



# *Law Enforcement Programs Study United States Park Rangers*

*Report to Congress pursuant to P.L. 105-391  
National Parks Omnibus Management Act, 1998*



## Vision Statement

National parks were established as bastions to preserve representative examples of America's most significant natural and cultural treasures. Sanctuaries that not only rekindle the human spirit through recreation and reflective introspection, but also as the contemporary, living link with our cultural history. They are the open books in the undisturbed library of our geological and paleontological history. They protect and allow interpretation of the archaeological clues that help us understand our prehistoric heritage. Parks are ecological safe havens, providing the guarantee of species diversity and genetic viability. These places of refuge are essential to perpetuating America's flora and fauna for their own right, for our enjoyment, for scientific study and as wellsprings of continuous repopulation for surrounding areas beyond park boundaries.

This report responds to the evident and sincere interest Americans have in their system of national parks. Its purpose is to communicate the law enforcement needs of the workforce charged with preserving these special places—to clearly communicate with Congress, ideas toward stronger protection of National Park System resources and the lives and personal property of visitors who will enjoy national park areas in perpetuity.

## Introduction

### Purpose

This report provides communication between the Department of the Interior and key congressional committees regarding law enforcement needs in the National Park Service. The report includes suggestions for corrective action, some of which involve significant cost. However, this report is not offered as a budget initiative, but rather as a response to a Congressional query: What is the status of the National Park Service law enforcement program—what would make it whole? It is intended to respond to that query and to open a dialog with the congressional committees that will lead to an improved park protection program.

### History

This report is the result of a requirement of Public Law 105-391, the National Parks Omnibus Management Act of 1998. Section 801 of the Act directs the Secretary of the Interior to conduct a study, *“to fully evaluate the needs, shortfalls and requirements of the law enforcement programs in the National Park Service.”* Section 801 further requires that two analyses be submitted to Congress: one analysis is to provide a statement on the law enforcement needs of the United States Park Police; the other is to provide an analysis of the park protection component of the field areas within the National Park System.

The Act requires:

- a multidisciplinary analysis of NPS law enforcement needs
- presentation of suggestions to address identified needs
- justification for all suggested solutions
- a statement of adverse impacts should identified needs remain unmet.

Both reports must be transmitted to the United States Senate Committees on Energy and Natural Resources, and Appropriations, and the United States House of Representatives Committees on Resources and Appropriations by November 13, 1999.

This report has recently been provided to the Office of Management and Budget (OMB), and is currently under interagency review. Based on the desire of the committees for transmittal by no later than November 13, 1999, OMB has allowed a copy to be provided at this time. Because the report is under OMB and interagency review, it should be considered an NPS planning document and does not necessarily have Administration approval. OMB will give consideration to the information in this report in formulating the President’s FY2001 request to Congress, but will not be bound by its contents, including future funding recommendations.

## Objectives

During the planning period, preceding the study, the following objectives and guidelines were identified for the project:

- meet the requirements of P.L. 105-391 as objectively as possible
- provide Congress with a benchmark information resource which communicates essential law enforcement needs, not as a NPS or Departmental budget initiative, but as an objective snapshot of the NPS law enforcement program in 1999 designed to be reliable for a working period of several years, supporting service-wide GPRA goal I for resource protection
- where the presentation of material is incomplete because of time constraints, provide Congress enough information to evaluate whether further inquiry should be pursued and to provide reference leads for follow up investigation
- conduct the study and report process as economically as possible
- use the opportunity of this project to communicate throughout the National Park Service and the Department of the Interior both the specific needs of the NPS law enforcement branches (U.S. Park Police and Ranger Activities) and a broader multi-year vision of how these branches should interact with the other organizational divisions to accomplish the core mission of the agency
- dove-tail with the objectives of the recently formed NPS inter-disciplinary safety program development team, to reduce loss and injury to visitors in accordance with service-wide GPRA goal II and reduce costs of visitor and employee suffering, property loss and litigation
- build an archive of support material to help the agency and Congress in future program analysis and in problem resolution.

### Organizing the Report

Three considerations drove the methodology for this report. The first consideration, from the Public Law, was that the report draw upon multiple disciplines. Second, due to time frames and expenses, required studies and the resulting report were done by Department of Interior, National Park Service staff. And third, a *case-making* approach was employed.

#### *Step One:*

Appoint a multidisciplinary task force to conduct the study and compile the resulting reports for transmittal by the Secretary. Secretary Babbitt delegated authority to National Park Service Director Robert Stanton to approve a task directive to guide the project on February 1, 1999. Director Stanton directed the seven regional directors to nominate four people per region to staff the task force by December 10, 1998. He specified that the nominees be selected from the various levels of the organization and that the task force members reflect a deep knowledge of NPS law enforcement and reflect the diversity of the NPS workforce.

The decision was made to conduct the study *in-house*, given the expense of a typical contract study, the time involved to contract a study and the availability of in-house expertise.

#### *Step Two:*

Identify task force and steering committee members to guide the project. A meeting with project managers, held in Seattle in February, organized the study and delegated work assignments to the steering committee and task force.

Participants recognized that communicating budget, staffing and equipment needs to Congress implied a temptation to bias and subjectivity. The steering committee and study managers stated a common concern that subjective, exaggerated or unsubstantiated reporting would be fatal to the integrity of the project and the veracity of the report. The group examined means to reduce subjectivity to a minimum. Recognizing that park protection rangers and Park Police officers are experienced at proving cases at standard burdens of proof, the group elected to take a *case-making* approach.

The *case-making* methodology adopted to gather and present the information in the report adhered to the following guiding principles:

- because Departmental suggestions for program improvement imply preferences, all material we present is backed up by evidence a reviewer can independently research
- estimates and opinions based on subject-matter expertise are identified as such and are not presented as fact

- where possible, backup material is from public records with time-tested standards of accuracy
- where data is gathered from parks by survey, we tie the survey questions (where possible) to industry standards or written justifications to minimize arbitrary responses
- where suggestions for improvement cannot be precisely determined because of inadequacy of surveying methods or lack of baseline information, we express suggestions in terms of ranges that correlate and that can be independently verified.

To produce the staffing elements of the report, the study team also used input from a previous, but recent study, the Visitor Management-Resource Protection Assessment Program (VRAP). VRAP was designed to produce a consistent and reliable method for determining staffing and support needs for visitor and resource protection programs throughout the National Park system. The VRAP program followed the same methodological approach that natural and cultural resource managers developed for staffing in their disciplines (Natural Resource Management Assessment Program and Cultural Resource Management Assessment Program, respectively). The above two programs, in turn, used FIREPRO as their methodological basis; FIREPRO has been recognized for about 20 years as an interagency standard for developing, testing and justifying staffing and support needs for wildlife management.

The VRAP study and report is submitted to each committee chair and ranking member of the four committees receiving this report. It provides an in-depth review of this methodology. See the section on permanent staffing for a more detailed discussion of the VRAP methodology.

## Report Format

To produce a concise document, reduce the cost and provide a balance between brevity and responsible corroboration, this report is presented in a two-volume format: A master report and a compendium of background material.

Two law enforcement entities work within the National Park System to preserve and protect the parks: the U.S. Park Police and protection park rangers under the direction of park superintendents. The park police provide enforcement with a particularly urban expertise in Washington, D.C., San Francisco and New York City. Protection park rangers, criminal investigators and special agents provide the criminal enforcement and much of the civil enforcement in the remainder of the field areas.

As required by the above statute, this section of the report focuses on the work and the needs of the protection park ranger. A companion report states the situation and the needs of the U.S. Park Police. The reports are submitted as two halves of the whole picture.

### Master Report

The first volume presents a concise master report of law enforcement needs and responds to the reporting requirements of P.L. 105-391, Section 801 (called *Action Elements*). Each *Action Element* projects a suggested solution and an estimated cost if that solution were adopted. A total of these costs are presented in a master list as part of a comprehensive *Action Element* on Fiscal Resource Needs.

The Master Report will be transmitted to each member of the House and Senate committees as prescribed by Section 801.

### Compendium

The second volume compiles background material the team used to develop many of the report's conclusions. This second volume provides material for a fuller understanding of the influences driving suggestions made in this report. It also allows independent analysis and possibly development of alternative suggestions for improving NPS law enforcement.

The compendium volumes are bulky and would be prohibitively costly to reproduce in quantity. Accordingly, an agreement was reached with Senator Thomas's staff to have one copy of the Compendium delivered to the chair and the ranking member of each of the four congressional committees.

### **An Imperceptible Crisis**

It should be the right of every park visitor to enjoy the great institutions of this country's natural and cultural heritage in relative safety. It should be the right of every future visitor that this heritage be there, intact, to visit. Over the past several decades however, the ability of the National Park Service to be effective in protecting people, property and resources has been eroded by the combination of growth of the park system and increased costs of doing business. Unless decisive steps are taken, these circumstances are not likely to be reversed.

Equipment and facilities are stretched to longer and longer periods of use. They break down and fail. Communications systems are out-of-date; response times lag. Fewer personnel responding to more calls means follow-up investigation and resolution are delayed or simply do not happen. Because reporting is down, the problems have become harder to articulate, the patterns harder to isolate. Employee and public safety are increasingly at risk.

At the same time, the forces of population growth and the pressures of illegal activity threaten park resources as never before. Theft and marketing of artifacts, animal parts, plant life and other illegal commercial activities threaten to bleed away the vital resource base of the parks. Drug smuggling, the movement of undocumented aliens, marijuana cultivation and clandestine drug labs create an unacceptable visitor safety risk in many parks and quietly obliterate natural resources, many of which are irreplaceable.

Because the National Park System is vast, criminal activity is often successfully concealed. Because the frontline workforce is relatively small, the onslaught takes its toll incrementally, almost imperceptibly. To most park visitors it is so incremental that it is a non-issue. To the trained eye however, it is a crisis. In time it will be too late or too expensive to reverse.

Public Law 105-391 provides the imperative first step in what we view as a joint rescue mission between Congress and the Department of the Interior—a mission to arrest the erosion of park resources and to re-energize our ability to meet public expectations for necessary and appropriate visitor services. The statute calls for the identification of problems, suggestions for corrective action, justifications, and an analysis of adverse impacts if corrections are not implemented. We call those sections of the report Action Elements.

Although Action Elements include a projected cost, this report is not a request for funding per se. It is our intent to communicate the status of the visitor and resource protection program and open a dialog with the oversight committees. We hope this dialogue will bring solutions over reasonable periods of time that address visitor and resource protection issues in the context of the National Park Service's total mission and needs. The suggestions contained in this report may spark additional suggestions from

the committees. The important thing is to open the discussion and begin the work of improvement.

The following Discussion section provides a brief orientation for the reader. An overview of National Park Service law enforcement issues, it is presented to put the Action Elements into a useful context.



*Rangers and California Highway Patrol officers respond to a roll-over accident at Death Valley National Park in California. After stabilizing and transporting the victims, the two men were charged with alcohol-related offenses and with the theft of the sedan from a rental agency in Las Vegas, Nevada.*

### Defining Law Enforcement

Law enforcement in the parks goes to the core mission of the National Park Service. Established initially, to thwart poaching, NPS law enforcement has evolved over the years, continually trying to stay ahead of the shifting impacts brought on by exploding park use and the interaction of visitors with each other and their impact on park resources.

Not an end unto itself, law enforcement is one of several tools used by park superintendents to accomplish basic agency objectives.

The law enforcement work done in the National Park Service is atypical when compared to the enforcement work done in other federal agencies. When viewed in total, it is, first and foremost, concerned with protecting natural and cultural resources in National Park System units. The National Park Service Organic Act directs that these nationally significant resources be protected to an extraordinary standard—a standard that preserves them unimpaired for the enjoyment of future generations. This is a daunting task when one considers that in 1998, more than 435 million people entered the 378 NPS units across the country. These entries, recreational and non-recreational, all contribute to the human impact on parks as well as to the law enforcement and resource protection workload.

In fact, the popularity of parks, if not managed wisely, threatens to be their undoing. With over 400 million annual visits and non-recreational entries, there are predictable results with respect to resource damage and general criminal activity. As the press of visitors increases, the limited NPS protection staff must give priority to visitor protection and less attention to natural and cultural resource protection.

Although protection rangers responded to over 13,000 natural resource criminal violations and 339 violations of the Archaeological Resources Protection Act in 1998, significantly more time was spent responding to people and property-related crime. Crime that all too often turns dangerous for visitors and rangers alike: in 1998, one park ranger was killed in the line of duty by a gunman at Great Smoky Mountain National Park, and 57 rangers and other NPS officers were assaulted.\*

A review of some of the statistics from the 1998 Uniform Crime Report reveals the scope of the NPS resource protection and law enforcement job and the gravity of the caseload (see Table A, on page 10).

\* In January 1999, another ranger was killed in the line of duty at Kaloko-Honokohau NHP in Hawaii.



*Protection rangers are trained to maintain a bearing that invites the visitor to strike up a conversation, while conveying a law enforcement presence. This balancing of demeanor is intended to result in better communication with the public and an atmosphere of public safety.*

**Chief Park Ranger's  
Perspective**

**Yellowstone National Park**

The 2.2 million-acre park occupies the northwestern corner of Wyoming and small portions of Montana and Idaho and supports the largest concentration of free-roaming wildlife in the lower 48 states and the Temperate Zone. With over 10,000 thermal features, Yellowstone includes the largest concentration of geysers in the world.

Within this area of exclusive Federal jurisdiction the 58 permanent and 57 seasonal rangers patrol 370 miles of paved road, 1,200 miles of backcountry trails, 12 frontcountry campgrounds with 2,201 campsites and 308 backcountry campsites scattered throughout the park. Today Yellowstone rangers investigate 6,000 case and criminal incidents each year. Rangers issue 4,000 violation notices each year and arrest approximately 100 individuals.

In addition to their primary law enforcement responsibilities, rangers also provide all emergency services for our 3 million annual visitors and several thousand residents. Rangers respond to nearly 700 emergency medical incidents annually, perform wildland fire suppression, respond to scores of search and rescue incidents and provide structural fire protection/suppression services for over 1,500 structures, of which 952 are historic, including five designated as National Historic Landmarks.

In addition to the protection of other threatened and endangered wildlife and plants, the recent identification of thermal microbes is adding yet another law enforcement challenge. Thermal microbes found in the park have developed into solutions for some of the world's most significant commercial and scientific problems. With the millions of dollars that are now at stake, protection rangers face the challenge of protecting a very small, yet extremely valuable resource.

<b>Table A</b>	<b>Type of Criminal Offense</b>	<b>Number of Incidents</b>	<b>Number of Incidents Cleared *</b>
<b>1998 NPS Unified Crime Report Selected Statistics for Park Areas Only**</b>	Homicide .....	8 .....	3
	Rape .....	19 .....	6
	Attempted Forcible Rape .....	10 .....	6
	Robbery .....	22 .....	0
	Kidnap .....	5 .....	1
	Aggravated Assault .....	83 .....	72
	Burglary .....	378 .....	32
	Larceny .....	3,552 .....	363
	Auto Theft .....	102 .....	24
	Arson .....	76 .....	3

**Vehicle & Resource Offenses, 1998**

Driving While Intoxicated .....	1,316
Traffic Incidents, Not Including DUI .....	43,916
Boating Law Enforcement Incidents .....	5,594
Aircraft Law Enforcement Incidents .....	220
Natural Resource Violations .....	13,239
Archeological Res. Protection Act Cases .....	339

\* Clearing a case means that the case was closed by making an arrest, court action or by other means. Closure rates are affected by limited personnel, remoteness and the often-transient nature of park users.

\*\* This chart represents a fraction of the overall crime statistics for 1998—a reprint of the full 1998 Uniform Crime Report (Part I and II and Other Crimes) is available in the compendium volume.

<b>Table B</b>		
<b>Rangers Assaulted in the Line of Duty</b>	Rangers assaulted by vehicle .....	6
	Rangers assaulted by firearm/blunt object .....	9
	Rangers assaulted by personal weapons/threats .....	25
	Total number of assaults .....	57
	Rangers killed by assault (firearm) .....	1

<b>Table C</b>	<b>Total service calls</b>	
<b>Service Incidents</b>	Search and rescue .....	2,252
	Emergency medical services .....	12,474
<b>DARE- Drug Awareness Resistance Education</b>	Educational .....	52,655
	Other service calls .....	27,238
	Total Ranger Instructors .....	70
	Currently Active Programs .....	45

Class sizes per program have a historic range of 8 students at the Pretty Eagle Elementary School near Ft. Smith, Montana to 1200 students contacted and instructed by two rangers at Chickasaw National Recreation Area near Sulphur, Oklahoma.

<b>Table D</b>	Vandalism .....	3,796
<b>Quality of Life Crimes</b>	Sex Offenses .....	340
	Liquor law .....	4,895
	Public intoxication.....	880
	Offenses against family and children .....	98
	Hate/Bias incidents .....	34

**Chief Park Ranger’s Perspective**

**Ozark National Scenic Riverways**

Ozark National Scenic Riverways in southeastern Missouri preserves 134 miles of the free-flowing Current and Jacks Fork Rivers along with some of the largest springs in the United States, over 300 caves, hundreds of archeological sites, historic structures and abundant wildlife. Covering 82,000 acres in four counties, it is located within a few hours drive of major cities such as St. Louis, Kansas City and Memphis and receives intense recreational use of 1.5 million annual visits.

Rangers investigate up to 1000 incidents a year including 300 to 400 drug cases. Heavy drug and alcohol use and drug manufacturing occurs within and outside the park area and the 300 drug arrests barely scratch the surface of the problem. Felony assaults, weapons and poaching violations are also frequent. Rangers assisted in the arrest and prosecution of a local poacher, which was the largest poaching case in Missouri history. Retaliation by violators in the past resulted in four rangers’ homes being burned down. A ranger station was burned in 1997 and threats to kill rangers are currently occurring. White supremacist activity has resulted in attacks on minority visitors: one such case is currently under investigation.

A workforce of 15 rangers patrol 134 miles of river and over 300 miles of remote back roads, providing law enforcement, visitor and resource protection, search and rescue, campground management and emergency medical incidents that routinely occur. Local area economies are poor and there is no emergency 911 service. Sheriffs departments have only 2 to 4 deputies for large counties, increasing the need for interdependence, but limiting available assistance.

## What Makes NPS Law Enforcement Different?

Americans, for more than 200 years the leaders in progressive government, created near the end of the 19th Century an innovative and noble public institution: a system of national parks. Our system, the first of its kind and long a source of national pride is emulated by nations around the world.

The features that make up our National Park System inventory are often the most significant, rarest, and in many cases, the unique icons of American natural and cultural history and include such diversity as: the Grand Canyon, Yosemite Valley, the ruins at Mesa Verde, the Statue of Liberty, the Lincoln Memorial and his birthplace, Martin Luther King's home, portions of the Nez Perce tribal homeland and the Liberty Bell, to name a few. National parks also protect complex ecological systems, cultural landscapes, or ethnographic assemblages and are, in many cases, the last, the best, or the only places where these values and processes are preserved.

What makes the NPS enforcement task different—as mission-specific as that of the Secret Service, the DEA or the FBI, is the mandate from Congress not only to provide



*Rangers are trained and evaluated on their ability to convey a positive and professional personality to the public. This includes making a normally uncomfortable task (such as a traffic stop) as constructive as possible. Park employees understand that most visitors are on vacation and that a negative contact could ruin a once in a lifetime experience. They are also aware that every stop is potentially dangerous. Fifty-seven rangers were assaulted in 1998. One was killed as he responded to complaints of a man threatening visitors with a rifle as the Blue Ridge Parkway in North Carolina. An even balance between alertness to risk and attentiveness to visitor service is essential.*

protection for the people visiting parks but to protect the vast and diverse inventory of National Park System resources.

Protecting this inventory of park resources and the people who visit the sites requires a skilled workforce, with a discipline that combines a high level of resource knowledge, an attitude of public service and professional law enforcement competence.

Protection personnel also provide search and rescue, emergency medical services and fire-fighting services in parks. It takes a mature, well-educated and fit individual to perform successfully.

The fact that rangers are encouraged by statute to be multi-skilled generalists highlights the need for an unusual workforce. The following examples make the point. Fire management requires a basic foundation in physics, chemistry, geography and meteorology. Administering an intravenous medication to a mountaineering accident victim, a ranger must understand physiology, certain aspects of chemistry and field medicine and often must perform in primitive and difficult settings. To manage the searchers attempting to find a lost hiker, the ranger directing the search needs experience in planning, statistical probability, human behavior and the psychology of stress and grief.

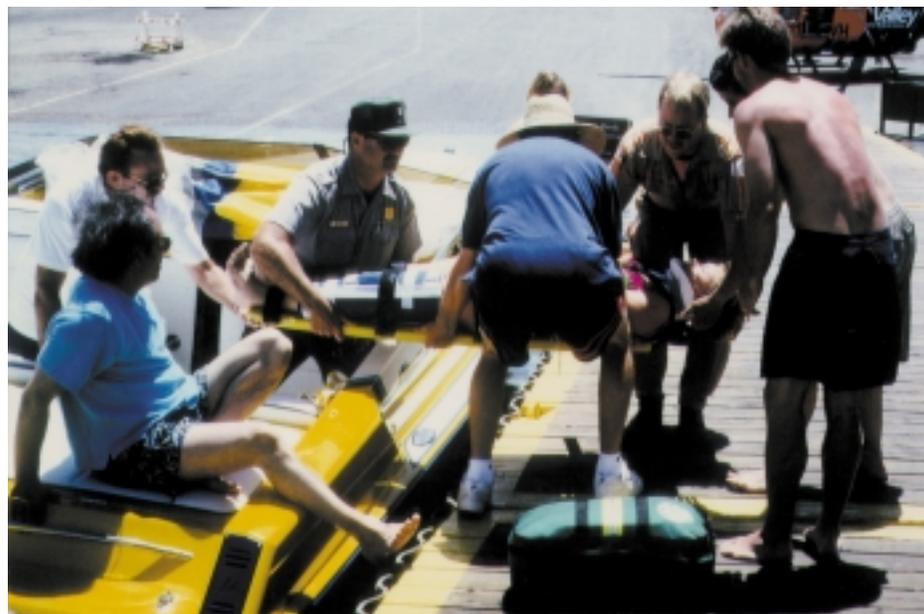
This knowledge base, common to most rangers, is capped by the education, training and experience essential to protect park resources and visitors through enforcement of the federal conservation, criminal and resource-oriented civil laws. Because the mission-emphasis is protection, not reaction, the NPS law enforcement approach differs significantly and materially from those of most other law enforcement organizations.

### **The Key is Prevention**

Whether addressing the protection of a park resource or ensuring that a park user enjoys a safe visit, the key to the NPS approach is prevention.

Prevention presents a more difficult challenge than reactive law enforcement. Preventing criminal or even accidental activity resulting in harm or loss, requires an agency to understand root causes, versus symptoms or outcomes. Once root causes are understood, strategies can be developed to eliminate or reduce their effect. Resources and people can be spared injury or loss. The parks stand a better chance of being enjoyed unimpaired.

In the National Park System, understanding root causes implies possessing knowledge of the vast array of park resources protected. It requires an awareness of market forces related to the exploitation of those resources. In many of the more heavily visited parks, it requires an understanding of garden-variety criminal behavior and the predisposition of some people to prey on others.



*Search and rescue and emergency medicine have been ranger duties since the beginning of the National Park Service (early rangers recover a body below Vernal Falls in Yosemite National Park). Frequently, accidents occur hours from the nearest hospital facilities. The same rangers that provide medical care at the accident scene also investigate the causes, record witness statements, collect evidence and file necessary charges. They provide emotional support to victims and survivors and sometimes serve as coroners. The contemporary scene is an evacuation of an accident victim at Lake Mead National Recreation Area.*

In parks on the southwest American border, prevention demands an understanding of the dynamics fueling the drug trade and the sociological realities inspiring thousands of undocumented aliens to cross parklands each year. Protecting wildlife, requires an understanding first of the wildlife, then of the international markets and the culturally-based motives that drive people to kill animals illegally in parks, to professionally guide hunters out of season or in restricted areas, or to kill animals for their marketable parts (which sometimes consists of only one part of the animal).

To successfully protect and prevent, one must attempt to understand the factors motivating the theft or destruction of all of the other park resources designated for protection by Congress. These include historical structures, archaeological ruins and artifacts, graves, paleontological specimens, plant life and natural features or systems as complicated as the subsurface hydrology that spawns the geysers in Yellowstone.

*Law enforcement patrols provide the opportunity for serving a public as diverse as kids exploring for leaves at Independence National Historic Site in Philadelphia and bikers at Mt. Rushmore during the annual rally at Sturgis, South Dakota.*



Each National Park area has a particular array of resources and values. Each national park area may also have a particular visitor constituency. If the NPS is to protect such a particular mix of resources and values in perpetuity—as used and enjoyed by a particular constituency—it must proceed from a mission-based understanding of that locality and those particularities. Only such understandings can usefully muster the effective chemistry of support disciplines necessary to the task.

For example, Mt. McKinley in Denali National Park is prone to a routinely life-threatening activity: illegal guiding by foreign mountaineers on one of the most popular, but deadly peaks in the world. Commercially guiding climbers requires NPS licensing and painstaking attention to safety. Each year, a certain number of guiding companies are permitted to conduct business. The problem arises when mountaineering guides without permits attempt to guide clients on the mountain—creating both an unfair situation for the legally permitted professional guide companies and a dangerous safety situation.

The problem is compounded when the climbing clients are from overseas. European and Asian climbers, with different languages and various cultural perspectives regarding goal achievement pose a complex enforcement problem to the ranger staff. Some mountaineers continue the climb, no matter what the conditions, almost to the point of suicide. Guides sometimes abandon weaker, ailing or injured clients in favor of those most likely to summit—successful climbs promote more business next season.

Understanding the cultural motivations and finding ways to surmount the language barrier, the ranger staff in Denali works with mountaineering clubs in foreign countries, publishes articles in international journals, and employs multi-lingual people during the climbing season, to prevent high altitude problems in advance.

The protection actions of the climbing rangers on Mt. McKinley provide an illustration of sensible, preventative enforcement. Most people would not realize that illegal guiding presents an enforcement problem. However, more people die on Mt. McKinley than die from drug overdoses in the national parks in Alaska each year. While drug abuse is clearly recognized as a national enforcement priority, the rangers in Alaska have adapted to meet one of their priority enforcement issues. Although the preventative approach in this example hardly seems like law enforcement at all, it makes more sense to take this approach than to arrest an illegally operating guide at 17,000 feet with a dozen clients from another nation that must then be escorted down the mountain by the rangers.

Rangers attempt to employ the same fundamentals of resource knowledge, constituency understanding and strategic prevention to thwart criminal activity throughout the National Park System— regardless of the resources and the park users. Innumerable

examples of resource threats range from the Asian markets for bear gall bladder and antler material to art collectors paying tens of thousands of dollars for artifacts looted from NPS sites commemorating ancient cultures.

Generally, the resources being stolen and put on the market are not renewable. In most cases, once they are gone, they are gone forever. In the case of cultural resources, once they are gone, the contextual information about the past can never be reconstructed even if the artifact should be recovered.

The real crime is that a relatively small number of people degrade the value of parks owned by all Americans for their own consumptive enjoyment or profit.

How is preventative enforcement possible when there are so many types of resources and so many millions of visitors?

### **A Common Effort by All Agency Disciplines**

Given the astronomical numbers of park users and the overwhelming variety of park resources, ranger division protection efforts are not optimally effective without a multidisciplinary approach. After all, each natural or cultural resource has its own field of study.

The National Park Service depends on teamwork between and among protection rangers, park interpreters, scientists and resource managers to carry out an orchestrated protection approach.

**Relationship with Scientific Resource Management:** The relationship with scientific specialists is critical to develop the right subject matter expertise in the ranger workforce. For example, rangers at Hawaii Volcanoes National Park routinely work with the US Geological Survey to sharpen their understanding of the geological processes associated with eruptions and volcanic features. They work with NPS and other federal or outside botanists, ornithologists and forest experts to understand better the rainforest ecosystem protected by the park's enabling legislation. As a result, they do a better job of enforcing public safety measures as visitors flock by the thousands to view eruptions. They enforce more effectively the federal drug laws against marijuana growers who enter the park, because they can articulate to juries and judges the resource damage done to the forest and the endangered species of birds that live there and no where else.

**Chief Park Ranger's  
Perspective**

**Everglades National Park**

Everglades National Park is a 1.5 million-acre park that occupies the southern tip of Florida. Over 1.25 million acres or 86% of the park is federally designated wilderness. There are 137 miles of coastline, 484,200 acres of open saltwater, and 572,200 acres of sawgrass/freshwater marsh. There are 400 species of birds, 25 species of mammals, 60 species of reptiles and amphibians, 125 species of fish, and over 1,150 species of plants (including air plants and 24 species of orchid). In addition, 13 endangered species of animals make their home in the park. The park has been designated a Biosphere Reserve, World Heritage Site, and Wetland of International Significance.

In addition to the great size of the park, rangers patrol 82 miles of surfaced roads, 156 miles of canoe and land-based trails with 48 backcountry campsites, 5 miles of surfaced trails, and 423 campsites in 3 campgrounds. They provide security and structural fire protection for 301 park buildings, including 5 visitor centers and 2 environmental education camps.

There are three major population areas adjacent to the Park: the Miami metropolitan area, Naples/Fort Myers, and the Florida Keys. In 1947 there were about 500,000 people living within a 100-mile radius of the park; today there are approximately 6 million, with 12 million projected by 2030. Park visitation averages 1 million per year, which does not include boaters entering from the Florida Keys.

Although crime nationwide has dropped over the last seven years, the number of Part I offenses at Everglades National Park has increased from 26 in 1994 to 139 in 1998. Natural resource violations such as recreational fishing violations, poaching, illegal commercial fishing and illegal dumping average 500-600 per year. Rangers issue an average of 1,100 violation notices each year. In addition to citations, in 1998 over 1,800 written warnings were issued. Rangers work on an average of 40-50 search and rescues per year; however, there were 98 search and rescue incidents in 1998.

Each area of the park has its unique law enforcement challenges. In the Pine Island and Flamingo Districts 400-500 animals are killed crossing the road to Flamingo every year. The Florida Bay, Flamingo and Northwest Districts are heavily oriented toward boating activity. Most of the 400-500 natural resource violations occur there, along with all of the 1,216 boating violations in 1998. The Florida Bay District has the Intracoastal Waterway along its boundary. The heavy boat traffic moving along the boundary results in an average of 50 boat groundings documented per year, with a high of 70 in 1998.

**Relationship with Park Interpreters:** The best way to prevent crime and resource destruction is through education. Like protection rangers, park interpreters are professional educators conveying knowledge about the values and significance of the natural and cultural history of the parks. Interpreters have an advantage in educating the public because they reach a much larger audience.

Each year, through personal presentations, publications, video productions, web-sites and other media, park interpreters reach hundreds of millions of people with the NPS message of preservation. As in the case of their partnership with science, protection rangers are most effective when they work in concert with interpretive specialists to raise the level of public knowledge about the values of our heritage.

This takes several forms.

First, developing interpretive programs and publications that teach the public the true value of park resources raises the level of voluntary compliance with conservation laws—an informed public is a much more cooperative and responsible public.

Second, as the results of successful prosecutions in criminal and civil cases are published in the media through NPS public affairs specialists and interpreters, the public develops an expectation that there are sanctions for committing crimes or damaging resources in parks—creation of a deterrent.

Third, when you combine an informed public, their spirit of voluntary compliance and a sense that there are fair, but firm penalties for crime in parks, you create peer pressure, a social conscience. An awareness is produced that parks are special places where rules are to be followed because they make sense and because the value of the park experience dictates responsible behavior. If the ranger workforce in a given park can reach that level of public commitment—that peer pressure—they can focus their reactionary law enforcement tactics (arrest, indictment, prosecution) on the purposeful criminals that prey on parks and visitors.

Continuing the example from Hawaii Volcanoes National Park: over the years, interpreters and protection rangers have merged their knowledge of past volcanic patterns and the best contemporary information supplied by the U.S. Geological Survey to link with the commercial media and Hawaii Civil Defense to promote safe, lawful visits to the park during eruptions. They have worked with interpretation and the media to make the public and the judicial system aware of the gunplay, boobytraps, resource damage and prison time that accompany marijuana growing. The result is a pervasive social consciousness—a peer pressure that damaging park rain-forest to grow marijuana is wrong, resulting in a dramatic decrease in marijuana cultivation in the park.

Across the National Park System, the partnered approach to law enforcement takes place with as much diversity as there are types of resources. In the cities and law enforcement academies, a similar approach is called community-based policing, connecting enforcement with the individuals in the community and the protection of their values, in this case, how Americans value their parks. Whatever its label, preventative enforcement requires adequate funding, maintenance and constant vigilance. Just because marijuana is not routinely cultivated in Hawaii parks today, intermittent cases (as recently as 1999) remind us that the threat is ever present. We could relapse to the historically unacceptable levels of cultivation activity (witnessed in the early-1980s) within a few months if we drop our guard.

### **Contemporary Threats Versus Size of the Existing Workforce**

Without sufficient protection ranger staffing, park users inclined to criminal behavior sense the opportunity to act with less risk. Without auxiliary cooperation from science and interpretation and without the support of maintenance and administrative services, effective enforcement does not occur.

The following factors describe significant influences—some alarming— that impact park resources, threaten park visitors and shape the issues that frame the discussion of National Park Service law enforcement. These include growth in the National Park System and a correspondingly relative decrease in protection workforce.

**Explosive Growth:** A look at changes occurring over the past 20 years is instructive (Table E). As the number of acres managed by the National Park Service climbed and annual visitation increased, the size of the ranger workforce did not keep pace. In the 20 years between 1978 and 1998, the National Park System:

- grew by 84 new units—**28% growth.**
- acreage in the system grew from 31.3 million acres to 83.4 million acres—**expansion of 166%.**
- total visitation grew from 283 million visits in 1978 to 435.6 million in 1998—**a 53 % rise** in total recreational and non-recreational park entries.

Without highly visible rangers, park users inclined to criminal behavior may sense an easier opportunity to act.

**Table E**

**National Park System  
Growth Compared to  
Growth in Protection  
Staff, 1978 to 1998**

<b>Growth Category</b>	<b>1978</b>	<b>1998</b>	<b>% Change</b>
Permanent Protection Rangers .....	1,168 .....	1,483 .....	27
Total Number of NPS Units .....	295 .....	378 .....	28
Total Acreage of Lands Administered .....	31,323,618 .....	83,459,633 .....	166
Total Visits .....	283,090,141 .....	435,636,920 .....	53
Recreational Visits .....	222,184,026 .....	286,739,115 .....	29
Non-Recreational Visits .....	60,906,115 .....	148,897,805 .....	144

During these same 20 years, the number of permanent protection rangers, which was 1,168 in 1978, grew by only 315 positions to 1,483 in 1998, or 27%. This is roughly one new ranger to every 1,816,030 new entries (recreational and non-recreational visits). Viewed another way, there are over 55,000 acres per permanent ranger to patrol, provide law enforcement response, protect property and resources and assist visitors.

Historically, cooperative relationships with nearby county sheriff’s offices, state troopers, and municipal departments are good. However, most local agencies are severely limited by force size and authorities and are often unable to provide support beyond emergency cooperative assistance. The FBI and other federal agencies have historically responded to NPS calls for assistance in urgent cases, but lack the staff to alleviate ranger shortfalls. They also lack the congressional protection mandate and usually do not have training in park-related enforcement.

The 1978 ranger workforce, which was staffed to reflect the workload demands indicated by the previous 106 years of park management experience (gleaned since the establishment of Yellowstone National Park in 1872), today finds itself overtaken by the spiraling growth of the last two decades.

During this same twenty-year period, Congress provided new legislation and amended earlier statutes to strengthen significantly the National Park Service’s ability to protect both natural and cultural resources. Many of these same statutes added to protection workloads, such as the Archeological Resource Protection Act (ARPA), the Native American Grave Protection and Repatriation Act (NAGPRA), and the 1996 amendments to the Resource Protection Act, by requiring necessary, but time consuming, assessments of damages. The problem now boils down to not having the personnel and equipment to enforce the laws already on the books.

**Marginalizing the Core Mission:** To comprehend fully the status of NPS field protection, it is a critical to be aware that in the face of the exploding growth of the system (both visitation and geographic area), the primary enforcement mission of the park ranger, resource protection, has been marginalized as the day-to-day priorities of protecting life and personal property have grown.

**Park Profile**

**Lake Mead National Recreation Area, Nevada-Arizona**

**1998 Miscellaneous Statistics**

Rangers, Law Enforcement Commissioned .....	43 Permanent, 6 Seasonal
Lives Saved .....	202
Mutual Aid Assists .....	182
Arrests .....	455
Citations Issued .....	2,388
Case Incident Reports .....	14,147



**Ten Year Statistics: Six Selected Criminal Incident Types\***

<b>Incident Type</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>
Homicide .....	0	0	1	2	2	2	4	3	3	4
Sexual Assault .....	10	14	12	14	4	11	8	7	5	6
Assault .....	23	34	35	38	59	56	62	50	51	46
Burglary .....	79	117	100	107	54	58	40	55	31	25
Larceny .....	225	238	226	231	326	276	276	289	234	260
Weapons Violations .....	6	2	4	7	5	96	97	68	59	43
Total Arrests** .....	516	468	462	439	524	439				455

\* These incident types are selected from a total of 50 different violation types statistically tracked by Lake Mead NRA each year.

\*\* Total Arrests indicates total number of arrests in all 50 incident categories each year.

	<b>1989</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>
<b>Visitation</b>	8,803,000	8,893,000	8,751,000	9,344,000	9,266,000	9,914,000	10,196,000	9,690,000	8,838,000	
<b>Incident Type</b>										
Vehicle Accidents .....	160	194	143	183	297	168	167	166	146	162
Boat Accidents .....	74	86	218	258	199	301	296	214	136	171
Medical Responses.....	604	10	316	753	597	607	505	395	389	393
Fatalities All Types.....	22	25	26	31	38	46	28	32	21	39
Search & rescue .....	118	268	316	345	312	245	137	217	142	411
Structural Fires .....	72	42	62	88	189	85	83	46	34	43

Twenty years ago rangers could concentrate their protection efforts on the well-being of their particular park's resources. In 1999, they usually do not have the time.

Today's ranger is forced to concentrate on reactive enforcement actions, attempting to thwart the negative impact of criminal activity on other park visitors. In most parks, rangers are overwhelmed by the type of law enforcement duties common to city police forces: traffic patrol, arresting drunk drivers, breaking up bar fights, investigating thefts, robberies, rapes and assaults.

The ratio of reactive life/property enforcement actions to preventative resource protection is so far out of balance that resource protection work is only accomplished as time allows. Only by building up the resource protection workforce to correct this imbalance will the core mission of the National Park Service be realized.

---

**Comparative  
Perspective**

The U.S. Capitol Police, maintains law and order in the area surrounding the United States Capitol, provides member security and is currently authorized a staff of 1,330 officers. These officers also work hard to convey a sense of safety in the capitol environs and extend an agency personality of helpful service to the numerous visitors attracted to the historic buildings and grounds.

<sup>1</sup> USCP, 6/30/99  
(Sgt. Diane Schmidt)

Currently, just over 1,483 National Park Service rangers work to achieve a similar mission in a system of over 378 units, spanning more than 83.3 million acres.<sup>1</sup>

---

**Southwest Border Problems:** Escalating criminal activity in park units along the Mexican Border damages park resources and puts visitors and employees at unacceptable risk. Based on current levels of illegal border activity, there is an alarming possibility that visitors and staff members will be killed and seriously injured in the future—park resources will continue to deteriorate.

Mexican drug smugglers use park roads and trails to move marijuana, cocaine and heroin into the United States. The remote and often wilderness nature of NPS lands decreases the criminals' risk of detection. The smugglers are preceded into the parks by scouts who monitor the location and radio traffic of the rangers and place headquarters facilities and residences under surveillance.

American law enforcement intelligence reports observe that ex-U.S. military servicemen are operating in training camps in remote areas of Mexico, instructing smugglers and scouts in military tactics for surveillance, covert movement and weapons use. Smugglers and scouts routinely use camouflage, coordinated night movement, lookouts, night-vision equipment and modern weapons in the course of bringing drugs through the parks. Armed confrontations, brandishing weapons and shoot-outs occur in the vicinity of at least four NPS border units with significant frequency.



*Park Rangers, assisted by Border Patrol, U.S. Customs, and Pima County Sherriff's deputies, load sacks of marijuana onto a helicopter in Organ Pipe Cactus National Monument, Arizona. Smugglers were attempting to move over 3,215 pounds of marijuana, valued over \$2 million, through the park's backcountry on horseback. One of the 11 smugglers was arrested and 20 animals seized. Impacts of smuggling include additional risks to visitors, increased trash and human wastes, and progressive damage to fragile ecosystems from smuggling trails.*

The National Park Service manages six units adjacent to Mexico for a total of 1,168,000 acres and 371 miles on the border, or 18% of the total 2,069-mile border between San Diego, California and Brownsville, Texas. The aggregate protection ranger workforce in these parks is 33. A force of approximately 8,000 Border Patrol officers, (currently authorized to increase by 1,000/year to 10,000)<sup>2</sup> is deployed along the southwestern border frontier and assist rangers when called. However, because much of the NPS land is remote, back-up is often too late to assist one or two rangers faced with arresting many armed smugglers or undocumented aliens at once. The United States Customs Service deploys agents along the Mexican Border also providing assistance when possible—although most Customs personnel are stationed at points of entry, their primary mission to prevent smuggling.

<sup>2</sup> Per Tom Cherry, FLETC—discussion with USBP-FLETC

On the US-Mexico Border, protection rangers provide primary law enforcement for 18% of the land with less than 0.5% of the federal law enforcement workforce.

While the Border Patrol operates against illegal border entry and Customs exists to prevent smuggling, no other law enforcement entity on the border is charged with protecting national park resources.

In addition to the life/safety threat posed by drug smugglers, the illegal traffic of human beings adds the additional problem of resource damage. It is a movement of hundreds of thousands of undocumented aliens a year through unsettled border country, much of it parkland. The Tucson Sector, which contains Coronado National Memorial is crossed by an estimated 30,000 aliens per month—the population of a small city moving through at night.

Smugglers and undocumented aliens often travel the shortest distance between two points to avoid detection. In the process, they carve deep trails straight into hillsides and ridges, causing erosion and a radiating pattern of destruction to plant and animal life. The herd-like movement of people results in the unmanaged deposition of human waste, the potential spread of disease and the littering of previously unspoiled wild areas with abandoned garbage that becomes a blight on the landscape.

**Threats to Wildlife, Plants, Geological and Paleontological Resources:** By law, units of the National Park System protect plants, wildlife, geological formations and fossils. Today, as never before, there are lucrative domestic and international markets for these resources that motivate criminal activity. Where markets exist for a protected commodity, black-markets develop to exploit that commodity where collection, possession or sale are illegal.

*Wildlife:* Poaching is an activity dating back centuries and occasionally popularized in folklore. But unlike the motives of the destitute to put food on the table in prior decades, entering a park to kill wildlife today is usually based on motives of profit or the status that comes from bagging trophy game.

For example, black bears and brown bears throughout Alaska and the Lower-48 are killed for money. Their gall bladders are smuggled out of the country to meet a market for traditional medicinals in certain Asian countries. The dried, powdered material from one bear gall bladder may have a street value of several thousand dollars overseas. A hunter will receive \$100 to \$300 for the unprocessed gall bladder taken from a bear killed in a National Park, and often abandons the rest of the carcass.

Trophy hunters pose a similar threat.

It is critical to point out here that the vast majority of hunters pursue their sport ethically and contribute substantially to the protection of wildlife and habitat through license fees and membership in wildlife clubs. What we are referring to in this report is those who resort to killing park animals, which are usually unaccustomed to hunting pressure. In too many cases, only the trophy parts (horns, antlers, cape or skin) are taken, leaving the carcass to rot. Unscrupulous commercial guides, under pressure to ensure a record of successful hunts, often slip their clients into NPS areas where hunting is prohibited but where trophy-size specimens are more easily taken. A guided hunt may bring more than \$10,000 to a guide with a successful kill record, depending on the species. The incentive for illegal activity is real.

These practices not only frustrate park managers, thwart scientific understanding and disappoint visitors, but also outrage lawful hunters and guides who pride themselves on adhering to the ethics of their traditional outdoor activities.

By managing parklands for species protection, we ensure that wildlife populations will be available for enjoyment of park visitors and scientific study. Implied in the maintenance of healthy park wildlife populations is the outcome that the natural forces of redistribution will also continue to stock lands adjacent to parks with wildlife populations available for lawful hunting.



*Rangers scan the carcass of a bear poached in Lake Clark N.P. & Pres., attempting to locate the bullet. Once located, the bullet will be sent to the State Crime Lab for analysis. When suspects are developed, the bullet will be used to obtain a match with the suspects' weapon. Using state-of-the-art forensic techniques, rangers cooperate with state game and fish agencies and the U.S. Fish and Wildlife Service to prosecute wildlife cases.*

Illegal markets for park wildlife parts—walrus and elk ivory, antlers from deer, elk and moose, talons and feathers from hawks and eagles, claws and fur from a variety of mammals—threaten the health of the wildlife populations in the very sanctuaries specifically created to protect them most carefully.

Environmental crimes represent a threat not only to wildlife and habitat, but in some cases, to the well being of human populations visiting and using parks. The most common types of illegal pollution ravaging the parks are hazardous and solid waste dumping and water pollution. Mojave National Preserve and Death Valley National Park are being threatened by hazardous waste dumping from industrial operations and methamphetamine drug labs. In one case alone, 105 barrels of waste were dumped resulting in over \$200,000 in clean-up and investigative costs. At Padre Island National Seashore, massive amounts of hazardous debris are washing up on the beaches from illegal disposal activities on fishing vessels and offshore oil exploration activities. At Glacier Bay National Park, the pristine waters of the park have been impacted by oil dumping from cruise ships. In the eastern U.S., New River Gorge National River has been heavily impacted by water pollution from faulty sewage systems and coal mining operations. Everglades National Park and Delaware National Recreation Area, both near major urban areas, regularly face illegal dumping of hazardous and solid waste.

**Geologic and Fossil Resources:** Domestic and international interest in geological and fossil specimens fuels an escalating market in crystals, gems, cave formations, petrified wood and dinosaur fossils. Accordingly, over 120 park units designed to protect these often *one-of-a-kind* and nonrenewable resources are waging a losing campaign in the battle to preserve them for the enjoyment of current and future visitors and for scientific study.

The recent media sensation surrounding the discovery of the tyrannosaurus fossil “Sue” in South Dakota and the eventual \$8.6 million price Sue commanded at auction has park managers steeling themselves for an intensification of an already pronounced impact from collectors. While Sue presented an extremely well-preserved specimen and accordingly, an unusually high price, there is a well-organized domestic and international market for fossils of lesser but still significant value that puts NPS resources at risk. For example, a Titanotherium skull from Badlands National Park would bring approximately \$5,000 at a collector’s show. Badlands is a park of more than 242,700 acres with a permanent staff of six protection rangers. For many collectors the potential reward is worth the slight risk of being caught.

The same is true for speleothems (cave formations), crystals and gemstones. Recently vandals entered a cave in Mammoth Cave National Park (52,000 acres; 11 protection rangers) and took sacks full of cave formations to sell at a local rock shop. Despite

national and state laws that make trafficking of cave formations a crime, the risk of prosecution is minimal. Absent detailed inventories and photographs, it is very hard for the park service to determine if theft of cave resources has occurred, much less prove that theft in court. Rock shops can sell cave formations for upwards of \$100, for individual specimens. It was only by chance that this theft was discovered and suspects were identified. Special techniques were employed to conclusively prove that the formations came from a park service cave and not one of hundreds of caves on private lands in the area. Prosecution under the Federal Cave Resource Protection Act was successful; each of the three men spent jail time; and the formations were returned. Using state-of-the-art techniques, scientists re-attached a small number of the formations. Most of the speleothems were so damaged by baseball bat damage and mishandling that there is no hope of restoring the cave. In this particular cave, gypsum formations grow at a rate of one cubic inch every thousand years; the largest gypsum crystal destroyed in this case was approximately 300 cubic inches—in other words, it took 300,000 years to form.

**Heritage Resources:** Like the natural resources mentioned above, the cultural resources, both archaeological and historic, showcased in the majority of our parks are also the target of theft for profit and vandalism.

It is hard to say which are the more egregious acts—the senseless destruction of headstones in a historic cemetery or spray-painting gang tags on historic structures—the premeditated stealing of cultural artifacts for personal gain or the trophy looting of graves or ancient sites for collector’s status.



*In September 1990, this artifact of the Civil War was stolen from a visitor center at Fredericksburg-Spotsylvania National Battlefield. The artifact, a hand-written note, was floated across the Rappahannock River from a Confederate soldier to Union soldiers on the other shore, offering to trade tobacco for coffee—a frequent practice as the bored troops of the opposing armies faced each other through the winter of 1862. The note was described by Fredericksburg’s *Freelance Star* (September 4, 1990) as “. . . a tiny, but extremely intimate piece of Civil War History.” It read:*

*March the sixth,  
I send you some tobacco and expect some coffee in return. Send me some  
postage stamps and you will oblige yours.  
Rebel*

*Although the subject of a continuing investigation, this irreplaceable glimpse of the human side of history’s most enigmatic wars remains missing.*

**Chief Park Ranger's  
Perspective**

**Fredericksburg &  
Spotsylvania National  
Military Park**

Fredericksburg & Spotsylvania National Military Park and National Cemetery commemorate four major battle actions of the American Civil War: the Battle of Fredericksburg (1862), the Chancellorsville Campaign (1863), the Battle of Wilderness (1864), and the Battle of Spotsylvania Courthouse (1864). The park today is comprised of eight major units, and numerous smaller ones, spread out over 100 square miles of rolling Virginia landscape. Its authorized acreage is just less than 9,000 acres, of which 7,300 are now federally-owned. The park maintains over 120 miles of exterior boundary in the third fastest growing area of Virginia (1998). Park visitors have direct access to 2 visitor centers, 3 historic buildings, a National Cemetery, an 80-mile long auto tour, over 26 miles of hiking trails, and countless Civil War resources like earthworks, lunettes, canons, historic roads and trails, numerous monuments, and hundreds of acres of battlefields.

In 1980, the protection staff numbered 7 who were responsible for approximately 4,000 acres of historic battlefield. The City of Fredericksburg, and the surrounding 4 counties, had a combined population of just over 100,000. In 1980, the park experienced law enforcement issues that were mainly traffic related. Now almost 30 years later the protection ranger staff stills totals 7; the park has grown to 9,000 acres; the area's population has exploded to over 275,000. Today, the park responds to over 1,200 law enforcement incidents each year, which includes the full range of crime, one would expect to find in an urban area.

As alarming as the urban impacts are on generic enforcement activity, the major issue governing the park's protection program is the all-out assault on its archeological resources, which has been likened to "tearing pages from a history book." The country's intense interest in the Civil War has driven the value of even the most inconsequential bullet to a level that makes the practice of relic hunting worth the risk. Fredericksburg has quickly become a Mecca for this illegal activity, which requires vast amounts of ranger time, patience, and luck to detect. The park's protection rangers must always be ready for unexpected strikes against the park's irreplaceable Civil War.

Once again, powerful market incentives are at play. A for-profit collector's culture exists for almost any artifact preserved in a park for public enjoyment. Slick, commercially published catalogues, trade journals and magazines post the going prices for cultural relics.

The extent of disregard by commercially oriented looters is stunning. NPS investigations reveal that looters will steal skeletal remains from graves on public lands and actually sell the bones to collectors. In the American southwest, a Mimbres Culture bowl with a "kill hole" will bring between \$2,500 and hundreds of thousands of dollars, depending on its quality—the real loss being the desecration of the gravesite from which the ancient bowl was taken and the destruction of the cultural record. Prehistoric Eskimo relics of carved ivory routinely command prices between \$2,000 and \$30,000 in markets in North America and Europe—one unusually rare piece was recently available at an auction for \$250,000.

Artifacts from the Civil War and earlier periods of American history are routinely looted from battle sites and places of early settlement in the east and southeastern United States. Antique shops and collector shows feature bullets, cannon balls, artillery projectiles, buttons, sabers and other collectibles. Under cover of darkness, looters descend on national battlefields, historic sites and places of prehistoric native occupation with shovels, metal detectors and sifting screens to systematically plunder—destroying the historical integrity and ruining the dignity of the site for their sole profit.

In some cases the criminality is not even subtle. In June 1999, an NPS visitor center in Dayton, Ohio, interpreting Wright Brothers-era aviation history was broken into and a bicycle was stolen—most likely for its collector's value. It's gone. Its story for the public is gone.

**Loss to the American Public:** Aside from their market value, artifacts and fossils have a deeper scientific value when left undisturbed for professional study. By looking carefully at an *in situ* artifact or fossil in the context of its surroundings, scientists and historians draw conclusions that help reveal information about a people or extinct species for the benefit of everyone. Looting graves, chiseling fossils from the ground and plundering battlefields robs the American public. As one ranger at Fredericksburg and Spotsylvania National Military Park put it, each act of stealing is like ripping a page from the natural and cultural history of the United States.

---

## Transition to Action Elements

The following section builds from the preceding discussion, identifying current problems, offering alternatives for correction, supplies brief justifications and statements of adverse impact.

### Findings

As requested by Section 801 of Title VIII of the National Parks Omnibus Management Act of 1998, this report identifies the shortfalls, needs and requirements of the Law Enforcement Program within the National Park Service. The information submitted is the result of actual surveys of National Park Service Units and data derived from VRAP and specifically addressed critical needs within the Resource and Visitor Protection Operations. The information contained within this report should not be considered a budget initiative, simply a reporting of facts available to the task force.

Although the needs presented in this report are critical, and in some cases life-threatening, the work group in developing this data consistently recommended a more holistic follow-up evaluation of National Park Service needs on a systemwide level. Many of the shortfalls identified are the direct result of insufficient funding for park operations which requires park managers to make difficult, sometimes painful decisions as to the priorities which must be addressed. The protection and management of resources within our national parks is an effort which involves full commitment from all operational entities, and in order to fully protect these national treasures the fiscal resources must be available to allow park managers to move forward.

In addition to shortfalls, the study also identified successful Administration initiatives, which have enjoyed the support of Congress, resulting in material improvement to NPS law enforcement and resource protection programs:

- drug enforcement base increase—began in FY92, currently \$1.3 million annually
- archaeological resource protection base increase— began in FY92, currently \$2.2 million annually
- Employee Futures initiative—FY95, \$2.5 million
- counter-terrorism initiative - reprogramming actions authorized in the wake of the World Trade Center and African embassy bombings, \$1.2 million recurring base increase
- ranger law enforcement “6c” initiative—began FY97, currently \$10.5 million recurring, providing a base increase to parks to fund increased law enforcement benefits costs, processing claims and backpay reserve
- training initiative—reprogramming authorized in FY97 and FY99 provided recurring base increases for NPS programs at the Federal Law Enforcement Training Center of \$530,000 and \$194,000 respectively.

The cost figures presented in this report can be considered staggering, or can be considered as a starting point for phased return to full protection of the irreplaceable resources within our national parks. Neither these resources, the safety of park users nor the lives of the people who protect them can have a value placed upon them—

the following Action Elements are submitted in an effort to identify cost effective steps to providing a safer and more protective situation in NPS units service-wide.

The table shown below, Table F, provides the park ranger law enforcement cost estimates reported in the FBI Uniform Crime Report for the last four fiscal years where final figures are available. The estimated cost figures are included with the caveat that they do not report the full cost of the protection ranger program (only an aggregate field estimate of the law enforcement component). Other activities such as search and rescue, emergency medicine and resource monitoring also support the protection ranger workforce. Accordingly, a precise law enforcement program cost is not available.

The figures in the table differ from the *Green Book* justification line item for law enforcement, but represent the best estimates from the field for costs as they are totaled at the end of each year. The table is included to provide the reader with general sense of context for the Action Elements presented on the following pages.

<b>Table F</b>	<b>Year</b>	<b>Estimated Cost</b>	<b>Emergency Law and Order Costs*</b>
<b>NPS Estimates to FBI Uniform Crime Report for NPS Field Law Enforcement Costs (does not include U.S. Park Police figures)</b>	FY95.....	\$73,009,000.....	\$ 296,000
	FY96.....	\$84,408,000.....	\$1,565,000
	FY97.....	\$83,938,000.....	\$1,491,000
	FY98.....	\$80,052,000.....	\$ 511,000

\* Emergency law and order account figures result from standing reprogramming authority to meet the costs of unforeseen emergency law enforcement incidents.

Table G on the next page provides a total report of cost data identified in the following pages through the Action Elements with additional information concerning specific topics found in the appendices.

A number of the suggested staff increases and equipment enhancements contained in the following Action Elements, require phase-in periods. These phase-in periods are noted at the bottom of the table or in the Action Element text.

Timetables for recruitment, basic training and administrative support work dictate the need to transition gradually to target levels suggested for the ranger workforce. Similarly, the physical logistics of engineering, repeater retro-fitting, testing and replacement of fixed and mobile radio assets will require up to 5 years as noted in the narrow-band, digital radio conversion section.

<b>Table G</b>	<b>Action Element</b>	<b>One-time or Start-Up Costs</b>	<b>Recurring Costs, Full Performance</b>	<b>Notes</b>
<b>Cost Summary for All Action Elements</b>	HR-1	Permanent workforce increase	\$ 68,114,000	(1) (2)
	HR-2	Convert 85% seasonal positions to subject to furlough	\$ [3,520,000] Subset of HR-1	\$[4,434,000] Subset of HR-1 (3) (4)
	HR-3	Law enforcement training program	\$ 738,000	\$ 1,250,000
	HR-4	Seasonal employee law enforcement training program		\$ 100,000 (5)
	HR-5	Aviation training	\$ 130,000	\$ 44,000
	TR-1	Radio: narrow-band conversion	\$113,000,000	(6)
	TR-2	NIBRS/CIRS computerized incident reporting	\$ 1,076,000	\$ 468,000 (7)
	ER-1	Acquire/replace vehicles	\$ 21,220,000	\$ 512,000
	ER-2	Acquire/replace vessels	\$ 6,200,000	\$ 130,000 (8) (9)
	ER-3	Acquire/replace aircraft	\$ 13,300,000	\$ 1,600,000
	ER-4	Special equipment caches & technical support units (TSU's)	\$ 4,400,000	\$ 990,000
FR-1	Repair/construct law enforcement facilities	\$ 1,671,000	(10)	
	<b>Draft total</b>	<b>\$161,735,000</b>	<b>\$ 73,208,000</b>	<b>(11)</b>

- (1) Includes 15% first year for new personnel incidentals; uniforms, law enforcement equipment, and office equipment.
- (2) Based on VRAP recommendations. See Compendium for breakdown.
- (3) 502 positions @ 0.5 FTE/each, at GS-9/5 with law enforcement pay.
- (4) Start up costs over 2 years. HR-2 in brackets not to be double-counted against HR-1.
- (5) Calculated at 40 positions annual turnover (historical average) times \$2,500/academy trainee.
- (6) Over a 5-year phase-in period.
- (7) 1-year start up costs.
- (8) Over a 7-year phase in period.
- (9) Includes cost of putting equipment on amortization schedule.
- (10) Projects are all DOI approved and in the PMIS 5-Year Plan.
- (11) The FTE are not double-counted with the totals in HR-1 and HR-2.

## HR-1, Permanent Employees: Staffing Increase

### Findings and Recommendations

The National Park Service currently employs approximately 1,480 full-time protection employees (law enforcement commissioned) to meet the variety of demands detailed in the Discussion. This number includes 55 criminal investigators (see attached section) available to conduct in-depth investigations. This number is insufficient, given today's criminal caseload, to provide acceptable resource enforcement and protection of public safety. The shortfall in protection workforce was carefully quantified in an NPS study - Visitor Management-Resource Protection Assessment Program (VRAP) conducted between 1996 and December 1998 (see below and in the Compendium for a full copy of the VRAP study and a copy of the 1998 NPS Uniform Crime Report).

### Recommend

Implement VRAP-recommended staffing by adding 1,295 new protection employees to bring the total law enforcement/resource protection workforce to 2775 rangers and support staff.

### Justification

In the 20 years between 1978 and 1998, the National Park System grew by 84 new units—28% growth. During the same period, acreage in the system grew from 31.3 million acres to 83.4 million acres—expansion of 166%. Total visitation grew from 283 million visits in 1978 to 435.6 million in 1998—53 %. The number of permanent protection rangers, which was 1,168 in 1978, grew by 315 positions to 1,483 in 1998, or 27%. This growth results in a ratio of one new ranger to every 1,816,030 new visits.

Viewed from another perspective, each additional ranger, added since 1978, is matched in growth by 620,000 new acres, which require patrol, visitor contact, enforcement action and resource protection. The population density or frequency of use in these new areas is typically lower than municipalities or even comparably-sized rural counties - with correspondingly fewer *people versus people* crime. However, the level of protection required remains high because the congressionally-mandated standard of protection for these public resources is to preserve them *unimpaired* into the future. Remoteness can encourage theft, looting, poaching or other criminal activity where the perceived risk of detection is low. Remoteness also becomes a factor in officer safety where back-up response times become unacceptable as an insufficient workforce attempts to cover too large a geographical area.

This explosive growth also results in the protection workforce having to concentrate on people-related crime versus resource protection. The suggestion for staffing at the VRAP-recommended levels in the study categories of *Visitor Management* and *Support/Supervision* is based on the belief that without sufficient staffing in these areas, rangers will be drawn off resource protection to respond to other emergencies and administrative duties—as is currently the practice—and today's shortfall will continue. *Support/Supervision* includes management, supervision, investigation and clerical staff.

**Chief Park Ranger's  
Perspective**

**Yosemite National Park**

In 1974, with an annual visitation of 1.5 million, the Yosemite National Park Ranger Division, responsible for law enforcement, search and rescue, emergency medical services, fire protection, and public well-being, consisted of over 200 Rangers. Today, with a visitation of 4 million, and with 400 felony offenses, 200 search and rescue operations, 800 emergency medical calls, over 100 fire calls, and the services demanded by an overnight population of 10,000 during the summer season, that ranger staff now totals less than 60 protection personnel.

The results of this workforce erosion are many and some consequences are significant. With emphasis given to life threatening incidents, criminal activities are often passed over in the priority of getting things done. Many of these are misdemeanors, but sometimes felonies against property are not addressed until long after the incident is finished. Prosecutions and case resolution are difficult at best under these conditions. We often delay the initiation of searches not having immediate life-threatening implications in order to address other priorities and we have had lost parties spend additional nights in the field under this circumstance. Fortunately, to date no lives have been sacrificed as a result.

Of equal concern is the impact to our staff. Rangers have always exhibited tremendous pride in their mission and they have a strong tendency to overextend themselves because of that pride. By August of each summer, our main concern is the survival and safety of our ranger staff, not necessarily the welfare of the public. It is not the result of callousness or of not caring—it is the result of “burn-out”, a condition that can be cured through appropriately staffing the rangers so that they can continue to serve the public in the highest tradition.

The third downside to the existing staffing levels is the unacceptable impact to the very resources for which the park was created to protect. As is often the case, it is the squeaky wheel that gets the attention. When the public is screaming for help, it is the resource that often suffers the most. We are unable to provide the resource the protection is deserves, particularly in those areas of the frontcountry where the heavy visitation is having a noticeable impact. We are failing in our congressionally mandated mission of “conserving the resource in an unimpaired state for the enjoyment of future generations.”

<b>Table H</b>	<b>NPS Region</b>	<b>Law Enforcement</b>	<b>Resource Protection</b>	<b>Visitor Management</b>	<b>Support Overhead</b>
<b>V-RAP Results figures represent staffing shortfalls</b>	Alaska .....	19 .....	36 .....	7 .....	26 .....
	Intermountain.....	37 .....	65 .....	41 .....	61 .....
	Midwest .....	53 .....	30 .....	22 .....	41 .....
	National Capital .....	22 .....	10 .....	7 .....	7 .....
	Northeast.....	95 .....	0 .....	-6 .....	47 .....
	Pacific .....	201 .....	55 .....	19 .....	72 .....
	Southeast.....	188 .....	29 .....	13 .....	53 .....
	Subtotal.....	615 .....	219 .....	154 .....	307 .....
	<b>Grand total:</b>	<b>1,295</b>			

**Justification**

Fully staffing the permanent protection ranger workforce would have the following advantages:

- Put the ratio of preventative resource protection to life/safety policing back in an acceptable balance—eliminate the triage situation where life/safety responses trump resource protection
- Provide a strategically planned system-wide and pre-emptive (not reactive) approach to natural and cultural resource protection that is thoughtfully linked to the educational efforts of NPS interpreters, resource management specialists and scientists
- Meet NPS performance goals for resource protection per GPRA
- Provide the opportunity to recruit new additions to the workforce that reflect the diversity of the visiting public
- Meet broad workforce professionalization directives of Title I of the National Parks Omnibus Management Act of 1998 by allowing protection employees time through adequate staffing to master skills and continue education in the resources they protect.

**Adverse Impacts**

- Risk the continued loss of NPS natural and cultural resources through criminal activity motivated by the spiraling market values of those resources, which become increasingly scarce over time—increasingly valuable
- Because the NPS mandate is resource protection in perpetuity, recognize that in some cases, this derogation of park resources may take decades of subtle erosion to reach irreversible levels and that when ultimately discovered, chances for recovery may be too late
- Risk increasingly poor service to the public as rangers are forced to ignore less urgent requests for assistance in favor of life and death emergencies and felony responses
- Continue increased safety risks for law enforcement and the public where back-up is needed, but not readily available

- Endure high turnover in the workforce, less professionalism and corporate memory as employees burn out
- Lose the opportunity to attract and retain the brightest recruits as the perception of park ranger working conditions diminishes

---

<b>Estimated Recurring Cost</b>	Personal Services: .....	\$47,028,000
	Benefits @ 30%: .....	\$14,109,000
	Support @ 15% of personal services less benefits: .....	\$ 6,977,000
	Total: .....	\$68,114,000

---

**Background**

Responding to NPS requirements for a “needs assessment” for each specific job function, park service managers undertook a staffing study between 1995 and refined through December of 1998: Visitor Management and Resource Protection (VRAP). The objectives included developing a consistent methodology for determining needs, applied uniformly across the service to provide defensible estimates. These estimates would support long range planning and serve as a useful tool for allocation of existing resources.

For each unit a Park Profile was developed based on data readily available in each park, which included among other variables: size, visitation, number of miles of roads, trails, river, miles of international border and acres of lake, etc.

The ranger protection responsibility was then broken down into twenty-six functional areas (example: road-patrol, museum security, trail patrol) and a staffing table developed for each function. For example, one table would project how many miles of highway may be effectively patrolled in one eight-hour shift. The staffing tables were developed with the input of over 100 subject matter professionals, including 60 chief rangers from a variety of different types of units—large, small, urban, natural, cultural and recreational. A total of 28 staffing tables were eventually created to forecast human services needs.

The data from each Park Profile was then applied to the staffing tables. The number of FTE per NPS unit was derived by totaling the applicable staffing table results.

The VRAP staffing tables were initially tested on 61 NPS units and ultimately expanded to 285 units. Sessions were held during the development period with the test park chief rangers to critique and refine methods. Eventually, the staffing tables were further refined using statistical methods (available for inspection in the compendium volume to this report).

The VRAP program followed the same methodological approach that natural and cultural resource managers developed for staffing in their disciplines (Natural Resource Management Assessment Program and Cultural Resource Management Assessment Program, respectively). The above two programs, in turn, used FIREPRO as their methodological basis; FIREPRO has been recognized for about 20 years as an interagency standard for developing, testing and justifying staffing and support needs in the federal fire management agencies.

Functions Included in Staffing Tables	Road Patrol	Backcountry Patrol	Area Patrol
	Open Water Patrol	Frontcountry Trail Patrol	River Patrol
	Beach Patrol	Criminal Investigations	Drug/Alien Interdiction
	Museum Security	Physical Security	Visitor Density Mgt.
	Overnight Detention Fac.	Natural Resource Prot.	Fishing Enf. Alpine
	Climbing	Cultural Resource Enf.	Hunting/Trapping Enf.
	Search and Rescue	Swimming Areas	Emergency Medical Svcs.
	Special Use Monitoring	Aviation Mgt.	Communication Center
	Protection Supervision	Clerical Support	Pers. Salary/Ops.
	Adjust: Shifts/Seasons		



*Bicycle patrols offer advantages over traditional vehicle patrols and are adaptable to a wide range of park settings. In some situations, bike patrols are more effective in reaching rugged backcountry (Canyonlands National Park) and crowded city streets (Independence National Historic Site). Advantages include cost, better visibility for the ranger, more approachability for the public and the bonus of fitness.*

## HR-2, Temporary Employees: Conversion of Temporary Positions to “Permanent-Subject to Furlough”

### Findings and Recommendations

The National Park Service currently hires 590 temporary law enforcement protection employees to respond to seasonal spikes in visitation. These spikes correspond to factors including the summer vacation schedules of schools, hunting seasons, holidays and the climate of the particular park.

The use of temporary employees holds the dubious advantage of very inexpensive labor: temporary employees do not receive health care or life insurance benefits and are often capped at the GS-5 level. The employees hired under OPM’s temporary hiring authority generally work seasons that range from 3 to 8 months—average 4 months. Over the decades, park managers developed a staffing tradition where as many temporary employees are hired as existing budget will allow for only that time period when visitation (and related enforcement problems) are at their most urgent peak. When budgets are reduced, the cuts are almost always taken by reducing this part of the workforce, which has no benefits, no guaranteed rehire rights and low salaries. Ironically, it is this part of the workforce, the temporary appointment ranger, which is most likely to have direct, day-to-day contact with the park visitor.

Using a low-paid, transient workforce that has no fiscal incentive to remain with the park service—employed only during the most urgent part of the year does not offer a realistic response to parks’ needs for resource protection, preparation for times of heavy use or a stable, mature protection staff.

### Recommend

Convert 500 seasonal positions to Permanent-Subject to Furlough to work no less than six-months a year, through the competitive Merit Promotion System. 500 positions represent a fraction of the temporary workforce (approximately 85%) which includes those protection personnel employed at parks requiring longer seasonal staffing for core mission work directly related to ramping up for heavy visitor use seasons, managing periods of heavy visitation, covering the fall shoulder season (which often includes hunting seasons) and the staffing for the same variables in winter use areas.

### Justification

Subject to Furlough appointments of the temporary workforce would have the following advantages:

- Stabilize and make more predictable each year’s returning seasonal workforce
- Increase park managers’ quality control and training development of seasonal workforce
- Provide a fiscal (career) incentive for mature seasonal workforce with deeper subject matter expertise by providing health benefits, life insurance and FERS retirement and the opportunity for career ladder promotion
- Allow seasonal workforce to know park neighbors and concessioners and their values with better understanding —leading to better community-oriented and preventative enforcement

- Attract brighter, more promising prospective employees who are currently lost to other agencies or private businesses offering more career stability
- Provide the opportunity to recruit new additions to the workforce that reflect the diversity of the visiting public
- Meet NPS performance goals for resource protection per GPRA
- Create a transition scenario for employees wishing to finish their formal education and eventually begin a permanent career with the NPS

**Adverse Impacts**

- Continue temporary staffing policy based on budget limits versus visitor and resource needs
- Endure high turnover of transient workforce, missing the opportunity for deeper park knowledge accrued over time
- Lose the opportunity to attract and retain the brightest, not just the most persistent employees
- Continue an arguably morale-diminishing practice that does not consider some of the basic economic needs of an important element of the NPS workforce.

---

**Estimated Costs**

Note: By adding two months to 500 seasonal appointments (which currently average 4 months/year). This would have the effect of adding 84 permanent FTE—this aggregate of 84 FTE has been taken into account in the HR-1 Permanent Staffing item. **These FTE and dollar figures should not be double-counted with the totals in HR-1. They should be considered an approach to reaching the desired totals in HR-1.**

First two years would be staffed at the GS-7/1 grade	
with law enforcement pay: .....	\$2,428,000
Benefits @ 30%: .....	\$ 728,000
Support costs = 15% of base pay without benefits: .....	\$ 364,000
First Two-year Annual Total: .....	\$3,520,000
Recurring, after two years, would be GS-9/5 with law enforcement pay: .....	\$3,058,000
Benefits @ 30%: .....	\$ 917,000
Recurring support costs = 15% of base pay without benefits: .....	\$ 459,000
Recurring Total: .....	\$4,434,000

### Findings and Recommendations

Complexity is perhaps the most appropriate adjective to describe the work of today's park ranger. In an age of task specialization, it is unusual to have a profession in which one is expected to be an expert in so many areas. However, the public expects protection rangers to be well versed in a large number of widely diverse subjects, from first aid to search and rescue to criminal law. The loss of existing law enforcement and ranger skills training programs and the inability to add new programs will not only inhibit the service's ability to professionally meet its statutory responsibilities in protecting resources and visitors. It also impedes our progress towards our emphasis in achieving diversity at the management level of our workforce, and in defining a meaningful role for the park ranger in resource stewardship. Park ranger training is a dynamic process that should not end when employees graduate from the Basic Law Enforcement for Land Management Agencies program or complete other entry-level training.

To be successful, the newly hired park ranger needs to be capable of effectively applying, in the real world, training received in the academic environment of the Federal Law Enforcement Training Center (FLETC). To this end, the National Park Service recommends that a service-wide field training and evaluation program based on the models developed and used by other professional law enforcement professions be implemented. This would include training field trainers for mandatory 1-year rookie ride-along assignments. NPS recommends reinstating a program much like the Introduction to Park Operations course, a multi-disciplinary, multi-week course designed to teach new employees the history and mission of the agency, as well as the other competencies necessary to be an effective NPS employee. Equally important is funding for advanced level training to continue through each employee's career. Training to manage complex, long-term or catastrophic law enforcement incidents is also necessary and currently unavailable. Law enforcement training must be ongoing and dynamic because law enforcement problems and accepted means of addressing them are dynamic and continually changing.

### Justification

Basic Law Enforcement training is just that—basic. In today's park environments, that program standing alone does not adequately prepare field rangers, first line supervisors, and law enforcement program managers in the skills, abilities and knowledge to provide employees safe working conditions and protection to park resources and visitors. Without sufficient training resources, small parks in particular may have to rely on whatever is offered from the local law enforcement community.

### Adverse Impacts

It would be unacceptable to have the service move from being a land management agency with an exemplary resource and visitor protection program to an agency with a fragmented program where law enforcement operations reflect a variety of local standards rather than uniform policy. Department of the Interior and National Park

Service directives mandate certain types of training related to the law enforcement function, including training in both deadly force and use of intermediate weapons. Finally, where training and supervision prove to be inadequate, there is a higher potential for government liability.

<b>Estimated Costs</b>	<b>Start-up Costs</b>	<b>Recurring Costs</b>
Field Training and Evaluation Program ..... (40 rangers annually @ \$6,875 each)	\$468,000	\$275,000
Advanced Law Enforcement/Incident		
Management Training.....	0	\$750,000
Intro to NPS Operations (for new hires - 120/year).....	\$270,000	\$225,000
<b>Total .....</b>	<b>\$738,000</b>	<b>\$1,250,000</b>

## HR-4, Temporary Employees: NPS Funding for Basic Law Enforcement Training

### Findings and Recommendations

The National Park Service currently hires approximately 590 temporary law enforcement protection employees a year to respond to seasonal spikes in visitation. Each year approximately 40 of these employees are new to the National Park Service as protection rangers with law enforcement commissions.

To qualify for a Type II or temporary employee's law enforcement commission, the seasonal employees must have successfully completed a law enforcement training curriculum at an NPS-approved training academy. This training must have been accomplished at the employee's own expense. Tuition and other expenses at an approved academy currently costs about \$2,500 per student.

It has long been considered unfair to require an individual to attend an academy at personal expense with no guarantee of a position at the end, even with successful passage of the course. It has also been observed that this practice gives an unfair advantage to those who can personally afford to get basic training over those who cannot, who in the final analysis, might be better employees and create a more reflective workforce - which would serve the diverse visiting public better.

### Recommend

Establishment of a funding item to allow the National Park Service to create a Seasonal Law Enforcement Basic Training Fund to provide entry-level employees in the seasonal protection workforce to receive equitable access to approved basic qualifying instruction. Another recommendation in this report will, if adopted, decrease the number of protection seasonals, thus decreasing the number needing funds through this source.

### Justification

That fraction of the temporary workforce (approximately 15%) not covered by Action Element HR-2 for conversion to subject to furlough includes approximately 100 seasonal employees. Of those, approximately 40 are new to law enforcement each year. However, many are not new to the National Park Service. Many have worked for a number of seasons in non-law enforcement jobs such as fee-collecting, interpretation, staffing the information desk, fire-fighting, emergency medicine or campground care-taking. These positions have given them a chance to mature into higher levels of responsibility and deeper levels of understanding about park resources. These early career positions also allow supervisors to assess their potential as career employees. Seasonal work allows the opportunity for mentoring.

Creating a funding pool that allows the NPS to pay the tuition and associated costs of attending an approved law enforcement academy would have the following advantages:

- Allow supervisors to recruit promising members of the seasonal workforce to law enforcement positions in subsequent years by sponsoring them to an academy
- Increase park managers' quality control and training development of seasonal workforce

- Create a more equitable scenario for employees of all economic means to gain entry to a higher level of NPS work and career enhancement
- Provide a means for recruiting a more diverse law enforcement workforce
- Provide the means to aggressively prospect for the most promising future-employees by matching up mentoring with the potential of an early career path with scholarship assistance.

**Adverse Impacts**

- Continue temporary staffing policy based on which seasonal applicants can afford to attend an academy, not necessarily which are the best prospects
- Lose opportunities to attract/retain the brightest from previously under-represented sources
- Suffer the opportunity cost on the protection of resources by accepting a less-than-ideal and less-than-fair practice for recruitment.

---

**Estimated Cost**                      Recurring cost only: 40 at \$2,500/student employee .....\$100,000

## HR-5, Pilot Training Program - Aviation

### Findings and Recommendations

A preliminary survey of the National Park Service indicates that the current number of pilots is insufficient to meet the National Park Service's mission to protect park resources. Many of our National Park Service areas are in mountainous, very remote country that can only be accessed, regularly patrolled and monitored by aircraft in a timely and efficient manner. As is the case in the general aviation industry, park service pilots are part of an aging workforce. Some NPS pilots could retire immediately, while many more will be eligible for retirement within the next five years.

The National Park Service recommends funding a pilot training program to assure that pilots will be available to manage and protect NPS resources. Currently, pilot training competes with all other National Park Service programs for funding. The National Park Service estimates an immediate training need for 17 additional pilot positions and the replacement of 2-3 pilots each year. These positions require a commitment to training. Secondly, the service recommends establishing a "mentor" pilot program throughout the service to enhance pilot skills and provide a safer aviation program. This program takes current, skilled service pilots and trains them as certified flight instructors (CFI's). These NPS pilots share and mentor their knowledge and skill, gained from years of flying experience, with "junior" pilots.

### Justification

The National Park Service uses aircraft in a variety of settings across the country. On a typical day park rangers are making aerial observations of parks from Big Bend National Park to Gates of the Arctic National Park and Preserve. The pilots and their aircraft are as important in their parks as park rangers in a motor vehicle are in other areas. Without park ranger/pilots, basic tasks necessary to protect significant cultural and natural resources and help visitors enjoy their national parks would not be accomplished. These pilots are used in a variety of tasks—enforcing big game regulations in Alaska, making wildlife surveys and observations, carrying out searches and conducting drug interdiction along the nation's border parks.

Because aviation costs continue to climb, the aviation program has become a significant portion of a park's budget. Consequently, the aviation budget has either diminished or is being sharply curtailed. A park superintendent with an aviation program is faced with a lack of funds for pilot training. Superintendents have often hired pilots and trained them as rangers—but this is becoming increasingly more difficult and is simply not an option in some remote areas. Skilled pilots will not necessarily work in areas without roads, hospitals, shopping and infrastructure that we take for granted but is sometimes non-existent in remote park areas.

### Adverse Impacts

Without additional pilots and the continuing replacement of qualified pilots the National Park Service will be hindered in its ability to respond to emergency calls, conduct patrols and protect resources. In a wide range of roadless and border environments, the

service will be limited on where and when patrols can be conducted. Without appropriate and necessary training in unique off airport and low-level pilot skills, the ranger's safety, and the mission of the service to protect resources and provide necessary services to the park visitors, will be compromised.

---

<b>Estimated Costs (annually)</b>	<b>Pilot Training:</b>	
	17 pilots - first two years .....	\$ 130,000
	2 pilots - recurring .....	\$ 30,000
	<b>Mentor Pilot Training:</b>	
	2 pilots - recurring .....	\$ 14,000
	<b>Total (recurring).....</b>	<b>\$ 44,000</b>

Note: These figures are for training dollars only. Personnel costs are in the Personnel portion of the report.

## TR-1, Radio Communications: Narrowband Conversion

### Findings

To conform to provisions contained in the Omnibus Budget Reconciliation Act of 1993, the National Telecommunications and Information Administration (NTIA) of the U.S. Department of Commerce directed conversion of all civilian federal radio system users (in the 162-174Mhz and the 406-420Mhz bands) to a new technology known as narrowband by January 1, 2005.

Despite this congressional mandate, limited funding has been appropriated to implement conversion of National Park Service radio systems. The original cost for system-wide conversion was determined to be \$115 million by a Department of the Interior cost analysis.

\$300,000 was obligated in FY95 to purchase a limited number of new technology radios to facilitate testing toward full conversion. Since then, \$1.037 million was budgeted in FY99 and \$500,000 in FY98 toward narrow-band digital conversion. An additional \$2.5 million dollars is earmarked toward conversion in the FY 2000 National Park Service budget.

To date, six parks have been able to convert to narrowband technology out of the funding sources listed above or through use of existing funds\*. These 6 NPS units are being monitored as test parks with initial results proving very satisfactory. The vast majority of parks, however, have no fiscal means to convert to the required technology. Cost to convert remaining units is \$110.5 million.

The means for determining the forecasted cost began with the National Park Service conducting a comprehensive inventory of existing service-wide radio assets in the early 1990's. Standard conversion costs were identified for all existing radio assets (hand-held radios, mobile units, fixed bases and various types of repeater facilities) and a total conversion estimate derived. Costs were also estimated for labor and remote access logistics. The NPS methodology was adopted and used by all other Interior agencies in their conversion planning.

(\* Parks converted include: Delaware Water Gap, Hopewell Furnace, Manassas Battlefield, Valley Forge, Marsh Billings Rockefeller and Appomattox Courthouse.)

### Recommendation

Appropriation of a \$113 million line item, phased in, in five increments in Fiscal Years 2000 through 2004 to complete the conversion by the deadlines required by statute and policy.

The FY2000 item for \$2.5 million leaves an outstanding cost of \$110.5 million to be phased in between FY 2001 and FY 2004.

Alternative: Appropriate \$113 million in “no-year” funding as a line item, exclusively for this program of conversion.

### **Justification**

All divisions in all NPS units rely on radio communications. Law enforcement, fire fighting and search and rescue operations depend on radio technology most urgently. Saving lives and property are routinely attributable to the rapid, accurate communication afforded by private land-mobile radios. In more remote NPS units, these systems are often the only resource for dependable communication. NPS estimates that law enforcement activities account for 60% of operations radio use, wildland fire about 10% and other emergency services (search and rescue, emergency medical responses and structural fire) about 10%.

Coordinated radio systems with state, county, municipal and other federal agencies are essential infrastructure for programs of public safety, protection of property and park resources and officer security. Cell phones do not offer a cost-effective alternative since cellular communication is not instantaneous and coverage in remote locations where search and rescue and other emergencies occur is non-existent. Cell phone system capacity is often overburdened in times of emergency or natural disaster by public use, leaving no clear channels for law enforcement, public safety or fire-fighting resources. The cost of extending cellular coverage to these locations and buying cell phones for the NPS workforce exceeds the recommended action. No other cost-effective alternative exists to provide the field with instantaneous, dependable wireless communication.

The recommendation for incremental appropriation or a one-time appropriation of “no-year” funding is based on the important point that the NPS radio system conversion will take all of 5 years to complete in an orderly and thoughtfully engineered sequence.

### **Adverse Impact**

Beginning January 1, 2005, federal radio systems, which have not converted to narrowband technology, will be out of compliance with NTIA regulations and subject to immediate termination of operations.

Termination of operations by NTIA will result in the crippling of not only law enforcement, but also all emergency service coordination both internally and with cooperators from other agencies. The service will not be able to carry out mandated functions of visitor and resource protection at acceptable levels. Further, there will be a significantly adverse affect on the ability to carry out the broader spectrum of park operations, including maintenance, science, and resource management. Failure of timely conversion will diminish current levels of NPS participation in local civil defense and FEMA programs.

Delay in the appropriation of funds for conversion until just before the 2005 deadline will create a situation where the engineering and the actual physical work involved in erecting towers, placing repeaters, converting mobile units and testing systems for compatibility with interagency cooperators will be a practical impossibility. NTIA mandate: systems must be proven and operational by December 31, 2004.

---

**Estimated Costs**

Cost for conversion in current forecasts and based on 1999 dollars .....\$113,000,000

This figure incorporates NPS field costs of conversion for all divisions (including those not in law enforcement), but does not include costs for U.S. Park Police radio systems. Please see the U.S. Park Police analysis for those additional costs.

Because the NPS field-based radio system is integrated across divisional lines, and could not be successfully accomplished piecemeal and maintain system integrity or economy, the whole field system conversion cost is presented here. To clarify with an example: it would not be possible to convert the law enforcement radio operation in a park to narrowband technology and not convert the maintenance division or administrative division and still maintain the ability to communicate with all personnel.

The costs forecasted in this section and the companion section in the U.S. Park Police analysis include all radio assets, including fixed base stations, dispatch equipment, mobile units, hand-held radios and retro-fitting repeaters and towers with the appropriate conversion equipment.



*Dispatchers at Shenandoah National Park provide communication coordination between rangers in the park and over 8 county and state cooperators for law enforcement, fire, emergency medicine and search and rescue. They also serve as the east coast consolidated communications center for significant incident reporting services for NPS units between Maine and Florida. Parks across the country rely on mutual aid with local and federal emergency operations agencies. This model of pooling assets to provide economy and streamlined communications through shared equipment and staffing can also be found at Santa Monica Mountains NRA and Redwoods National Park in California and is viewed as the approach for communication centers in the future. Because conversion to the advanced computerized record system (NCIC2000) and Automated Fingerprint Identification (AFIS) rely on state infrastructure used in cooperation with NPS units, a clear picture of field area dispatch needs has not emerged. NPS field managers continue to study needs as local systems come on line this year.*

**Findings**

The Uniform Crime Reporting Act of 1988 (Public Law 100-690) mandates that all Federal agencies annually provide the FBI with criminal incident information that has occurred within their areas of responsibilities. This information must be provided electronically and in a format provided by the FBI to meet their reporting needs. This project has been designated as the National Incident Based Reporting System (NIBRS).

The National Park Service developed a Case Incident Reporting System (CIRS), but it was never fully implemented, as the software became obsolete and can no longer be supported. The service has begun developing a CIRS application based on Lotus Notes, which is designed to meet current and future reporting needs. The Lotus Notes format is computer software already identified by the service as the new standard platform for electronic mail. Although much work has gone into the new Lotus Notes application, further funding is required to complete this work. The National Park Service recommends funding a CIRS contract for conversion of the program to a software program that will meet current and future needs.

**Recommendation**

Include seven regional FTE for support for the program, on hand to resolve server and other hardware problems, provide training and support to the field input offices and to integrate (where possible) other field reporting categories into a comprehensive/shared computerized data collection service.

**Justification**

The National Park Service has been working to develop and deploy the automated Case Incident Reporting System (CIRS) to meet the mandated FBI requirement and also provide the service with technology to electronically collect a wide range of information to support the park operations and provide customers with requested data (including other government agencies and congressional offices). The long-term expectations of the system are that it will facilitate the data collection, for a variety of disciplines, for required monthly, quarterly and annual reports. It will also simplify the collection of management data from resource, safety and criminal incident reports. The implementation of a service-wide system will improve the accuracy and validity of statistical reports, satisfy the FBI mandated requirements and provide park areas with a system that can be utilized to meet individual park needs and still provide the data for service-wide requirements.

**Adverse Impacts**

Currently the National Park Service is utilizing a system that has been under development but not completely deployed. This system has a number of drawbacks; the most glaring problem is that the program is built in an outdated language. The program is subject to errors when trying to work with current software applications support. The program lacks the support resources necessary in the various locations throughout the National Park Service. Current computer hardware and software packages have made the current program obsolete.

Our alternative to the recommendation will be to return to hand-written reports and hand collating service-wide information. This will not meet the public law requirement and Departmental Manual Guidelines. An additional adverse affect of not continuing with software development will be protection rangers spending more time doing paperwork and spending less time providing protection to our resources and the public at a time when we need more officers working. Without the benefit of current technology, the efficiency in which we run the National Park Service's protection program will decrease. Correspondingly, the protection of park resources and park visitor's enjoyment of them will also continue to decline.

---

**Estimated Costs**

First Year start-up, staff and contract for software application .....	\$1,076,000
Annual maintenance of system, 7 FTE, one GS-12 in each region .....	\$ 468,000

### Findings and Recommendations

A survey of National Park Service units indicates that the current status of law enforcement vehicles needs significant improvement.

The survey queried the NPS computerized fleet management system, searching for vehicles, which exceeded industry standards for mileage or age. This was backed up by an additional survey of park chief rangers, using a web-site questionnaire to collect comparative vehicle information and to capture data on other types of conveyances, besides automobiles and trucks (examples: snow machines and motorcycles). Standard fleet unit costs were established by using the GSA fleet acquisition price list where possible and through the use of historical purchase data from the Yellowstone National Park facilities management division.

The current ranger law enforcement fleet consists of 2,153 vehicles—patrol cars, utility vehicles and trucks. Industry standard for safe vehicle life before replacement is 80,000 miles or 6 years of age. These vehicles are essential to daily protection operations—both in a preventative and response context. In park units across the country there are 808 Interior-owned vehicles (38%) that exceed industry standards of age. Through the survey, parks have identified the need for 215 additional vehicles. Parks have also identified the need for other types of patrol and response conveyances, ranging from snowmachines to motorcycles.

The National Park Service recommends funding new units, replacing older units and providing support costs for maintenance. Specifically, the service estimates a need for 808 replacement vehicles, 215 additional vehicles and 153 vehicles in the “other” category (i.e., snowmachines, motorcycles). Using DOI fleet purchase rates, replacement and acquisition costs for these vehicles is 16.2 million dollars. The cost for other types of vehicles is \$720,000.

### Justification

The National Park Service uses law enforcement vehicles in a variety of settings across the country. On a typical day park rangers are on the job from Manassas to Grand Canyon. At a typical park like Lake Meredith, a ranger may operate a utility vehicle that is 15 years old with 165,000 miles on the odometer. The national park ranger law enforcement vehicle, with its characteristic green stripe and National Park Service arrowhead, is one of the basic tools that park rangers use to protect significant cultural and natural resources and help visitors enjoy these national treasures. It is essential that these “tools” be reliable, up-to-date and dependable. They are used in a tremendous variety of functions—from checking on lost hikers at trailheads to answering “man with a gun” calls.

The current method of replacement or additions to vehicle fleets requires that the emergency vehicles compete with all other park needs and with a limited vehicle/equipment replacement program. Often a park superintendent must choose

between a sanitation truck, required by law, and a park law enforcement vehicle, essential to the mission of the service. It is not uncommon for vehicles to go well beyond their expected replacement age, while the park waits until funding a new vehicle is a high enough priority.

**Adverse Impacts**

Without the replacement and addition of vehicles the National Park Service will be hindered in conducting field operations that range from answering emergency calls, conducting comprehensive patrols and being assured safe access to all areas of the park requiring four-wheel drive equipment. In a wide range of weather environments, the service will often be limited on where and when patrols can be conducted. By failing to maintain a reliable fleet, the ranger’s safety, and the mission of the service to protect resources and provide reasonable levels of service to the park visitors, will be compromised.

Estimated Costs	Type	Number of Vehicles	Cost
	Vehicles, DOI-owned, Replacement .....	808 .....	\$16,200,000
	Other vehicles (motorcycles, etc) .....	153 .....	\$ 720,000
	Vehicles, DOI-owned, Additional .....	215 .....	\$ 4,300,000
	Subtotal, non-recurring purchase cost:.....		\$21,200,000
	Maintenance Support: .....		\$ 512,000



*NPS vehicles withstand the rigors of terrain and extreme weather conditions. Enforcement and emergency service calls often occur at night, during bad weather and in isolated locations. Timely and safe responses are dependent on reliable equipment. This Humvee at Death Valley National Park represents one of the more specialized backcountry patrol/emergency service vehicles.*

### Findings and Recommendations

A survey of National Park Service units reveals that 49 parks require new or replacement law enforcement vessels. This survey relied on the use of a temporary website to gather information from chief park rangers concerning their needs for replacement or new patrol vessels.

Of the 49 parks responding, 38 reported needing 107 replacement vessels due to age, condition or type of vessel and fourteen parks require 21 additional vessels in order to meet the service's mission. The current agency inventory of vessels of all types (law enforcement and non-law enforcement) is 1,285.

The National Park Service recommends funding to support vessels used for law enforcement operations, including acquisition of new units, replacing old or damaged units and providing support costs for maintenance.

### Justification

The National Park Service mission of visitor service, enforcement and resource protection requires rangers to use boats in numerous river, lake and maritime park settings across the country. On a typical day park rangers are on the water from Everglades National Park to Lake Mead National Recreation Area. Recognizable on park waters as a source of assistance, the NPS law enforcement vessel is one of the basic tools that park rangers use for patrol, emergency response, to protect water resources and help visitors enjoy outdoor recreation. The use of the vessels involves a range of operations as varied as detection and prevention of drug and alcohol problems, poaching patrols and rescue missions in hazardous waters. It is essential that these vessels be reliable, up-to-date and dependable.

The current method of replacement or addition to vessel fleets requires that the vessels compete with all other park needs and with a limited vessel/equipment replacement program. It is not uncommon for park rangers to encounter visitor vessels that are newer, faster, more reliable and better equipped than their own vessel, while they wait for their replacement or new vessel to reach a high enough priority to be funded.

### Adverse Impacts

Safety on the water is a key consideration. Without the replacement and addition of vessels the National Park Service will be hindered in its ability to conduct thorough patrols, answering emergency calls, provide rescue transportation and monitor resources for protection. Often emergency vessels are under-sized, under-powered and lack standard equipment—radar, global positioning system (GPS), depth finders—that are common to the vessels encountered in their course of work. It is often the case that response to law enforcement incidents, searches and rescues occur under poor conditions of darkness, fog or storms.

In a wide range of environments, the service will be limited on where and when patrols can be conducted. By failing to provide a basic tool to the resource protection park ranger, the ranger's safety, and the mission of the service to protect resources and provide necessary services to the park visitors, will be diminished.

For example, Everglades National Park has a 10-year-old vessel designed to operate in shallow waters like Florida Bay but the vessel is out of service due to a deteriorated hull. In the past this vessel has been used for law enforcement patrols, drug enforcement, search and rescue and Presidential security details with the U.S. Secret Service.

<b>Estimated Costs</b>	<b>Vessel Type</b>	<b>Number of Vessels</b>	<b>Cost</b>
	Replacement .....	107 .....	\$5,100,000
	Additional .....	23 .....	\$1,100,000
	Subtotal, non-recurring purchase cost:.....		\$6,200,000
	Estimated Recurring Maintenance Cost: .....		\$ 130,000

### Findings and Recommendations

A preliminary survey of National Park Service units indicates that the current status of aircraft used in law enforcement missions is not sufficient to meet the National Park Service's mission to protect park resources.

This survey relied on the use of a temporary web-site to gather information from chief park rangers concerning their needs for acquisition of new or replacement aircraft. The results of the survey were reviewed by the NPS Aviation Program Officer and found to be consistent with Department of the Interior interagency objectives for air fleet management.

The National Park Service recommends funding replacement and new aircraft in order to meet the increasing needs and responsibilities of the service. Specifically, the service estimates a need for 24 replacement or additional aircraft. The current aircraft fleet size is 22 aircraft (see breakdown of replacement and new acquisition numbers below). The service requests support costs per aircraft. Currently the aviation program competes with all other National Park Service programs for funding, and the service recommends funding these aircraft used in law enforcement and associated emergency operations.

### Justification

The National Park Service uses aircraft in diverse settings across the country. Park rangers patrol and respond to incidents by air in settings as diverse as Big Bend National Park in Texas and Gates of the Arctic National Park and Preserve in Alaska. Many of the National Park Service areas are in rugged, remote country that can only be accessed by aircraft. The aircraft in these areas are as basic to law enforcement and visitor services operations as patrol cars or pick-up trucks are in other areas. Without these aircraft park rangers could not perform basic tasks necessary to protect significant cultural and natural resources and help visitors enjoy these national treasures. These aircraft are used in a variety of tasks—from enforcing big game regulations in Alaska to drug interdiction along the nation's borders inside national parks. In addition, the discontinuance of aircraft load limitation waivers has greatly diminished the effectiveness of a "work horse" aircraft that much of the service's aviation areas depended on, and newer, different aircraft are required to fill in this gap. It is essential that NPS aircraft are reliable, safe and that the capabilities of the aircraft meet the mission needs of the service.

Because aviation costs continue to climb, the aviation program has become a significant portion of a park's budget. In some cases, the aviation budget has been sharply curtailed. A park superintendent with an aviation program is faced with a dilemma of needing the aviation program to accomplish the mission of the service but not being able to afford the program. While the aviation program remains, the number of flight hours are reduced. This results in an ineffective operation, decreases pilot skills and compromises the program's safety, not to mention reduction in service to the public.

**Adverse Impacts**

Without the addition and replacement of aircraft the National Park Service will be hindered in answering emergency calls and effectively protecting resources. In a wide range of environments, the service will be limited to where and when patrols can be conducted. By failing to provide a modern, safe aircraft fleet, the ranger’s safety, and the mission of the service to protect resources, conduct law enforcement patrols and provide necessary services to the park visitors (emergency medical, search and rescue), will be compromised.

<b>Estimated Costs</b>	<b>Park Areas</b>	<b>Number of Replacement Aircraft</b>	<b>Number of New Aircraft</b>	<b>Acquisition Costs</b>	<b>Support Costs</b>
	Lower 48 Parks .....	4 .....	8 .....	\$11,300,000 .....	\$1,200,000
	Alaska Parks .....	4 .....	8 .....	2,000,000 .....	\$ 400,000
	Subtotals: .....			\$13,300,000 .....	\$1,600,000
	<b>Totals: .....</b>	<b>8 .....</b>	<b>16 .....</b>	<b>\$14,900,000</b>	

### Findings and Recommendations

Law enforcement professionals have come to increasingly rely on special, technical equipment to meet their missions. During the past decade, the National Park Service has used modern technology and equipment, but the agency's efforts have lagged behind due to fiscal constraints. The scant equipment that exists, is generally not compatible between parks, not efficiently utilized, and lacks technical support.

A temporary web-site survey was conducted in May 1999, which queried chief park rangers as to those equipment needs that could be most cost-effectively managed using a shared-use cache system. The cache concept would be modeled after the firecache system, providing parks the ability to "borrow" necessary equipment, while reducing costs by not overstocking an inventory of enforcement gear. The survey asked NPS units to identify types of equipment needed, estimated number of units needed at a time and estimated number of user-days per year.

As a result, the National Park Service recommends establishing two (2) Technical Support Units (TSU) based on the U.S. Forest Service model, in order to provide a central cache of equipment and high-level support to the park units. A recent survey of responding parks indicates that there is at least a service-wide Special Equipment deficit of \$4.4 million. The establishment of TSU's, and the purchase of compatible equipment used efficiently by many parks, will result in net savings of fiscal resources. The total cost for the equipment and TSU's is \$6,590,000. Recurring costs are \$990,000.

The National Park Service recognizes the benefits of sharing equipment assets with other federal agencies. We view the cache concept as a way to coordinate borrowing equipment from interagency cooperators with better distribution and return accountability. The same would be true with regard to loaning NPS equipment to our cooperators during "downtime". This could reduce the amount of equipment to be purchased overall and further reduce costs.

### Justification

A significant improvement will occur in safety, efficiency, protection of resources and the investigation of criminal offenses with the establishment of two TSU caches. A TSU would be a cost-effective program, reducing the overall number of electronic property items needed for supporting the parks, through the temporary or long-term loan of equipment. This would recycle the equipment to where it's needed the most to protect park resources. A centralized cache system of TSU's would also provide the service with up-to-date technology information. Parks would have direct access to a technical resource for personnel, equipment, training and planning. The purchase of equipment could be standardized, resulting in cost savings in terms of implementing the equipment, acquisition, repair and training.

The TSU would be modeled after the U.S. Forest Service unit, which has two positions that provide high level technical support to their field areas and a technical agent in each state. The service’s proposed TSU’s would be two units service-wide, each with two special agents and two electronic technicians. The purchase of centralized inventory of compatible equipment will enable the National Park Service to reach a minimum standard of resource and visitor safety protection. Life safety issues for park rangers will be reduced, as surveillance and information gathering activities can be done from a safe distance, with diminished time requirements for actual on-site physical presence.

**Adverse Impacts**

Park resources will be lost because many offenses will not be investigated in a timely or efficient manner because they are best suited for investigation by technical equipment (wildlife poaching, archeological looting, vandalism, etc). Without the establishment of a TSU, park protection programs will continue to compete for priority within park base funding. The current inventory of special equipment will need to be replaced, resource protection efforts will be critically hampered, park ranger safety will be compromised and larger gaps will occur between the services the agency can provide and the visitors’ level of expectations. Fiscal resources will be wasted on less efficient personnel costs versus more efficient electronic surveillance equipment costs that can be placed in the field providing 24-hour monitoring.

Without TSU’s, there will continue to be no service-wide equipment standards, support or acquisition guidelines. This encourages the purchase of a wide range of incompatible equipment, sometimes items of poor quality and risks inadvertent acquisition of unsafe equipment (e.g. foreign made night vision goggles that damage eyes).

Officer safety will continue to decrease due to the exposure to risks and the lack of counter measures and training to combat the criminal elements. Detrimental impacts to the resource and visitor protection missions will continue due to poor utilization or lack of equipment.

<b>Estimated Costs</b>	<b>Estimated Non-recurring Costs:</b>
	Special Equipment for Park Specific Use .....\$ 600,000
	Technical Investigative Equipment Inventory .....\$3,800,000
	Total .....\$4,400,000
	<b>Recurring Costs:</b>
	Personnel - 4 Investigators (GS-12/5 with LEAP pay), - 4 WG-10/3 Electronic Technicians .....\$ 406,100
	Benefits @ 30% .....\$ 106,500
	Support costs* .....\$ 177,400
	Special/Investigative equipment (maintenance and rehab): .....\$ 300,000
	Total.....\$ 990,000
	* Support costs reflect extensive travel to provide technical assistance to field areas.

## FR-1, Facilities and Construction Projects

### Findings

A survey was conducted to identify construction or facility-improvement projects needed by parks to directly support law enforcement and enforcement-related resource protection projects. Parks were asked to note those projects currently stand “approved” by the Department of the Interior five-year Project Management Information System (PMIS) project plan. Four parks responded with projects meeting the survey criteria. The NPS recommends supporting these projects for construction and rehabilitation funding.

Table I	Park	PMIS #	Project	Cost
<b>List of DOI-Approved Facility Enhancement Projects</b>	Fredericksburg & Spotsylvania NMP	13196	Upgrade & Replace Alarm Systems in 17 Park Buildings .....	\$ 64,000
		22649	Rehab Rangers’ Bldg, incl. Log Shop .....	\$246,000
	Glacier Bay NP&P	22603	Rehab Ranger Office .....	\$158,000
	Independence NHP	11696	Replace 325 Walnut Street Fire & Intrusion Alarms .....	\$ 49,000
			11715	Replace 2nd Bank Fire & Intrusion Alarms .....
		11701	Replace Declaration House Fire & Intrusion Alarms .....	\$ 49,000
		11702	Replace Bringham Fire & Intrusion Alarms .....	\$ 49,000
		13540	Replace Pemberton House Fire & Intrusion Alarms .....	\$ 49,000
		13541	Replace New Hall Fire & Intrusion Alarms .....	\$ 49,000
		13542	Replace City Tavern Fire & Intrusion Alarms .....	\$ 49,000
		13544	Replace Deshler-Morris House Fire & Intrusion Alarms .....	\$ 54,000
		13545	Replace Todd House Fire & Intrusion Alarms .....	\$ 49,000
		13546	Replace 339-341 Walnut Street Fire & Intrusion Alarms .....	\$ 49,000
		13547	Replace 313 Walnut Street Fire & Intrusion Alarms .....	\$ 49,000
		13559	Replace Franklin Court Fire & Intrusion Alarms .....	\$ 84,000
		13561	Replace Free Quaker Meeting House Fire & Intrusion Alarms .....	\$449,000
		20666	Replace Maintenance Shop Fire & Intrusion Alarms .....	\$ 49,000
	20667		Replace Visitor Center Fire & Intrusion Alarms .....	\$ 49,000
	North Cascades NP	7047	Rehab Unsafe Boathouse At Stehekin .....	\$ 69,000
		7051	Replace Unsafe structural Members, Hozomeen Ranger Station .....	\$ 49,000
	<b>Total .....</b>			<b>\$1,671,000</b>

**Justification**

These projects fall into two fundamental categories: correcting unsafe structural situations and providing modern protection alarms systems to prevent loss of priceless public resources. Detailed justifications for each proposed project are available in the compendium volume of this report.

**Adverse Impacts**

Structures used as office space or employee housing at North Cascades and Glacier Bay will continue to pose primitive and in some cases, unsafe situations for the workforce. Irreplaceable cultural resources as well as costly government equipment will remain at risk of theft, vandalism or fire at Fredericksburg/Spotsylvania National Military Park and Independence National Historic Park.

**Background**

The study stressed collection of projects which had been approved at the departmental level and which are currently logged in the PMIS 5-year plan. Many other construction and facility-enhancement projects benefiting law enforcement are at various stages of the approval process. These include space in ranger stations, firearms ranges, housing and other projects that will support enforcement. They will be reviewed at the park, regional and headquarters levels before possible inclusion in the DOI-approved 5-year plan.



**United States Department of the Interior  
National Park Service**