Mary E. Slater, Exhibit Specialist

Mary started at the end of October 1999, before supervisor Angelyn Rivera was hired the following January. During FY 2001, Mary was quite busy supporting VT Program activities and projects including conducting condition assessments and emergency stabilization work, as well as leading a training program in Site Conservation and Heritage Management.

Beginning in June, Mary led the training program that focused on developing practical experience in the stabilization and management of cavates structures, along with the long- term goal of developing a preservation plan for the sites. This training program brought together Native American students from the Pueblos of Cochiti, San Ildefonso and San Juan, as well as an intern from the Museum of New Mexico from Santo Domingo Pueblo, and a seasonal Exhibits Specialist. In addition to organizing the field school, Mary conducted graffiti mitigation in three cavates on Tsankawi Mesa. This included obscuring modern graffiti incised into the earthen plasters and soot- covered tuff by infilling and inpainting these areas with earthen materials and mineral pigments. Similar mitigation treatments were tested and implemented in 1998, 1999, and 2000 and have proven effective at deterring new graffiti.

Additional work performed by Mary included conducting a condition assessment at Tyuonyi ruin, a 14th century pueblo located in Frijoles Canyon. The purpose of this assessment was to identify high priority areas needing stabilization work in 2002. As part of this assessment, project activities included conducting archival research into the history of excavation and preservation of Tyuonyi ruin; creation of a condition

assessment form and Access database; cutting weeds obscuring the walls; completing digital photography; inspection and measurements of each wall and completion of a written condition assessment form followed by database entry. As a product of this project, Mary wrote a paper on the condition assessment of Tyuonyi ruin that was accepted for presentation at the 2002 Facility Manager's Conference.

Mary, along with fellow VT hire Angelyn Rivera, conducted emergency masonry stabilization on walls at Tyuonyi ruin and Big Kiva. They also met with VT Structural Engineer, Preston Fisher, to discuss the implementation of crack monitors at Talus House.

Technical Assistance/Training

During FY 2001, Mary was active in providing preservation assistance and training to other VT parks and local preservation organizations. Mary assisted Salinas Pueblo Missions National Monument with drainage and backfill issues at Gran Quivira and Abo Mission, and worked with the IMSO- Santa Fe, at Canyon de Chelly National Monument in designing a backfilling strategy, as well as assisting in stabilizing earthen plasters in two kivas at Antelope House. Mary also assisted in evaluating test mortars at Lizard House at Chaco Culture National Historical Site and worked with an objects conservator at the Museum of New Mexico Conservation Laboratory to analyze an unknown soil contaminant from Gran Quivira.

Mary received training in masonry stabilization by assisting with the stabilization of a historic stone privy at Grand Canyon National Park. She also attended Program Management training, an Archeological and Historic Site Shelters Colloquium, Hazardous Communications

training, Dupont Safety training and the annual Fire Refresher. Finally, Mary attended the 3- day Vanishing Treasures Conference held in Blanding, Utah in early October 2000.

Chaco Culture NHP

Rachel Anderson, Archeologist

Rachel's accomplishments in FY 2001 include the continued development of a standardized format to document VT resources and treatments, and development of electronic methods to store and track compiled documentation

In December, Rachel organized a scoping session to review the mortar test studies conducted at four sites in Chaco. Dennis Fenn started the mortar tests in the mid-1970's, and Chaco is now working with him to complete analysis and a final report of the study. Mary Slater of Bandelier National Monument, and Jake Barrow, Jim Trott, and Bob Hartzler of the Santa Fe Support Office attended the scoping session organized by Rachel. During the session the group discussed several issues including, other possible testing that could be done on the sample mortars, the type of documentation needed to continue the monitoring of the test panels, and whether the park should continue the study. The group decided to visit the sites involved in the study, take photographs and samples of the test mortars, and assist in writing a final report of the study.

Rachel also oversaw the re- identification, condition assessment, mapping, and documentation of 75 sites in the park as part of two different projects. The first project required the relocating, assessing, mapping and documenting 40 sites that are in the area of a proposed erosion control project at Pueblo del Arroyo. The remaining 35 sites

were assessed and documented as part of the WASO GPRA call for ASMIS condition assessment data accuracy.



Chaco Culture Preservation Crew working at Lizard House, a small ancestral pueblo site, Chaco Culture National Historical Park, NM.

and rescue incident in the park. Rachel learned how search and rescue operations are organized, and will apply this knowledge to minimize impacts to cultural resources in future search and rescue operations.

In order to more fully understand and use the ASMIS database, as well as to construct other customized databases for storing and tracking preservation treatment documentation, Rachel took a Database Management class at San Juan College. During the semester-long course, Rachel learned Microsoft Access programs and constructed Chaco's new Preservation Documentation Database that will be used to track preservation treatment photos and documents.

Training

In October 2000, Rachel attended the Vanishing Treasures Conference in Blanding, Utah. In March, Rachel attended the Introduction and Overview of Outdoor Recreation Guidelines training organized by the National Center on Accessibility. During this training she learned accessibility laws and regulations, and will apply that knowledge to the interpreted VT structures at Chaco. As part of the process to make the interpreted sites accessible, Chaco hosted a 2-day working session to assess the sites and develop solutions to make the sites accessible while maintaining the character of the sites.

Rachel also attended a New Mexico State Police Search and Rescue Incident Commander Training session. Rachel was sent to this training after Chaco had a search

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

This year Jack, Leo, and Paul, along with James Yazzie (new 2001 VT hire) and other member of the park's preservation crew, had a very demanding schedule during FY 2001. They used most of the fall and early winter completing backfilling work at Kin Kletso and boundary fencing at the Kin Bineola unit. In mid to late winter, the staff worked both in the dark room developing the preservation photographs, and with the preservation clerk labeling these records and compiling the written architectural and preservation treatment forms. In early spring, they compiled condition assessments on approximately 50 sites in the active treatment program, identifying any changes in condition that occurred over the winter and updating the records.

By mid- spring, when temperatures permitted, capping and vertical wall repointing treatments began at Kin Bineola and Rabbit Ruin. In early summer, they completed a treatment project at an early Dinetah Phase pueblito in Delgadito Canyon for the BLM Farmington Resource Area, and at Guadalupe Ruin, a Chaco greathouse in the BLM Rio Puerco Resource Area. Back in the park, for the remainder of the summer, the crew repaired capping and vertical wall mortars at Wijiji, Pueblo Bonito, Pueblo del Arroyo, Pueblo Pintado and Penasco Blanco. The VT project to backfill Lizard House completed the year's work for the crew.

Training

In October 2000, the preservation crew attended the Vanishing Treasures Conference in Blanding, Utah. The crew also attended a Skid Loader safety training held at Aztec Ruins National Monument. The crew received training in what safety equipment should be stored on a bobcat loader, how to safely operate a loader around people and sites, and how to work safely in an area where a loader is being used. Other safety training that the crew attended along with staff from Aztec, focused on how to develop, write, and use Job Safety Analyses for Chaco's preservation program.

The crew also attended Scaffolding and Historic Preservation training in Philadelphia, Pennsylvania. During the course of this training, the crew visited several historic sites and learned how other parks and preservation specialists use scaffolding, as well as what types of preservation treatments are used in the historic buildings in the Philadelphia area. The crew also attended a Multi- ethnic Workforce Training session hosted by Mesa Verde National Park. As a result, the crew

recommended that Chaco should host a similar training session, to learn more about how to work effectively in a culturally diverse workforce.

El Malpais National Monument

Jim Kendrick, Archeologist

Jim started work at El Malpais National Monument on June 19, 2000. In May 2001, Jim received his Ph.D. in Anthropology from Southern Methodist University. His dissertation focused on the dynamics of household economy and Chaco - style great house development in the Lowry area of southwestern Colorado.

As well as serving as the only archeologist for El Malpais, Jim also serves two other parks, El Morro National Monument and Petrified Forest National Park. At each of these places, Jim supervised and coordinated various VT projects during FY 2001. At El Malpais, the major focus was on the Garrett Homestead, a Dust Bowl era homestead included on the List of Classified Structures. Once complete documentation of all standing architecture was completed, condition assessments were made, and following consultation with the New Mexico State Historic Preservation Office, treatments with natural, unamended mud mortar began in September.

At El Morro National Monument, Jim oversaw the first application of what will be annual routine maintenance at Atsinna Ruin. Two walls that had been repointed in 2000, were repointed with unamended mud mortar. Finally, at Petrified Forest National Park, Jim and his crew provided assistance by completing an erosion control project at the park's largest VT resource, Puerco Ruin. The drainage was improved at this ruin, and VT related work will continue in FY 2002.

Along with directing the tri- park VT program, Jim received training in NEPA and Section 106 of the NHPA, ARPA, and was one of only 24 new employees service- wide chosen to take the first NPS Fundamentals course.

Flagstaff Area National Monuments

Lloyd Masayumptewa, Archeologist

In FY 2001, Lloyd completed his graduate studies and earned his Master of Arts Degree in Anthropology from Northern Arizona University (NAU) in May. Upon his graduation from NAU, Lloyd was promoted to a full performance archeologist position for the Flagstaff Areas.

Lloyd's duties included leading a seasonal crew in mapping various features of the Citadel Ruin at Wupatki National Monument. Features mapped included terrace walls, circular enclosures, room blocks, rock alignments, and other features. The mapped features will be incorporated into an overview map of Citadel ruin, which will provide a better picture of the spatial layouts of features in and around the Citadel area.

Lloyd was also actively involved in supervising and training the FLAG Area preservation crew on ruins preservation techniques at the South Unit of Wupatki Pueblo. Stabilization repairs on the South Unit consisted of repointing eroded mortar joints, resetting capstones, cleaning out and sealing rodent burrows and holes, removing vegetation, cleaning drains, and improving water drainages within and around the ruin.

In September, Lloyd was involved in an ongoing documentation project at Inscription House in Navajo National Monument. Crews from Mesa Verde NP,

Flag Areas, and Navajo NM joined forces for an 8- day session to continue architectural documentation at Inscription House.

In October 2000, Lloyd attended the 3- day Vanishing Treasures Conference in Blanding, Utah. In the summer of 2001, Lloyd attended Archeological Resources Protection Act (ARPA) training. Lloyd's training will be used to assess potential ARPA violations on architectural sites found in Wupatki and Walnut Canyon National Monuments.

In FY 2002, Lloyd will focus on writing a completion report for the stabilization work performed at Wupatki. He will also assist in the survey of Walnut Canyon National Monuments newly acquired lands. In addition, Lloyd will also contribute to the development of a three- week Ruins Preservation workshop for Hopi and Zuni youth. This training will be held during the summer 2002. Lloyd will also continue to work on ruins preservation activities including stabilization work at Wupatki Ruin and sites at Walnut Canyon National Monument, as well as continued architectural documentation of ruin sites.

Fort Bowie National Historic Site

Phil Tapia, Masonry Worker

Phil, and Fort Bowie's other VT employee, Fernie Nunez, were quite busy in FY 2001. Beginning in October, they began spraying and cutting mesquite sprouts from around the ruin walls at First and Second Fort Bowie. Phil also performed stabilization work on two structures, the Post Trader's Store (HS 032), and Cavalry Barracks (HS010).

The stabilization work performed placed most of its emphasis on the Post Trader's Building (HS035), where Phil served as Lead Supervisor. The work on the Cavalry Barracks (HS010) required less stabilization work.

Work at the Post Trader's Building (HS035) included removing failing plaster coats that had been applied beginning in 1988. These layers of plaster are now too thick (up to 4") and no longer securely adhered to the walls of the structure. These plaster layers are now beginning to fall off in square- yard sections, exposing original adobe fabric. Once the failing plaster coats were removed, an unamended mud layer was applied over the original adobe to fill in uneven areas and to provide a smooth surface to apply additional plaster coats. After this initial application, two thin layers of unamended lime plaster, a scratch coat and a finish coat, were applied to the wall. These coats of plaster were then covered with a breathable lime whitewash that was then covered over with a soil wash to tint the surface. The stabilization work performed at the Calvary Barracks (HS010) was similar in nature to the work performed at the Post Trader's Building, but less extensively. Phil was also responsible for ordering materials and project documentation. From May 7- 11, 2001, Phil assisted with the Blankenship Ranch Roof Repair Project at Organ Pipe Cactus National Monument.

Training

From July 16- 21, 2001, Phil attended the Seventh Annual International Earthen Architecture and Lime Plaster Workshop in Hidalgo del Parral, Chihuahua, Mexico. Phil also attended the 3- day Vanishing Treasures Conference held in Blanding, Utah in early October 2000.

Montezuma Castle and Tuzigoot National Monuments

Ruben Ramirez and Alex Contreras, Masonry Workers

The Vanishing Treasures Program at Montezuma Castle and Tuzigoot National Monuments continues to provide the parks with a stabilization and restoration effort that is proving consistent and progressive. In FY 2001, the permanent staff of Ruben Ramirez and Alex Contreras was augmented by a seasonal team of Lori Thwaite and Greg Anderson, funded through the Cultural Cyclic Program. The VT staff has been removing the hard mortar from the structures, salvaging all structurally sound stone, and replacing the mortar with a softer and less impervious soil cement mix, while using new stone to replace those that have deteriorated. Visually, the end product more closely approximates a soil and stonewall in terms of color, texture and consistency. The completed work has received many positive comments from park visitors and staff.

For the fiscal year ending September 30, 2001, the crew had repointed 1139 square feet of wall, replaced 467 square feet of deteriorated stone surface, repaired 300 lineal feet of wall basal structure, and in conjunction with a Preservation Skills Training Program (P.A.S.T.) project, recapped 63 lineal feet of wall cap. In addition, Ruben, Alex and the preservation crew were able to maintain vegetation levels within the ruins at a point that will continue to discourage rodent activity.

Alex is currently completing the final year in the Preservation Skills Training Program (P.A.S.T.), and participated in training sessions at Gulf Islands National Seashore, Pecos National Historical Park, Fort Clatsop, and Kinishba National Landmark

(White Mt. Apache Tribe). Information he brings from the P.A.S.T. Program is being used by both he and Ruben to improve the performance of stabilization efforts at Tuzigoot. Ruben also participated in a special P.A.S.T. Program project held at Tuzigoot to define and test methods used to cap wall tops. As a result of the work done by Ruben, Alex and the preservation crew, the Vanishing Treasures program is now considered by park staff and management to be the most beneficial approach to the preserving the park's resources in many years.

Salinas Pueblo Missions National Monument

Philip W. Wilson, Archeologist

Phil continues to direct the preservation program at Salinas, overseeing treatment projects as well as the associated planning, compliance, and documentation activities. This year, Phil focused on organizing and compiling the preservation history of the park, assembling an interdisciplinary team to review the park's preservation strategies, and increasing program safety (adding and/or updating Job Hazard Analysis sheets and safety protocols). Specific projects Phil has worked on include, writing preservation funding proposals, developing short and long- range preservation plans and coordinating training for the preservation crew (First Aid, Hazardous Communications, and Scaffold Use).

Phil also worked with Amy Horn, from Grand Canyon National Park (GRCA), to continue an informal preservation training program that was initiated between the two parks the previous year. This year, the Salinas crew traveled to Grand Canyon National Park and assisted GRCA archeologists in the implementation and documentation of preservation treatments

at Tusayan Ruin. Phil also organized a park-based Advisory Team to provide management and preservation treatment recommendations to Coronado State Monument, and along with the preservation crew, performed preservation maintenance and documentation throughout Abo, Quarai, and Gran Quivira Missions.

Training

Phil presented a paper at the annual SAA meetings this year and attended training courses on NEPA/Section 106 Compliance, Wildland Fire, Supervision, and Adobe Preservation. Phil also served on the Vanishing Treasures SEPAS panel to prioritize VT project funding for fiscal 2002 and is currently serving as the Chairman of the VT Career Development Workgroup. In addition, he conducted a training session on fall protection and scaffold use at the annual Vanishing Treasures Conference in Blanding, Utah in October 2000.

San Antonio Missions National Historical Park

Susan Snow, Archeologist

In FY 2001 Susan Snow performed a variety of duties including filling in as Acting Chief for the Professional Services Division, managing the curatorial facilities for artifact collections, as well as monitoring park development projects, documenting structures, and report writing.

In January 2001 Susan assumed responsibility for the artifact collections at the park and has been working closely with the curator at University of Texas, San Antonio's Center for Archeological Research (UTSA- CAR) in order to begin entering the large amount of collections from the park that are stored at UTSA- CAR. Susan will be entering the collections

data into the Automated National Catalog System (ANCS+). Of particular focus so far has been the continued processing of materials from the 1983 excavations of the Post-Colonial "Tufa" House. Materials from the 1981 excavations of the Grape Arbor at Mission San José have also been completely cataloged and restored in appropriate archival materials. Both of these excavations were conducted in conjunction with stabilization projects.

Susan has been editing archaeological reports for contracted monitoring and testing projects as well as report writing for field projects. She also helped complete editing of the Post Colonial "Tufa" House, Mission San Juan Historic Structure Report.

Documentation projects for FY2001 include documentation of the Spanish Colonial wall uncovered at the grist mill at Mission San José; photo- documentation of WPA- era or earlier walls discovered underneath the amphitheater at Mission San José; as well as photo- documentation of the west wall at Mission San José. The lime kilns at Mission Espada were relocated and photo- documented in coordination with a preliminary plan for stabilization. AutoCAD Map was purchased with year- end monies to further augment the park's documentation program.

Field projects for FY 2001 include monitoring repointing at the "unfinished church" at Mission San Juan as part of the stabilization project. Other field projects include monitoring installation of a fire line and conduit outside the west wall at Mission San José. Susan has also photo- documented disturbance/vandalism at the San Juan acequia, the Espada acequia, and the Espada Aqueduct.

Training

In FY 2001 Susan participated in the Vanishing Treasures Conference in Blanding, Utah. She also attended Contracting Officer Technical Representative Training in June 2001. Susan also organized ANCS+ training in San Antonio for park staff, staff from UTSA-CAR, and staff from other parks in the Intermountain Region.

Personnel Hired in FY 2000 (Work Accomplished in FY 2001)

In FY 2000, \$795,000 was provided to nine parks to recruit and train 13 individuals. Benefiting parks included:

El Malpais National Monument (1 position)
Flagstaff Area National Monuments (1 position)
Fort Davis National Historic Site (2 position)
Grand Canyon National Park (1 position)
Mesa Verde National Park (4 positions)
Navajo National Monument (1 positions)
Salinas Pueblo Missions National Monument (1 position)
San Antonio Missions National Historical Park (1 position).
Tumacacori National Historical Park (1 position)

Brief summaries of the accomplishments of these individuals are presented below.

El Malpais National Monument

Calvin Chimoni, Masonry Worker

Calvin Chimoni was hired as the VT Masonry Worker for El Malpais in FY 2000. Calvin is a member of the Pueblo of Zuni and is trained in traditional Zuni masonry and plastering techniques. Calvin was previously hired through a SCEP appointment, and is now a permanent, full-time employee of the National Park Service. He has focused much of his efforts on developing natural, non-amended mortars for use in Vanishing Treasures sites.

During this past year, Calvin also assisted in conducting condition assessments of masonry architecture at the Garrett Homestead in El Malpais National Monument. Once complete documentation of all standing architecture was completed, condition assessments were made, and following consultation with the New Mexico State Historic Preservation Office, treatments with natural, unamended mud mortar began in September.

Calvin also performed stabilization work at El Morro National Monument and Petrified Forest National Park. At El Morro, Calvin assisted in the first application of what will become annual cyclic maintenance at Atsinna Ruin. Two walls that had been repointed in 2000 were repointed with unamended mud mortar. At Petrified Forest National Park, Calvin assisted in completing an erosion control project at the park's largest VT resource, Puerco Ruin, improving the drainage at this site.



Calvin Chimoni repointing eroding masonry joints in Atsina Pueblo, El Malpais National Monument, NM.

In October of 2000, Calvin attended the Vanishing Treasures Conference held in Blanding, Utah. Finally, in FY 2001 Calvin received safety training by taking the OSHA 600 Collateral Duty course. In addition to his duties at El Malpais, Calvin will continue to assist in VT related work at other parks during the FY 2002.

Flagstaff Area National Monuments

Lyle Balenquah, Archeologist

In FY 2001, Lyle was active performing various activities related to ruins preservation in addition to maintaining a full academic schedule in graduate studies at Northern Arizona University (NAU). Lyle served as the crew leader for a mapping project conducted at Walnut Canyon National Monument that was successful in producing both a planview and profile images of WACA 161. These maps were produced to replace older maps that were outdated, and will be used to help track any future changes to the structure.

Other duties that Lyle accomplished include the continued architectural documentation and mapping of ruin sites located within Wupatki National Monument. These on-going documentation projects were successful in collecting much needed baseline data about sites that had little or no information concerning their construction styles and materials. Additionally, Lyle assisted in the on-going monitoring of sites located in the backcountry of Wupatki National Monument. This information will be used to assist in the development of appropriate

protection and preservation methods for these sites.

In conjunction with his academic activities and his training in ruins preservation, Lyle undertook a joint internship between the National Park Service (NPS)- Flag Areas, and the Hopi Cultural Preservation Office (HCPO), as a requirement for his Masters Degree. Lyle's internship focused on the completion of two related tasks. The first task was assisting in the writing of a Ruins Preservation and Implementation Guidelines for Wupatki National Monument. These guidelines will outline how the ruins preservation process will be carried out for at least the next 10 years at ruin sites located in Wupatki National Monument.

The second task Lyle completed as a part of his internship was in the presenting of the Ruins Preservation Guidelines to the HCPO staff and then soliciting their comments, concerns and inputs. He then compiled this information, and incorporated it into the Guidelines. This information represents traditional Hopi beliefs about ruin structures and outlines how the Hopi Tribe feels these ruins should be interpreted, protected and preserved. Lyle is continuing to work on collecting comments and input from the 10 Native American tribes affiliated to Wupatki National Monument.

In FY 2002, Lyle will continue to work on ruins preservation activities and architectural documentation of ruin sites. In addition, Lyle will be completing his graduate studies at NAU and anticipates receiving his Masters Degree in Anthropology in May 2002.

Fort Davis National Historic Site

Jeffrey Rust, Archeologist

Jeffrey began working for the park in July 2000. He has both a B.A. and M.A. in Anthropology (archaeology emphasis) and over six years archaeological/cultural resource experience. His accomplishments in FY 2001 include setting up and directing the Cultural Resource Division and Historic Preservation Program at Fort Davis NHS.

Over the past 40 years, historic preservation has been accomplished through the maintenance division or through the former Southwest Region's Ruins Stabilization Crew. The Maintenance Division has done a good job at preservation of the site, but because ruins stabilization and preservation were just one of many duties for the division, stabilization or maintenance on many of the ruins has been continually deferred. The Historic Preservation Program as part of the Cultural Resource Division at Fort Davis now has the advantage of focusing solely on historic ruins preservation and stabilization.

Jeff's accomplishments also include supervising the Curation Program, completing Section 106 and NEPA compliance for all projects at Fort Davis, assisting in the finalization of the Park's General Management Plan/EIS, preparing and presenting public workshops/lectures on historic adobe preservation, and preparing an historic preservation plan/Cultural Resource Management Plan for Fort Davis.

Training

Jeffery attended the Vanishing Treasures Conference that was held in Blanding, Utah in early October 2000.

Linda Richards and Rogelio (Roy) Cataño, Masonry Workers

Linda and Roy completed adobe stabilization projects on four historic

buildings. Roy and Linda, overseeing two seasonal masonry workers, capped and mudded the exposed adobe walls of a non-commissioned officers' quarters (HB- 19), the post band barracks (HB- 24), the post guardhouse (HB- 30), and one of the officers' kitchens (HB- 275).

For each building they prepared adobe brick caps by matching the color of the modern adobe with the color of the historic adobe and preparing brick molds to the same dimensions as the historic bricks. The walls were capped with the replacement adobe bricks and mud mortar was used to tie the modern bricks into the historic adobe wall. Heavily eroded adobe walls were covered with a mud veneer to protect the historic material. The mud veneers were then scored with joint lines and filled with mortar to visually mimic the original brick pattern of the wall. Eroded portions of the stone foundations of the buildings were repointed with lime mortar.

Roy and Linda also applied a wood preservation treatment (linseed oil, paraffin wax, and turpentine) to historic wood joists and boards in one of the enlisted men's barracks (HB- 26) and one officer's quarters' (HB- 15).

Use of Lapse Salary

Lapsed salary was used to purchase supplies and equipment and to fund seasonal masonry preservation crews. Vanishing Treasures funds were also used to hire an archaeological aid for three months who prepared plan and profile drawings of the four ruins to be treated. The archaeological aid also prepared drawings of several other adobe ruins/buildings in preparation for preservation treatments in the future.

Grand Canyon National Park

Amy Horn, Archeologist

Amy started as the Grand Canyon VT Archeologist in September 2001. During the past year, she performed a variety of duties for the Grand Canyon VT program including research, report preparation, database maintenance, VT program direction and project supervision.

Over the winter, Amy researched Grand Canyon's stabilized sites at WACC, Arizona State Museum, and Grand Canyon National Park Museum Collections. Data collection was focused on identifying and documenting past treatments at the sites. She also oversaw an existing contract with Northern Arizona University for VT assessments

During the summer, much of Amy's time was spent overseeing the assessment, documentation, and treatment of Tusayan Ruin. Her tasks included research and documentation of previous stabilization efforts at the site, preparation of a comprehensive report detailing the site's history and making treatment recommendations, and supervision of the assessments, documentation, and treatment at the site. The project also required the negotiation and letting of a contract for detailed mapping at Tusayan Ruin and other sites.

Throughout the year, Amy directed additional VT work at sites in the inner canyon and the South Rim. This work involved supervision of park staff and volunteers completing assessments and documentation at stabilized and pristine sites. Further, Amy arranged for emergency documentation at a VT resource impacted by wildland fire.

Amy is also responsible for database maintenance at the park. This includes management of the VT database, ASMIS database, and GRCA site database. This year Amy assisted with the development of a new Grand Canyon site form and began an effort to integrate that form with ASMIS using the Park Plug- In Module. Amy also wrote SEPAS proposals and prepared year- end reports for VT and other park projects. Other duties included assisting with the Grand Canyon Field Institute Hands- On Archaeology course, serving as a resource advisor on wildland fires, and continuing to oversee the Prescribed Fire Section 106 compliance program while that position remains vacant.

Training

Amy attended the Vanishing Treasures Conference in Blanding, Utah in October 2000. Amy also attended a 3- day workshop on historic masonry preservation, taught by RESTORE, in Seattle, Washington. Participants learned how to analyze historic mortars and select compatible stabilization mortars. Amy also received training in Wilderness Advanced First Aid and Fall Protection at Grand Canyon National Park. In March, Amy presented papers at the George Wright Society and Society for American Archaeology meetings.

Mesa Verde National Park

Don Corbeil, Historical Architect

Don has been working on both backcountry and front country archeological site documentation for sites within and outside of Mesa Verde National Park (MEVE). His work involves both a field component (documentation and condition assessment) and lab work (development of architectural drawing sets for each site). In 2001, his involvement in this has been ongoing at

Lancaster House, Spruce Tree House, Spring House, and several Soda Canyon sites affected by the Chapin V burn in 1995.

Currently we have completed the architectural drawing sets for Soda Canyon sites 5MV 544, 542, and 548, and for approximately 50 percent of the work planned at Spruce Tree House, as well as 30 percent of the work planned at Spring House. Fieldwork at Lancaster House was completed this fall, and we will be converting all of the architectural data for these sites into an AutoCAD format during the winter of 2001/2002. A database linkage between the drawings and tabular data has been done on site 544, and is currently underway for sites 542 and 548. All the completed level 1 sites are designated to have database linkages as part of the final product.

In addition to assisting field crews with site documentation at Spring House, Don has developed and written a condition assessment report as a result of a walkthrough conducted along with Larry Nordby and VT Structural Engineer, Preston Fisher in June 2001. As a consequence of that report, Don has organized and implemented a monitoring program at Spring House to understand and mitigate structural damage occurring as a result of environmental factors (namely hydrology). The goal of the project will be to gather environmental and architectural condition data, then integrate this data into the Park's GIS environment, and use this information to monitor the processes that are causing damage to the site. With this information, an effective long- term stabilization plan can be developed to protect this valuable archeological site.

In addition to these projects, Don's architectural staff has finished the "Site Conservation Program Graphical Standards Guideline". This guideline outlines and

explains in detail, the graphical methods and procedures used at MEVE. These procedures range from the design of the layering module, to the linking of the tabular database, to our digital drawing sets. This illustrated guideline is under continual refinement. This manual is important in that it allows us to leave a detailed record of our methods and procedures, so that anyone who is interested in creating this type of program has the information to do so.

Cynthia Williams, Archeologist

During FY 2001, Cynthia spent much of her time supervising a crew of three archeologists and three photographers for Mesa Verde's Archeological Site Conservation Program (ASCP). Cynthia directs record management for the ASCP in coordination with archivist Paul Rogers. This work includes storing and caring for original documents, as well as entering and maintaining the digital versions of the work. Cynthia also spent part of FY 2001, training new employees within the ASCP in the use of the data collection forms and the Access Database for multi-level architectural and archeological projects.

Technical Assistance

During FY 2001, Cynthia consulted with other parks on issues related to resource and database management. Cynthia worked with Grand Canyon National Park, Navajo National Monument, Canyon de Chelly National Monument, and Salinas Pueblo Missions National Monument. Cynthia also provided assistance in coordinating data collection and management efforts of cooperating associates; including Sally Cole on prehistoric art, Fred Blackburn on Historic Inscriptions, and the University of Pennsylvania on Plaster conservation and condition assessment.

In addition, Cynthia participated in the Vanishing Treasures Architectural Documentation Project at Inscription House, at Navajo National Monument.

Rebecca Carr, Exhibit Specialist (Conservator)

After two attempts to hire a conservator in 2000, the park was finally successful in 2001. Rebecca Carr was hired as a term, GS- 7, exhibit specialist (conservator) position and came on duty June 3, 2001. Rebecca has an undergraduate degree in Anthropology and art from the University of Delaware and is now getting her degree in architectural conservation from the University of Pennsylvania.

Rebecca worked with the University of Pennsylvania conservation team who were in the park July and August. This year the UPenn conservators treated earthen surface finishes in Cliff Palace. Rebecca worked with them gaining valuable treatment experience and also coordinated their activities with other park staff. She also worked with the park's architectural documentation crew developing a form to be used in the initial documentation of surface finishes- - characteristics of the panel as well as condition. Rebecca returned to school September 2001 for her final semester of class work for her degree in conservation.

Preston Fisher, Structural Engineer

Preston began work at Mesa Verde NP as the Vanishing Treasures Structural Engineer on January 22, 2001. Preston is a Registered Professional Engineer with 19 years of experience in the Department of Interior. He has worked with instrumentation and monitoring programs ranging from buildings to dams. Preston has also helped to develop monitoring programs to evaluate structural movements of different types of

buildings. In addition, Preston has worked with many Native American tribes in the southwest, including the Ute tribe of Southern Colorado and the Zuni tribe of Northwestern New Mexico.

Preston is duty stationed at Mesa Verde and is available to any VT Park that has structural concerns. He has assisted Navajo NM; Bandelier NM; Chaco Culture NHP; Salinas Pueblo Missions NM; Hovenweep NM; El Morro NM; Tumacacori NHP; Walnut Canyon NM; Wupatki NM; Canyon De Chelly NM; Aztec Ruins NM and Mesa Verde NP with structural assessments of sites.

He has purchased and installed structural monitoring instrumentation at Hovenweep NM and Mesa Verde NP. Preston has also prepared Environmental Screening Forms and assisted with several site preservation projects at Mesa Verde NP. He prepared a Scope of Work and assisted with Alcove Scaling evaluations for Alcove Sites at Mesa Verde NP affected by last years' wildfires. Finally, Preston served on the Vanishing Treasures SEPAS Panel in March and has worked on improving the criteria for next year.

Use of Lapse Salary from the FY 2000 VT Positions

The lapse funding for the Structural Engineer and the Exhibit Specialist positions was used to fund other archeologists who were working on VT projects, including condition assessment of alcove sites, and architectural documentation of Spruce Tree House.

Navajo National Monument

Kevin Harper, Archeologist

In FY 2001, Kevin performed a variety of duties that were related to the VT initiative and management of resources at Navajo National Monument. Duties included conducting research; submitting funding proposals; planning projects; coordinating the Inscription House Project with Mesa Verde and Flagstaff Area National Monuments; oversight of collections management; monitoring of sites in Betatakin; Inscription House; and Keet Seel Units; NAGPRA Federal Register Notice; General Management Plan; Resource and Compliance Coordinator and Government Performance Review Act Coordinator.

Research involved gathering site records and reviewing early archeological work in the Monument at Inscription House, Snake House, Turkey Cave and Kiva Cave. With assistance from the Museum of Northern Arizona, Kevin worked on improving location information for objects, collecting information concerning objects related to architecture, and managing a cooperative agreement involving backlog cataloging for Inscription House. In FY 2002, staff will be traveling to the Arizona Historical Society and the University of Utah to conduct further research on objects collected by Byron Cummings during his 1909 project and later fieldwork at Inscription House.

In June, Kevin oversaw the initial phase of work concerning rock art recording at Inscription House conducted by Arizona State University staff from Deer Valley Rock Art Center. Kevin also assisted in a 3D photogrammetric recording of Kiva Cave conducted by C+ Dimensions. Later, in September, Kevin coordinated the Inscription House project with Larry Nordby (MEVE) and Todd Metzger (FLAG). Staff from all three parks assisted in a two- week project that focused on condition assessment and architectural recording of the site.

Other work has included managing a geology and GIS project at the Monument, writing Environmental Impact Statements for cultural resources and collections, writing the Introduction for the General Management Plan, conducting compliance work for archeological and maintenance projects, and writing the Monument's Federal Register Notice for NAGPRA. Kevin also instructed the Ranger Division in archeology and resources of the Monument.

Training

In October 2000, Kevin attended the Vanishing Treasures Conference in Blanding, Utah. In addition, Kevin attended training at Grand Canyon Albright Training Center for Supervision: The Next Step.

Salinas Pueblo Missions National Monument

Duane C. Hubbard, Archaeologist

During FY 2001, Duane was involved in various aspects of cultural resource preservation ranging from compliance to site stabilization. For example, Duane developed site inventory forms that incorporate several information fields required by the Archeological Sites Management Information System (ASMIS), NM Archeological Records Management Section (ARMS) and the Vanishing Treasures Initiative. Duane added information to 117 site/subsite records in the Monument's site files. Duane also initiated, developed and maintained eight cultural resource databases (ASMIS, LCS, Photographs, Site Preservation Work Log, Site Monitoring and Condition Assessment, Site Files, and SAPU bibliography).

Duane was involved in preservation work with the Salinas preservation crew at Abo,

Quarai and Gran Quivira. This year, he completed a scope of work for preserving three 19th Century structures at Salinas. Duane consulted with architectural engineers, conservators, archeologists and exhibit specialists regarding upcoming backfilling, vegetation control and drainage projects. Duane and Phil Wilson developed preservation work plans and directed the removal of cholla and saltbrush from 17 prehistoric Pueblo mounds at Gran Quivira, and nearly six acres at Abo. Duane oversaw the stabilization of 13 structures that contained 57 individual rooms and 153 walls.

In the lab, Duane supervised an extensive photographic backlog project. In one year, the SAPU photographic database was developed and nearly 8,000 photographic images were entered into the database. He also directed the housing of all negatives in accordance with the Secretary of the Interior Standards, the scanning of 2,000 images, and established a working ceramic type collection for research.

Duane helped organize a 5- day preservation/stabilization project with Grand Canyon National Park personnel. At Grand Canyon National Park, Duane was in charge of all documentation for the project. He completed detailed site and structure condition assessment forms for 10 rooms and 1 kiva in the Tusayan Ruin Pueblo; compiled nearly 300 before, during and after b/w, color and digital photographs; completed an hour of project video; and trained two GRCA archeologists in documentation procedures. Duane participated as a member of a cultural resources advisory team (documentation specialist) at Coronado State Monument, New Mexico. He provided documentation recommendations for site managers at Coronado.

Duane also continues to serve as a member of the VT database committee. In addition,

Duane was involved in public outreach programs in FY01. Duane attended Career Days at local High Schools, participated in "Job Shadow" programs, and presented archeology talks to classes ranging from the 4th grade to Graduate School.

Training

In October 2000, Duane attended the Vanishing Treasures Conference in Blanding, Utah. During FY 2001, Duane received training in NEPA, Section 106 compliance (NHPA), ARPA, Scaffold Hazard Awareness, and Wildland Firefighting. Finally, Duane attended and presented a paper at the 2001 Society for American Archaeology Meetings in New Orleans.

San Antonio Missions National Historical Park

Dean Ferguson, Masonry Worker

In FY 2001, Dean performed masonry stabilization and preservation work on Building 308 (the "unfinished church"), located at Mission San Juan. Dean also helped direct a crew of day-labor craftsmen in bringing this building to good condition. The work elements for the project included low-pressure hot water cleaning of approximately 4000 square feet of surface area, recapping four-foot thick walls to improve drainage, vegetation removal and repointing. Dean also directed similar work on Buildings 306 and 314 at San Juan, bringing these structures to good condition.

As part of an ongoing materials conservation effort occurring at two sites within the park, Dean assisted Restoration Associates LTD. in constructing and relocating (where needed), safe and comfortable (OSHA approved) scaffolding from which the conservators could conduct

their work. In addition, Dean performed masonry stabilization and preservation on Buildings 225, 204, 206, and 212 at Mission San Jose.

Technical Assistance/Training

Dean also traveled to Guadalupe Mountains National Park where he spent three weeks providing technical assistance and masonry preservation skills working on the Pratt Cabin and the Butterfield Stage Line ruins. In addition, Dean attended the Vanishing Treasures Conference in Blanding, Utah.

Tumacacori National Historical Park

Houston Rogers, Archeologist

In FY 2001, Houston worked alongside conservators from Spain and Mexico and recorded their stabilization efforts in the dome of the church. He is in the process of assimilating information on past preservation efforts within the church as an update to the park's aging historic structure report. His work has involved extensive photographic research, photogrammetric recording, ASMIS database development, and mapping of the park's historic structures as well as an excavation at Los Angeles De Guevavi mission unit.

In the past year, Houston has worked extensively with the park's preservation crew at Tumacacori, Calabazas, and Guevavi units, as well as with the U.S. Forest Service at Kentucky Camp and Lowell Ranger Station, and Gachado Line Camp at Organ Pipe Cactus.

Training

Houston attended the 2000 Vanishing Treasures Conference in Blanding, Utah, and helped organize the 2001 Conference at

Tumacacori and designed the format of the conference's breakout sessions. During FY 2001, Houston received training in NEPA, Section 106 compliance (NHPA), NPS Fundamentals, and photogrammetry and database design at Santa Fe's System Support Offices.

In addition, Houston has had the opportunity to travel and work with conservators and archeologists from Mexico's cultural resource division, the Instituto Nacional de Antropología y Historia (INAH), during the Seventh Annual International Earthen Architecture and Lime Plaster Workshop held on July 16- 21 in Hidalgo de Parral, Chihuahua, Mexico.

Personnel Hired in FY 2001

In FY 2001 the Vanishing Treasures program provided four parks with \$239,000 to recruit and train four individuals. The benefiting parks include:

- Aztec Ruins National Monument** (1 position)
- Casa Grande Ruins National Monument** (1 position)
- Chaco Culture National Historical Park** (1 position)
- El Morro National Monument** (1 position)

Brief summaries of the accomplishments of these newly hired individuals are presented next.

Aztec Ruins National Monument

Brian Culpepper, Archeologist

Brian is the first full- time NPS archaeologist duty stationed at Aztec Ruins National Monument (AZRU). He received his B.A. in Anthropology from the University of Minnesota and a M.A. in Anthropology from Northern Arizona University. Brian has researched several archaeological

collections; including research of Neolithic European stone implements; Dismal River pottery; Hartville Uplift lithic materials; Animas La Plata lithic materials; Kaibab Plateau lithic materials and ceramics from the Northern Arizona region.

His archaeological fieldwork includes excavations and site inventories in Arizona, Minnesota, Montana, New Mexico, and Wyoming. In addition, Brian has worked as an archaeologist for private archaeological contractors; with the U.S. Forest Service on the Kaibab National Forest in Northern Arizona; the Bureau of Land Management in North- Central Wyoming, and more recently, at Canyon de Chelly National Monument in Northeastern Arizona.

Since arriving in May 2001, Brian has assumed the responsibility of leading the preservation program at AZRU. Presently, his major duties include overseeing the architectural documentation and backfilling of the West Ruin. Brian addressed safety concerns early on by purchasing new scaffolding and safety equipment. Additionally, Brian has developed a cyclic maintenance stabilization program, and is in the process of evaluating the effectiveness and possible detriment of the modern concrete roofs covering the intact prehistoric roofs in the West Ruin and East Ruin.

Use of Lapse Salary

Most of FY 2001 lapse salary funds were used to hire temporary worker, Carl Jim, as a masonry worker and as work leader for the backfill crew. Much of the remainder of FY 2001 lapse salary funds were used for training purposes; facilitating Brian's permanent change of station (PCS) to Aztec, NM; the purchase of a computer; software; a printer; a digital camera; a transit and various pieces of office equipment.

Training

Brian attended supervisor training in Harper's Ferry, WVA and Safety Management training in Cortez, CO.

Casa Grande Ruins National Monument

Ray Hartzel, Masonry Worker

Ray was hired on August 12, 2001 as a Masonry Worker, and represents the first Vanishing Treasures position at Casa Grande Ruins. Prior to being hired during FY 2001, Ray worked as a seasonal worker at Casa Grande performing various preservation and "housekeeping" duties. Ray also has prior experience in Mining operations, where he operated heavy equipment and performed general maintenance activities including plumbing, masonry, carpentry, electrical and painting.

Prior to working in the Mining field, Ray worked with various construction companies that specialized in the preservation of historic structures. During this time, Ray was introduced to methods of preservation and general preservation policy. Ray brings this past experience with him and will greatly aid the VT Program at Casa Grande NM.

Since Ray joined the staff at Casa Grande, he has worked with maintenance person, Nalbert Chavez, applying a preservation coating to the walls in Compound A. This process involves using an amended mud consisting of soil, clay and a commercial product called Duraweld. These materials are mixed proportionally and then applied to the walls with whiskbrooms.

Approximately 320 linear feet of walls were coated with amended mud to protect them from the weather elements. Ray is also involved in a second project involving

Compound B. This involves covering the exposed ruins found here with a soil backfill. This process is conducted on a two year cyclic to ensure that weather and small animals do not cause irreversible damage to the original fabric.

Additional Use of VT Funds

Casa Grande National Monument was able to use additional VT funds to employ two seasonal laborers. Ray was one of these seasonal workers before being brought on as the new VT hire. Nalbert Chavez (WG-4749- 08) was the other seasonal worker employed with VT funds. Nalbert has been the key preservation person at Casa Grande Ruins for the past 26 years, and annually spends approximately one- third of his time working on prehistoric cultural resources. This year Nalbert worked with Ray in completing the preservation projects outlined above at Compounds A and B. Both Ray and Nalbert also worked on sifting soil materials (rocks, seeds, and other organic material) into clean soil for use in our amended mud mortar. The monument also used VT funds to purchase an additional 40 tons of tested soil for use in our preservation activities.

Chaco Culture National Historical Park

James F. Yazzie, Masonry Worker

James was hired as a new VT hire for Chaco in FY 2001. He joins an established and experienced preservation crew at Chaco. James Yazzie began his career with the National Park Service at Chaco Canyon as a teenager working with the Youth Conservation Crew. One of his first jobs was backfilling excavated sites with a wheelbarrow and shovel. James worked seasonally with the Chaco preservation crew for the next 30 years and through the

Vanishing Treasures Program, was finally hired with base funding in FY 2001. Ironically, James is still backfilling sites, but has commented that while the generator-powered conveyors are an improvement over wheelbarrows, the shovels are just the same. James is the third generation of his family to work in Chaco, acquiring much of his understanding of Chaco architecture and preservation skills from his great uncles and grandparents.

James is the preservation staff's primary photographer, and during 2001, took most of the pre- and post- treatment photographic records of backfilling at Lizard House, as well as the other preservation work completed this year. During the winter, James printed much of the documentation film, logged, labeled and assembled these records into project files, and assisted with the completion of the 2000 preservation records. During the field season, he worked on capping projects at backcountry sites around Pueblo Alto, Penasco Blanco, Pueblo Pintado, and conducted emergency treatments at Pueblo Bonito and Pueblo del Arroyo. Finally, James assisted in the set up and backfilling project at Lizard House.

El Morro National Monument

Debra Popham, Archeological Technician

Debra enters duty early in FY 2002 as the Archeological Technician serving the tri-park region of El Morro National Monument, El Malpais National Monument and Petrified Forest National Park. Debra will be stationed at El Morro National Monument. She holds a B.A. in Anthropology from Arizona State University, and is new to the National Park Service.

Prior to being hired through the VT Program, Debra gained archaeological experience working on various projects, including work at Chavez Pass Ruin (North- Central Arizona) and as the Laboratory Director for the Zuni Archaeology Program. Debra will be joining the tri- park team and working alongside VT hires, Jim Kendrick (1999) and Calvin Chimoni (2000), and will be participating in a variety of VT activities. These activities will include architectural documentation (using AutoCAD), data management (using both ASMIS and IRMS), stabilization of historic and prehistoric structures, as well as coordinating these projects.

With the addition of Debra, the VT Program servicing these three parks now includes an Archeologist, a Masonry Worker, and an Archeological Technician. Though small in number, the foundation is now laid for the program to make significant contributions to the preservation of the architectural heritage found within these parks.

Use of Lapse Salary

El Morro National Monument used lapse salary funds from this position to purchase much needed equipment to support the park's preservation program and remodel office space to accommodate the growing preservation staff of the park.



Section 6, Project Completion Reports

In FY 2001, the Vanishing Treasures Program dedicated \$975,000 to conduct emergency and high priority preservation treatment projects in sixteen (16) parks. They include:

Chaco Culture National Historical Park: Continue Partial Backfilling of Lizard House Ruin, \$125,000

Flagstaff Area National Monuments: Document Architectural Plan of Citadel, Nalakihi, and Wukoki Ruins, \$100,000

Fort Davis National Historic Site: Preservation Actions on Band Barracks, \$39,000

Fort Bowie National Historic Site: Preservation Actions on Post Trader's Building and Calvary Barracks, \$34,300

Fort Laramie National Historic Site: Lime Concrete and Plaster Preservation Research Program, \$100,000

Fort Union National Monument: Architectural Documentation/Mapping of Historic Structures by Historic American Buildings Survey, \$40,000

Hovenweep National Monument: Hydrologic Study Around Square Tower, \$30,000

Glen Canyon National Recreation Area: Condition Assessments/Survey of Masonry Archeological Sites, \$115,000

Grand Canyon National Park: Condition Assessment, Architectural Documentation and Mapping of Tusayan Ruin, \$125,000

Montezuma Castle/Tuzigoot National Monuments: Comprehensive Photodocumentation of Tuzigoot Ruin, \$15,000

Organ Pipe Cactus National Monument: Emergency Stabilization of Dos Lomitas Ranch House and Gachado Line Camp, \$20,000

Pecos National Historic Park: Conduct Removal of Church Floor/Improve Drainage, \$69,000

Salinas Pueblo Missions National Monument: Preservation of Park's Primary Resources, \$43,700

San Antonio Missions National Historical Park: Inventory of Spanish Colonial Plasters at Mission San Jose, \$64,500

Tonto National Monument: Preservation Actions/Site Stabilization, \$32,000

Tumacacori National Historical Park: Preservation of Guevavi and Calabazas Missions, \$22,500

Brief summaries of these projects and their accomplishments are presented.

Chaco Culture National Historical Park

Continue Partial Backfilling of Lizard House Ruin - \$125,000

The FY 2001 backfill project begins the fourth major phase of the long-term site reburial program that involves some 20 major excavated structures in the park. Lizard House, a small greathouse, is located in the backcountry of the park, ½ mile east of Chetro Ketl. The structure was completely excavated in 1960 as a salvage project. However by the mid- 1970s, the exposed walls had deteriorated to a degree, but the backfill from the excavations had sufficiently armored the arroyo bank, significantly reducing the threat of undercutting by erosion.

In 1975, the site was selected as one of 4 areas to conduct a long-term study to test the effectiveness of organic polymers in ruins stabilization mortars. The goal of the research was to develop improved, cost-effective, and resource-compatible mortars and additives used in the stabilization of ruins and preservation of stone. The mortar tests were monitored annually for subsequent years. Out of this research, the National Park Service was able to identify several mortar additives that are both effective and compatible with the prehistoric fabric. These additives are now in wide use at various masonry and earthen structures throughout the Southwest.

The VT treatment project accomplished two goals. First, the history of the mortar test study was reviewed, the experimental walls were reanalyzed and documented, and the findings are being compiled into a final report on this study. The second goal of this

project was to backfill the site to provide long- term preservation care.

A group of park specialists from Bandelier, Fort Union, and Chaco, and the Santa Fe Support Office met in December to review the mortar testing program and make recommendations on how to finalize this study. It was determined that final monitoring and documentation of the test walls was necessary and that every effort should be made to have the original investigator, Dr. Dennis Fenn, conduct this work. In August, Dr. Fenn scheduled a week- long examination of the mortar test walls, and with the assistance of Mary Slater, Jake Barrow, Jim Trott, and park staff, the walls were sampled and documented, and the entire test program was reviewed and discussed.

Preliminary results of this final analysis indicate that after 26 years, the additives that showed the best performance during the early stages of the study have not yet developed any serious problems. Performance criteria for the purposes of this study were based on durability, compatibility, and stability. Some of these additives clearly extended the life of exposed mortars, but none proved to be miraculous elixirs. An unexpected finding was that one of the experimental additives seems to be significantly out- performing others as a capping mortar; an additional study is currently underway. The multi- park, multi- site mortar- testing program is expected to continue through FY 2003.

Once the mortar test monitoring was completed, backfilling of the site began. No drainage pipe was used in this backfill project, and the fill material is soil with a higher content of sand than that used in previous backfilling work. Once the site was reburied, the access road was rehabilitated and will be reseeded in the spring. The architectural and treatment documentation

records are being compiled this winter into the preservation archives.

Flagstaff Area National Monuments

Document Architectural Plan of Citadel, Nalakihi, and Wukoki Ruins - \$100,000

Wupatki National Monument's Vanishing Treasures Project consisted of documenting architectural plans for Citadel, Nalakihi, and Wukoki Ruins. Maps produced include 20cm contour maps of developed lands in the front country, detailed maps of standing architecture, and maps of associated architectural features and sites located around these front country sites. The resulting products will be used to plan for future development in the areas, assist in monitoring the condition of archeological features in the front country, serve as a baseline for future projects, and assist in preservation planning.

The work was conducted by GeoMap Inc., a survey firm from Tucson, Arizona, via a cooperative agreement between the NPS and Northern Arizona University. Contour mapping was completed using aerial photogrammetric mapping of a 300- meter x 300- meter grid of the areas surrounding the ruins. Architectural mapping involved using GPS stations to plot features and walls to create digital maps. NPS archeologists, using trilateral mapping techniques, completed mapping of associated archeological features. The site datums were then recorded using GPS equipment and the maps were digitally incorporated onto a larger base map. This work was completed for Citadel and Nalakihi with Wukoki deferred for fall 2001 (FY 2001 project funds were allocated for this). As part of this project, surveyors with GeoMap Inc. are experimenting with 3 dimensional mapping using a 3D scanner.

Initial efforts are promising and techniques are now being developed and tested for applying this technology to mapping and modeling prehistoric architectural sites.

Other components of the project include write-up of findings from architectural documentation assessments. Northern Arizona University Department of Anthropology delivered final reports on documentation projects for Wupatki Pueblo, Lomaki Pueblo, and Nalakihi Ruins. Combined with the digital maps, we now have comprehensive baseline data on a significant portion of our front country sites at Wupatki National Monument.

Fort Davis National Historic Site

Preservation Actions on Band Barracks - \$39,000

The purpose of this project was to repaint the stone foundation and stabilize the adobe walls of the Band Barracks at Fort Davis. The funds acquired through the VT Program were used to hire two seasonal masonry workers for five months. VT funds were also used to purchase necessary supplies and materials. The seasonal workers along with the Fort Davis historic preservation masonry crew were able to complete the preservation treatments on the Band Barracks (HB- 24), as well as three additional ruins, the post guardhouse (HB- 30), a non-commissioned officers' quarters (HB- 19), and an officer's kitchen (HB- 275).

Vanishing Treasures funds were also used to hire an archeological aid for three months who prepared planimetric and profile drawings of the four ruins to be treated. The archeological aid also prepared drawings of several other adobe ruins and buildings in preparation for preservation treatments in the future.

Fort Bowie National Historic Site

Preservation Actions on Post Trader's Building and Calvary Barracks - \$34,300

Stabilization projects conducted during FY 2001 included the Post Trader's Building (HS035) and Cavalry Barracks (HS010). Beginning in 1988, the adobe walls at these structures were treated by encapsulating them using a lime plaster. The lime plaster shelter coat is breathable yet waterproof, as long as cracks are sealed and additional coats of plaster are applied as needed. However, existing layers of lime plaster are now too thick (up to 4") to securely adhere to the walls, and are falling off in square-yard sections that expose the original adobe material. The current Historic Structures Preservation Guide, completed by Bob Hartzler in March 2001, calls for removing the failing lime plaster encapsulation, and re-coating the exposed adobe walls with fresh material.

This year's project included the Post Trader's Building, the largest and most seriously threatened structure. The building was worked on, a section at a time, over a six-month period by four employees, Phil Tapia, Fernie Nunez, Phil Tapia, Jr. and Greg Kleppinger. After the failing plaster coat was removed from the wall, a layer of unamended mud was applied over the original adobe to fill in uneven areas and provide a smoother surface on which to spread the plaster. Unamended lime plaster was applied in two thin layers consisting of a scratch coat and a finish coat. A lime whitewash was applied over the final plaster coat as an additional breathable sealer that bonds with the plaster. This was followed by a soil wash, used to tint the surface color to an earthen tone. The work was carefully documented, in photographs and writing by Phil Tapia. Although occasionally slowing

progress, the entire preservation crew actively interpreted ruin preservation techniques to park visitors.

Fort Laramie National Historic Site

Continue Lime Concrete and Plaster Preservation Research Program - \$100,000

Ft. Laramie National Historic Site is located in Wyoming, approximately 100 miles north of Cheyenne and 23 miles west of Torrington. There are 20 structures at the park that are constructed of lime concrete, an unusual mid-19th century building material similar to the tabby construction of the southeastern US.

The project funded by the VT Program, represents the second phase of a Lime Concrete and Plaster Preservation project at Ft. Laramie National Historic Site, Wyoming. This research project was initiated in 1997 with funding provided to conduct preliminary condition assessments, compile historical data and develop a stabilization strategy for lime concrete and plasters. The resulting report entitled "*Lime Concrete and Plaster Preservation Project, Phase 1: History of Stabilization and Maintenance Condition Assessment*" (Anne Oliver, 1998), serves as the foundation for this project.

In the course of pursuing long-term preservation goals at Ft. Laramie, researchers and park staff identified the need to learn more about the properties of lime concrete and to disseminate this information more widely to other preservation professionals, conservators and private building owners. The current project will provide baseline data for understanding how lime concrete and plaster building systems perform.

In February 2001 a Task Agreement was developed with input from Historical Architect Richard Cronenberger, Senior Exhibit Specialist Jake Barrow, Architectural Conservator Anne Oliver, Archeologist Emily Donald, FOUN Exhibit Specialist Robert Hartzler, FOLA Exhibit Specialists Reed Robinson and Don LaDeaux, FOLA Chief of Maintenance Shawn Bryant, and FOLA Superintendent James Mack. On April 11, 2001, this team (with the exception of James Mack, who transferred to WHSA) met on site to finalize the project direction and documentation approach. Anne Oliver designed a custom condition assessment form for FOLA structures.

Condition assessment and documentation work began in June. A team composed of two ICOMOS interns and a graduate student from Columbia University (CU) performed these tasks. They were joined in July by a third ICOMOS intern. The team completed condition assessment/documentation forms for eleven lime concrete ruins. They also completed record and documentation photography for these structures. This documentation addressed condition of original masonry, condition of surface finishes and repairs, structural stabilization intervention, and fabric loss over time. The team also developed overlays for the photographs to document fabric conditions. The overlays were scanned, and they began scaling the photos. The team also developed a sampling strategy and collected samples from several structures to be analyzed in the testing phase.

During June, Emily Donald installed and set up the Integrated Resource Management System for FOLA. This program is intended to be the repository for technical information derived from this project and will be the park's primary tool for

continuing documentation of condition, preservation maintenance, and archival information related to lime concrete structures and ruins. This system will allow the park to perpetuate the documentation and tracking implemented by this project.

On August 13, 2001 the original project team met with Chris Koziol of Colorado State University (CSU) and Pamela Jerome of CU to develop a cooperative agreement with CSU to continue the research portion of this project. The statement of work for this agreement included many goals: Diagnostic and material characterization of lime concrete and surface plasters through physical, mechanical, and chemical testing; a graduate research project to produce a graduate thesis report including written descriptions, photographs, graphs, and analysis; non- destructive testing of existing monolithic lime concrete materials; continued documentation of Ft. Laramie lime concrete structures focusing on occupied structures; a study to determine the feasibility of using sheltering to preserve lime concrete ruins; and further development of the IRMS system to accommodate computer graphics to be used to monitor rate of deterioration of lime concrete and plaster.

This agreement was finalized and implemented in September. Funding was obligated to CSU to produce the following: Report on Material Testing; A Graduate Master's Thesis; Report on Non-Destructive Testing of Monolithic Materials; Report on Pilot Test Treatment Methodology; Condition and Inventory Assessment Forms for Occupied Structures; Report on Sheltering Options; Completion of the Computer Database for Documentation and Research. These tasks have varying completion dates that are outlined in the statement of work.

A portable wireless weather monitoring station was purchased to document temperature, relative humidity, barometric pressure, wind chill, rainfall, dew point, windspeed and direction in the area around the ruins and structures. This information will be transferred to weather monitoring software to record averages and trends. It is hoped that this data will assist in determining the effects of environmental conditions on the rate and type of deterioration to original fabric.

Completion of this project will allow the management of Ft. Laramie to make informed decisions on treatment options for lime concrete and lime plaster ruins at the site. It will also provide a substantial body of research and information on lime concrete and lime plasters that is publishable and can be accessed by other preservation professionals.

Fort Union National Monument

Architectural Documentation/Mapping of Historic Structures by Historic American Buildings Survey (HABS) - \$40,000

Fort Union National Monument received VT funds to host a four- person team from the Historic American Buildings Survey (HABS) to map the fort and document and photograph the ruins. The team spent a total of 20 days at Fort Union, acquiring an extensive amount of data that will be taken back with them to Washington to be digitized and archived. During 2001, the HABS crew was able to measure plans of buildings 1- 9, 13, 14, 17, 27- 32, 36, 39, 40, 43, 57, and 305 (numbers based on the HSR). Additional drawings were done of the following buildings: 2 sections on 5; 2 sections on 9; 4 elevations on 17; 2 sections on 29; 3 elevations and 2 sections on 30; 2 elevations and 1 section on 32; 3 elevations

and 5 sections on 36; 4 elevations and 3 sections on 43; and 3 elevations and 4 sections on 57.

When the project is complete we will receive a detailed site plan, a plan of each individual building, sections and elevations of selected buildings, and a plotted set of all drawings as well as copies of the digital files.

In 1933 the National Park Service, Department of the Interior established the Historic American Buildings Survey (HABS). Similarly, in 1969, America's industrial and engineering heritage, the National Park Service, the Library of Congress and the American Society of Civil Engineers (ASCE) established the Historic American Engineering Record (HAER) to document significant engineering and industrial sites. Thus, HABS/HAER is an integral component of the federal government's commitment to historic preservation. The program documents important architectural, engineering and industrial sites throughout the United States and its territories.

A complete set of HABS/HAER documentation, consisting of measured drawings, large-format photographs, and written history, plays a key role in accomplishing the mission of creating an archive of American architecture and engineering. To insure that such evidence is not lost to future generations, the HABS/HAER Collections are archived at the Library of Congress, where they are made available to the public.

Hovenweep National Monument

Hydrologic Study Around Square Tower
- \$30,000

During FY 2001, funds acquired through Vanishing Treasures were used to continue the monthly monitoring of shallow groundwater wells around Square Tower. Preston Fisher, VT Structural Engineer and Larry Martin, NPS Hydrologist were consulted on probable causes of deterioration of the boulder below Square Tower, and ways to prevent further deterioration. An Engineering consulting firm was hired to assess the surface and groundwater conditions around the tower. They recommended further monitoring of the groundwater conditions around the tower, as well as work to divert surface water runoff from a small drainage basin west of the tower. Water from this small arroyo appears to be draining directly into the area of the tower and may be infiltrating into a buried kiva adjacent to the tower. This water in turn, infiltrates either through, or under the kiva, directly impacting the boulder that Square Tower is built on. The modifications recommended involve constructing a small diversion dike, 6" x 6" x 15 ft. along the rock and above the site, to divert the runoff into a pipe that carries it away from the site.

We have also purchased a tiltmeter to install inside of Square Tower to detect suspected leaning of the tower, and some piezometers to install around the kiva, as well as a data logger for all this instrumentation. Hovenweep paid for half of this instrumentation and the VT Program provided funds for the second half of this project.

Glen Canyon National Recreation Area

Condition Assessments/Survey of Masonry Archeological Sites - \$115,000

During the pre- inundation studies of the late 1950s and early 1960s, approximately 1400 sites were recorded by the University of Utah and the Museum of Northern Arizona within what is now Glen Canyon National Recreation Area. In the 1970s, additional survey projects documented another 200- 300 sites. Approximately 500 of these sites contain Vanishing Treasures resources. However, the majority had not been visited since they were first documented. Because this initial documentation was outdated and inadequate at best, and non- existent in many cases, funding was requested and received from the Vanishing Treasures program to relocate, re- document, and update the condition of these sites. The collection of this updated data is critical to our efforts in developing a park- wide preservation plan that incorporates all known VT structures.

During this project, we attempted to relocate 156 sites. Thirty- five of those were relocated, completely re- documented, and the condition of the structures updated using a newly developed Structure Condition Assessment form. Twenty- nine sites were determined to be inaccessible, primarily because of the extremely low level of Lake Powell during the FY 2001 field season. Fifty- six sites were relocated and determined to be drowned by Lake Powell. Eleven sites were relocated and determined to be destroyed, mostly by visitor impacts. Finally, there were twenty- five sites that we were unable to relocate. This was a result of extremely poor and inaccurate site location information. During the course of the relocation project, 42 new sites were located and recorded.

In addition to the relocation efforts, funding was also used to update the recreation area's cultural sites database from an outdated Access format to the newly required ASMIS format. This will provide us with a much more comprehensive management tool in

our ongoing efforts to prioritize preservation activities.

Grand Canyon National Park

Condition Assessment, Architectural Documentation and Mapping of Tusayan Ruin - \$125,000

This project focused on the assessment, documentation, and preservation treatment of Tusayan Ruin. The site is a partially excavated 16 room pueblo on the park's south rim. It is actively interpreted and heavily visited. The first step in the project was to research the site's stabilization history, which showed that the site was excavated in 1930 and has been irregularly maintained over the past 70 years. Condition assessments revealed that visitors, vegetation, animals, and lack of maintenance were the primary agents of deterioration. Treatments were designed to address these causes of site degradation. Detailed architectural documentation, including medium format photography, was completed prior to treatment.

In August, the Salinas Pueblo Missions Ruins Stabilization Crew conducted preservation treatments, with assistance from Grand Canyon National Park archeologists. This served as an occasion for the Salinas Pueblo Missions crew to learn about and work with a new resource, while providing a training opportunity for Grand Canyon personnel. Direct treatments included repointing severely eroded mortar joints; relaying collapsed portions of the walls; removal of a wall erroneously reconstructed in 1948; removal of four large trees impacting structure walls; repair of the kiva bench; the introduction of fill and regrading of rooms; and re- establishing a drain out the kiva ventilator. The project also included trapping and relocation of ground squirrels and other animals living in

the site. After work was completed on the structure, the Grand Canyon Revegetation crew planted cacti and other plants along the edge of paths to deter off- trail travel.

A second component of the project involved the collection of baseline data and completion of condition assessments at 37 additional sites in the Desert View area. Twenty- three of these sites were recorded between the 1930s and the 1960s. Most had not been visited since their initial recording. An additional fourteen sites were discovered during the current project while re- locating previously recorded sites. With the implementation of the park's GMP, visitor use patterns in the Desert View area are expected to change and the collection of this data will assist in planning for and assessing impacts from those changes.

Finally, the project included a contract for mapping Tusayan Ruin and three other large pueblo sites in the Desert View area. Geo- Map, Inc was contracted to produce detailed topographic and planimetric maps of the sites

Montezuma Castle/Tuzigoot National Monuments

Comprehensive Photodocumentation of Tuzigoot Ruin - \$15,000

Tuzigoot received funding for a project to conduct photodocumentation all architectural features at Tuzigoot Ruin. This was the first project of its kind conducted at Tuzigoot, and resulted in the collection of baseline data of the site, in addition to providing a set of digital photos that can be used in the future to create overlays, working plans for condition assessments, etc. Work on this project was completed in November 2001.

In addition to the photodocumentation project, during FY 2001, a seasonal team of Lori Thwaite and Greg Anderson, funded through the Cultural Cyclic program, augmented the permanent staff of Ruben Ramirez and Alex Contreras. Work continued in the removal of detrimental materials, and replacement with more compatible materials. Much of the deterioration of the walls has been due to previous stabilization efforts using Portland cement as a mortar. The harder, more impervious cement had caused moisture trapped within the wall structure to exit through the sandstone and limestone, causing their deterioration, and in places leaving a "skeleton" of cement mortar surrounding deteriorated or "powderized" stone components. This also contributed to a lack of stability of the wall, with resulting cracks, and even further moisture penetration.

The program has been removing the cement mortar, salvaging all structurally sound stone, and replacing the cement with a softer and less impervious soil- cement mix, while using new stone to replace those that have deteriorated. The result has been a consistent and more porous surface that protects stone components from rapid deterioration, while still being hard enough to serve as a structurally efficient support for the walls. Visually, the end product more closely approximates a soil and stonewall in terms of color, texture, and consistency. The completed work has received many positive comments from visitors and staff.

For the fiscal year ending September 30, 2001, the crew had repointed 1139 square feet of wall, replaced 467 square feet of deteriorated stone surface, repaired 300 lineal feet of wall basal structure, and in conjunction with a preservation Skills Training Program project, recapped 63 lineal feet of wall cap.

Organ Pipe Cactus National Monument

Emergency Stabilization of Dos Lomitas Ranch House and Gachado Line Camp - \$20,000

Emergency stabilization of Dos Lomitas Ranch House was conducted during the month of May 2001. VT personnel from Tumacacori NHP and Fort Bowie NHS were used in this preservation activity. VT Exhibit Specialist, David Yubeta and Masonry Worker Ray Madril (TUMA) joined Masonry Worker's Phil Tapia and Greg Kleppinger (FOBO), to assist ORPI preservation worker Bob Bryant in removing deteriorated roofing from this late 1800's historic structure. The leaking and badly deteriorated earthen roof was removed and several broken and deteriorated vigas were replaced. New straw and saguaro ribs were replaced and a new roofing system was installed. The interior was mud plastered and large voids were filled- in with adobe mud.

In September 2001, Tumacacori's VT preservation crew consisting of David Yubeta, Ray Madril and Archaeologist Houston Rogers again assisted Bob Bryant with preservation of the earthen roof at Gachado Line Camp. The existing earthen roof was repaired and large voids and cracks filled with adobe mud. The exterior of the building was repaired and stabilized and building received a plaster coat of mud.

Pecos National Historic Park

Conduct Removal of Church Floor/Improve Drainage - \$69,000

The purpose of this project is to improve the drainage in and around the 18th century mission. The goal is to create an

environment that will reduce rate of deterioration evident in adobe walls that are adjacent to concrete slabs. These areas show an accelerated rate of deterioration than other areas of the adobe walls. Other funding sources were used to cover costs of the project above the \$69,000 of Vanishing Treasures money.

In 1967 Mr. Roland Richert began assessing the erosion of adobe walls at the mission. In 1969 he used park staff to implement a stabilization effort he designed. At the conclusion of the project, sloped concrete slabs were poured on- site in all but three areas of the 17th and 18th century churches. The concrete drained water from the east to drop drains in the extreme west of the 17th century church. The drains directed water flow subsurface through the structure, under the visitor trail, and outside the structures to the existing ground surface. Overall, Richert's system generally works, and the condition of the concrete has stood the test of time. However, the extreme incompatibility of the edges of the concrete against the adobe walls caused a remarkable increase in rising damp, creating an increase in the problems associated with rising damp in adobe.

Although the system moved considerable water out of the structure, the adobe walls became more susceptible to rising damp and they suffered more damage than walls without concrete abutments. The solution to the problem at Pecos was developed around two ideas: 1) To keep the portions of Richert's system that are working and 2) Modify the portions that are doing more harm than good.

In the final analysis, this translated to removing about a four- foot width of concrete at every juncture it has with an adobe wall. This translates to about 1,500 square feet of 4" - 6" inch thick concrete. The voids are then filled- in with a clay/dirt material designed to improve the

transportation of water away from the adobe walls. The entire system will be capped with flagstone to within one foot of the base of the adobe walls. Water runoff will continue to be directed through the drop drains.

Salinas Pueblo Missions National Monument

Preservation of Park's Primary Resources - \$43,700

In early May, Salinas hired eight seasonal masonry workers and an Exhibit Specialist to augment the permanent preservation staff of Sam Chavez- Masonry Work Leader, Ramona Lopez- Masonry Worker (VT Hire 98), Felix Garcia- Maintenance Worker, Phil Wilson- Archeologist (VT hire 99), and Duane Hubbard- Archeologist (VT Hire 2000). VT project funding contributed to the following accomplishments:

Treatment of 13 structures (57 rooms, 153 walls) was completed at Abo, Gran Quivira and Quarai Missions. The work included repointing 6,986 square feet, capping 1,351 cubic feet and replacing 32 tons of material. Other tasks accomplished included, removal of invasive vegetation (Cholla & Salt Brush) from 17 of the 20 mounds at Gran Quivira and from the Pueblo Mission Complex at Abo, as well as the establishment and contouring of positive drainage at all three units.

VT Program funding also aided with various preservation functions including the development of condition assessment forms for Salinas; baseline monitoring of structures and preservation treatments; maintenance of eight Cultural Resource databases (ASMIS, LCS, Photographs, Site Preservation Work Log, Site Monitoring and Condition Assessment, Site Files, and SAPU bibliography); compliance and

consultation; inventory and identification of mortar samples and producing a report synthesizing the various sources of structural deterioration at Salinas, as well as recommendations for treatment.

Additional emphasis within the program was placed on professional networking and peer review. For example, Exhibit Specialist Angelyn Rivera and Architectural Conservator Mary Slater (Bandelier NM) and Structural Engineer Preston Fisher (Mesa Verde NP) joined park staff for a scoping session to discuss various preservation strategies at Salinas. This interdisciplinary team was solicited for expert opinions regarding ongoing and upcoming preservation projects such as backfilling Mound 7 at Gran Quivira, drainage concerns at Abo, and vegetation removal from prehistoric mounds at all three units. Also, members of the Salinas preservation program formed a Cultural Resources advisory team that provided preservation recommendations to Coronado State Monument, NM.

The Salinas Preservation Crew also assisted Grand Canyon NP in the implementation and documentation of preservation treatments at Tusayan Ruin, a 16- room, two- kiva pueblo, located on the South Rim of the Canyon. The intent of this cooperative project is to establish stronger, professional associations within the preservation community. We believe that these relationships will provide Salinas with different ideas, new approaches and the critical review necessary to develop appropriate preservation strategies.

San Antonio Missions National Historical Park

Inventory of Spanish Colonial Plasters at Mission San Jose - \$64,5000

In FY 2001 San Antonio Missions NHP received Vanishing Treasure project funds to complete the inventory of Spanish Colonial plasters at the Convento at Mission San José. The project is being completed by Restoration Associates, Ltd. and will be conducted through FY 2002. The project will assess all of the existing Spanish Colonial plaster at the Convento, as well as conserve the plasters and the arriccio located in the convento. Drainage problems at the top of the wall that are accelerating the loss of plasters will be corrected. Areas that are identified as needing repointing will be repointed using a lime- base mortar. Recommendations for long- term preservation of the plasters will be included in the final project report.

Tonto National Monument

Preservation Actions/Site Stabilization - \$32,000

During FY 2001, the stabilization crew at Tonto used VT project funds to conduct work on the lower cliff dwelling. This included constructing a support- footer along the base of an existing stone masonry wall that is beginning to fail. This support footer used native rock to construct new walls along 140 feet of trail. The walls vary from 8 inches high to eight feet high and totaled approximately 245 square feet of wall. Additional construction of a low wall and rock curbing up to the dwelling provides additional stabilization to the front of the lower cliff dwelling that is exposed to the elements since it is outside the shelter drip line. The rock material used in the construction of the walls was procured from a nearby quarry. This work was extremely labor intensive since materials had to be transported ½ mile to the job- site. Four laborers were hired for 9 pay- periods and \$2,840.00 was used for materials.

Additional work on the lower cliff dwelling entailed removing a cloth barrier from one of the room floors; repairing wall plaster; widening the trail leading up to the dwelling by constructing a new stone wall alongside the old stone wall which posed a threat of collapse; installing new railings alongside the trail; and repairing the tread surface on the trail. All work on both dwellings was documented including digital photography. A final stabilization report for 2001 was completed.

Tumacacori National Historical Park

Preservation of Guevavi and Calabazas Missions - \$22,500

The majority of this fiscal year's VT funding was used to hire additional seasonal assistance for Tumacacori's preservation program. Preservation treatments that were accomplished included the capping of convento walls with lime plaster; capping the walls at Mission Guevavi; lime plastering the granary and stabilization of the interior nave of the church. Additionally, landscaping duties were also accomplished during the year at the mission sites of Calabazas and Guevavi. A portion of this funding was also used to purchase supplies such as sand, lime and hand tools.

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% of his time to performing program management duties.

VT Personnel

FY 2001 saw little change in the personnel involved in the technical and leadership side of VT. Minor changes occurred in the Leadership Committee, Advisory Group and some of the Workgroups.

Leadership Committee

The Leadership Committee saw the retirement of its Executive Office, Jerry Rogers. Fortunately for the Initiative, Jerry has agreed to continue his involvement in the Initiative as the exofficio Executive Office. With the exception of the fact that Jerry is no longer an NPS employee, his duties with VT remain virtually unchanged.

Advisory Group

As noted in last years report, the Advisory Group saw the resignation of a two of its members; one assigned and one elected. We have yet to fill these positions in accordance with the Advisory Group By-Laws, but have placed two individuals in the vacancies on a temporary basis. Currently, Preston Fisher, VT's Structural Engineer, and Phil Wilson, VT's Career Development

are substituting in these positions until the formal election process can be initiated.

Workgroups

There has also been a minor shuffling of members on the various workgroups. Most of these changes are the result of folks changing jobs and no longer having any involvement with VT resources. Some of these changes are addressed in the various Workgroup reports presented below. A complete listing of the personnel involved in VT can be found in Table 7.1.

Database Workgroup

Over the last several years, the Database Workgroup has made significant progress towards the four goals outlined in the Long Range Plan while taking on new responsibilities such as the Vanishing Treasures web page. Through the course of FY 2001, the Database Workgroup has been somewhat inactive due to the Workgroup's initial success in accomplishing its goals and to turnover in leadership. Despite the relative inactivity of the Workgroup there were several accomplishments to report. Updates on the Database Workgroup, its history, and its activities were presented at the Vanishing Treasures Conference and at the CR2000 Conference in Santa Fe in December 2001. Also at the CR2000 Conference, Vanishing Treasures presented two poster sessions, one on Vanishing Treasures in general, and a second submitted by Chaco Culture National Historic Park. Both poster presentations highlighted what the Program is about and provided specific examples of how parks have benefited from the Program to

resource management professionals and park managers from throughout the Service. The Vanishing Treasures web page has been revamped and updated providing new information about the Program. Finally, a new Vanishing Treasures Poster was created to showcase what problems Vanishing Treasures parks face, how we are meeting the challenge, and illustrate the types of resources and projects Vanishing Treasures is promoting.

2002 Goals

In FY 2001 and beyond the Database Workgroup has been charged with two new goals. The first is to completely revamp the web page to make it not only as a gateway to educate people about the goals and accomplishments of the Vanishing Treasures program but also to serve as a clearing house of information for NPS preservation specialists working on VT resources. Terry Childs, from the Archeology & Ethnography Program in Washington D.C., is finalizing updating a new look for the VT web page. The Program will be working with Terry in the near future to get additional information on the web soon. The second goal is to develop a procedure to make the data collected from the VT database more accessible to program leadership for assessing goals and needs. This potentially entails developing a system for data calls and/or submission, and the storage of data.

The primary goal for 2002 is to develop a clear vision of how we want our web page to function. To this end we will develop a list of functions that the web site should serve, outline what types of information is appropriate, and work with Terry Childs to get changes implemented.

Career Development Workgroup

The Career Development Workgroup is charged with formulating and implementing a plan that will result in the recruitment of a qualified and highly skilled workforce, and the retention and continued training of this workforce. Implementation of both aspects will ensure the effectiveness of the Vanishing Treasures Program and the NPS both today and in the future.

The workgroup suggests that these goals may be met by providing assistance to parks through the refinement of position descriptions and by providing guidance regarding available recruiting methods. The workgroup also believes that long-term training is best served by developing courses of instruction that combine formal training, mentoring programs (formal and informal), on the job training opportunities, and cooperative training outside of the organization.

In FY 2001, the workgroup continued working on the goals identified in FY2000 to:

- Identify areas in which we could assist parks in recruiting and hiring qualified candidates;
- Work to develop a formal competency based preservation training program which could be made available to outside agencies, as well as institutions of higher learning;
- Identify and sponsor essential preservation training until such time as the formal curriculum and training plan can be implemented.

Pre- Recruitment and Recruitment Strategies

Over the last two years, the workgroup identified several aspects of the recruitment and hiring process where we could provide assistance, as needed, to parks filling Vanishing Treasures positions. These aspects included:

- providing concise and accurate information regarding the range of hiring authorities available to parks;
- developing strategies to expand recruitment;
- offering assistance with position development to assist program managers in filling positions earlier in the fiscal year;
- clarifying the relationship between the Vanishing Treasures Initiative and other programs such as Resource Careers;
- assisting parks, as requested, in developing appropriate Vanishing Treasures position management plans;
- providing critical review and modification of exiting Vanishing Treasures position descriptions to better reflect the diversity of resources as well as preservation skills required by each park;
- ensuring position descriptions and KSAs reflect skills in the core areas of resource documentation, treatment, conservation, and assessment and;
- Continuing to work towards appropriate classification and titling of Vanishing Treasures positions to ensure recognition of employee skills and expertise.

In FY 2001 the workgroup enlisted the aid of Personnel Specialist in Denver and Santa Fe and Tom McGrath, and Dorothy Printup of

the Historic Preservation Training Center to aid in:

1. Re- writing several Position Descriptions for Masonry and Craft Specialist positions;
2. Identifying and/or developing essential competencies for the positions;
3. Creating a career ladder position within the Wage Grade Series similar to the GS 7/9/11positions,
4. Identifying the preservation training and experience required to achieve the competencies and skill levels necessary for the career ladder position.

The workgroup expects to have a career ladder position, and several revised Craft Specialist positions available, for parks to use, early next spring.

In the coming year, the workgroup will continue to offer assistance to parks to aid in the recruitment and hiring process, and will be actively working with several parks and personnel specialist for the 2002 hire. We believe that in the coming year there will be substantial improvements in the Vanishing Treasures hiring and recruitment process, as the above issues are addressed.

Employee Training and Development

In developing an effective ruins preservation training program, the variety and complexity of the resources must be recognized. Each position within the Vanishing Treasures program faces unique requirements and challenges. Vanishing Treasures, park- based program managers need both practical and management skills, while preservation specialists may be called upon to participate in all levels of assessment, documentation, treatment, conservation, and management. The workgroup, in line with the National Park Service's competency- based training program, views the development of

competencies as a systematic approach to developing Vanishing Treasures employees.

Working towards this end, the group views the three types of training previously identified, apprenticeship /mentoring, academic course work, and workshops as integral aspects of a holistic training program. Such a program would include a formal curriculum that accounts for a range of positions, and the diversity of preservation related skills.

This year, the workgroup continued working to identify various elements of a ruins preservation- training curriculum and has enlisted the aid of the Historic Preservation Training Center staff in developing the training curriculum. The workgroup maintained its contact with the College of Eastern Utah and the Utah State Historic Preservation Officer who are in the process of developing a ruins preservation training program.

In the up- coming year, the workgroup will continue working with the College of Eastern Utah and NPS Training Specialists in developing a comprehensive ruins preservation curriculum (more rapid progress is expected in the coming year once the Olympic Games are over) Once this is completed it should be a relatively simple process to implement a formal, competency- based NPS, ruins preservation training program. The workgroup expects to make significant progress towards these goals should have a draft document compiled in the near future.

Workshops and Priority Training

While personnel issues and development of a formal training program are essential goals of the workgroup, we recognize that there is a current and continuing need for annual preservation training, as personnel change and new preservation techniques and

methods are developed. With this in mind, the workgroup will work closely with park program managers and preservation specialists to identify and help sponsor essential training (e.g. safety training), and ensure that internal as well as external training opportunities are conveyed to the VT community.

Vanishing Treasures Conference

Tumacacori National Historical Park, Arizona hosted the fourth (third annual) Vanishing Treasures Conference October 2- 4, 2001. 93 attendees, representing 39 VT parks, three NPS support offices and several NPS partners spent the three days listening to professional presentations, presenting park reports and participating in several field trips highlighting the unique earthen cultural resources of Southern Arizona. Presentations covered a wide range of topics - from monitoring structural integrity to new assessment techniques to scaffolding issues. Field trips to Mission San Xavier del Bac and the NPS Western Archeological and Conservation Center (WACC) in Tucson strengthened participant's knowledge of earthen architecture preservation issues as well as the resources available to them at WACC. A visit to Tumacacori's Calabazas Mission Unit covered interdisciplinary approaches to preservation. An afternoon spent at Tumacacori Mission highlighted the unique preservation issues of original plasters on adobe and new techniques for documenting and photographing preservation work. Conference attendees participated in a facilitated group discussion on the Vanishing Treasures program itself. Many felt it was time to "take stock" of the program and it's successes along with suggestions to make it an even more successful program - as support for our irreplaceable cultural resources as well as the professional staff that are dedicated to preserving them. Items for action and

discussion were circulated to all participants after the conference.

Funding Workgroup

As noted in previous year- end reports, the efforts of this workgroup have primarily been handled by the VT Leadership Committee. Similar to last year, efforts in FY 2001 focused on securing and maintaining a funding source specifically dedicated to VT, and providing updates on the status and accomplishments of the Initiative to the National Park Service Washington Office staff and various Congressional members and their staff. 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.

In light of how this workgroup actually functions, as described above, it was decided that it was no longer necessary to retain a number of individuals that would be involved in the workgroup. Since the workgroup still has the responsibility for the VT SEPAS criteria, however, Ford has been asked to retain her title as workgroup leader. Dabney will coordinate any efforts on the SEPAS criteria with VT's Advisory Group. Some of the individuals that made

up this workgroup will continue to have involvement in VT's other workgroups or their aspects of VT as their interested dictate. The efforts of Sue Eininger, Jack Burns, Kathy Fiero, Regina Heiner, and Judy Reed in achieving the original objectives of this workgroup are greatly appreciated.

Guidelines and Standards Workgroup

Once again, we have very little to report on the finalization of the VT Ruins Preservation Guidelines. They are still in draft format, but nonetheless serve as the document by which all VT activities are guided. A copy of the draft document is posted on VT's Web Page, and distribution of hard copies has been made to all VT parks and all interested individuals.

Work continues towards the production of a final draft document. It is our hope that it will be distributed sometime during the summer of 2002 for internal NPS review. It is expected that partner and stakeholder review will occur during the fall or early winter of 2002. If this time- line can be maintained, it is expected that a final document will be available by the end of the calendar year.



Table 7.1. Vanishing Treasures Personnel

LEADERSHIP COMMITTEE

Glenn Fulfer, Superintendent, Salinas Pueblo Missions National Monument, **Chair**
 Jerry Rogers, Former Assistant to the Director, Retired, Ex- officio **Executive Officer**
 Sam Henderson, Superintendent, Flagstaff Area National Monuments
 John Lujan, Superintendent, El Malpais National Monument
 Ann Rasor, Superintendent, Tumacacori National Monument
 Larry Wiese, Superintendent, Mesa Verde National Park
 Butch Wilson, Superintendent, Chaco Cultural National Historic Park

Program Management

Todd R. Metzger, Chief, Division of Resources Management, Flagstaff Area National Monuments, **Program Coordinator**
 Margaret Rasmussen, Budget Analyst, Flagstaff Area National Monuments, **Program Budget Analyst**

ADVISORY GROUP

Dabney Ford, Chief, Division of Resources Management, Chaco Culture National Historical Park
 Larry Nordby, Archeologist, Mesa Verde National Park
 Judy Reed, Chief, Division of Cultural Resources Management, Pecos National Historical Park
 David Yubeta, Exhibit Specialist, Tumacacori National Historical Park
 Phill Wilson, Chief of Resources, Salinas Pueblo Missions National Monument (Temporary)
 Preston Fisher, VT Structural Engineer, Mesa Verde National Park (Temporary)

DATABASE WORKGROUP

Al Remley, Archeologist, Flagstaff Area National Monuments, **Workgroup Leader**
 Rachel Anderson, Archeologist, Chaco Culture National Historical Park
 Julie Bell, Archeologist, Mesa Verde National Park
 Brian Culpepper, Archeologist, Aztec Ruins National Monument
 Duane Hubbard, Archeologist, Salinas Pueblo Missions National Monument
 Cynthia Williams, Archeologist, Mesa Verde National Park
 Sayre Hutchison, , Historical Architect, Intermountain Support Office, Santa Fe
 Terry Childs, Archeologist, Archeology & Ethnography Program WASO, Special Consultant
 Dabney Ford, Chief, Division of Resources Management, Chaco Culture National Historical Park
 Bob Hartzler, Exhibit Specialist, Intermountain Support **Office, Santa Fe**

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
 Julie Bell, Archeologist, Mesa Verde National Park
 Eric Brunneman, Archeologist, Canyonlands National Park
 John Crowley, Assistant Regional Director, Human Resources, Intermountain Region
 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**

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
 Sayre Hutchison, Historical Architect, Intermountain Support Office, Santa Fe
 Larry Nordby, Archeologist, Mesa Verde National Park
 Scott Travis, Superintendent, Canyon de Chelly National Monument
 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

A DEFINITION OF VANISHING TREASURES RESOURCES

Vanishing Treasures Resources are defined as a structure or grouping of related structures that:

- Are in a "ruined" state.
- Have exposed intact fabric (earthen, stone, wood, etc.).
- Are not being used for their original function.
- Occupation and utilization have been interrupted or discontinued for an extended period of time.
- Are located in the arid west.
- Are the resources or part of the resources for which the park was created, or, National Historic Landmark, listed on, or eligible for listing on the National Register of Historic Places?

EXAMPLES OF VANISHING TREASURES RESOURCES:

- Architectural remains that have intact historic fabric exposed at or above grade, including: wall alignments, upright slabs, foundations, bins, cists, constructed hearths.
- Sub- grade architecture exposed through excavation or erosion (i.e., pithouses, dugouts, cists, etc.).
- Native American architectural structures (i.e., pueblos, cliff dwellings, hogans, wickiups, ramadas, corrals, earthen architecture, etc.).
- EuroAmerican architectural structures (i.e., churches, convents, forts, ranch-

farm structures/homesteads, mine buildings, acequias or related features, kilns, etc.).

EXAMPLES OF NON- VANISHING TREASURES RESOURCES:

- Sites with no exposed architecture or structural remains, (i.e., collapsed, buried, mounded, or otherwise not evident).
- Archeological or other sites with no architectural remains (i.e., lithic scatters, dumps, campsites, etc).
- Civilian Conservation Corp (CCC) and Civil Works Administration (CWA) buildings and features.
- Historic structures which are regularly maintained, and/or adaptively used, and fit within the Historic Structures/List of Classified Structures (LCS) definitions.
- Structures in use as National Park Service facilities (i.e., administrative buildings, trails, bridges, ditches, canals, etc).
- Mine shafts, caves, which do not have architectural/structural features.
- Pictographs, petroglyphs, rock art, etc., except if found in or on architectural structures.
- National Park Service or other reconstructed buildings or ruins (i.e., Aztec Great Kiva, Bents Old Fort).

Note: It is acknowledged that often times the traditionally associated communities to whom many of the involved Vanishing Treasures resources/archeological sites hold importance, do not consider them to be unoccupied, out of use, or abandoned. "Ruins" are considered by some groups to be spiritually inhabited and are considered to be "in use" by virtue of being invoked in prayers, songs, stories, etc. They are considered dynamic parts of active cultural systems. While we use the term "ruins" and the associated definition, it is recognize that some communities do not use the term "ruin" nor consider the places to be unoccupied or out of use.