Facilities In Many National Parks And Forests Do Not Meet Health And Safety Standards

Lodges, employee dormitories, water and sanitation systems, bridges, and tunnels in 21 of the 22 national park and forest areas GAO reviewed did not comply with Federal or State health or safety standards. Once they became aware of facility deficiencies, the National Park and Forest Services took a broad range of actions, including the immediate closure of unsafe and unhealthy facilities. In many parks and some forests, however, facilities remained open even though they did not meet standards established to protect the health and safety of visitors and employees.

GAO estimated that to correct identified health and safety deficiencies would cost well over 1 billion dollars.

GAO makes a number of recommendations to the Congress and the Secretaries of Agriculture and the Interior on what needs to be done to bring facilities in our national parks and forests up to health and safety standards.
of the United States
Controller General

Sincerely yours,

[Signature]

I hereby request that the Department of Housing and Urban Development, the Department of Agriculture, and the Department of Transportation, in accordance with the provisions of the National Environmental Policy Act of 1969, prepare a report on the environmental impact of the proposed project. The report should be submitted to me within 30 days from the date of this request.

As requested by your office, unless you otherwise specify.

[Signature]

Dear Senator Hartfield:

I wish to inform you of the actions being taken to ensure the protection of the environment in the area of the proposed project. The Department of Housing and Urban Development, the Department of Agriculture, and the Department of Transportation are working closely to develop a comprehensive plan for the project.

I would like to take this opportunity to express my appreciation for your continued support and guidance in this matter. If you have any questions or concerns, please do not hesitate to contact me.

[Signature]

[Date: 2-197179]
Actions Taken to Improve Facilities

some national parks, (see pp. 74 and 95),

hazards at old facilities in the following:

$32.2 million to correct fire and safety

standards ranged from $5,000 to report

the cost of bringing facilities up to

close.

wasted repairs or upgrading, but not

better condition, and inspectors recommend:

In other cases, the facilities were in

facilities could be corrected or upgraded.

recommends immediate closure until the

facilities to be hazardous, that they

use.

be replaced, upgraded, or targeted in their

domitories, bridges, and hazardous lagoons, and

visitors and employees. Substandard water

protected the health and safety of those

The Park and Forest Services have not

STDANDARDS

RESOURCES

requirements for water, health, and safety standards.

meet health and safety standards. For example, the

health and safety standards. These

came aware that a facility did not meet

broad range of actions once they do-

The Park and Forest Services took a

cover sheet should be noted hereon.

AMERICAN INDIAN COMMUNITY BANK

TO THE RANKING MINORITY MEMBER:

COMPTROLLER GENERAL'S REPORT

WATER RESOURCES

UNITED STATES SENATE

WATER, HEATH, AND SAFETY

PARKS AND FORESTS DO NOT

FACILITIES IN MANY NATIONAL

PARKS, FORESTS, AND MONUMENTS.
ALTERNATIVE FUNDING METHODS

and administrative buildings. (See p. 21.)

and interpretive displays, campsites, picnic

and parking facilities, and new visitor centers, hik-

and safety. These included interpretive display

and health officials. The extent of funds taken

for projects other than health

69 percent of the $225 million of construction

50 percent of the $218 million of construction

During Fiscal Years 1979 through 1991.

health standards.

were often not sufficient to meet safety and
deficiency, but the improvements
total GAO of numerous actions taken to improve

and Forest Supervisors

provide adequate coverage. (See p. 32.)

and

existing fire exits are difficult to use,

have enough fire exits and most of the
during a fire because the lodge does not

quarters may become trapped in their rooms

resistant.

that

the lodge. A 1979 inspection disclosed

the 80-room Crater Lake Lodge in Crater

Lake National Park or restricted use of

and interior walls were not fire

that
Entrance and camping fees

--Negotiating with concessioners to make

The National Park Service attempted to
raise entrance fees at some areas and to
increase fee revenue by $12 million in
1979. However, Congress levied penalties
charged at units of the national park
system at those areas and rates which
were in effect on January 1, 1979.

This was because the Congress disagreed
with the Park Service's plan to reduce
the amount of the increase in fees collected.
GAO proposes that all revenue increase
in an amount that would normally be used
funds and that the revenue not be used
to replace any other Park Service funding.

To implement this funding method, the
Congress would have to (1) enact legislation
permitting the Park Service to increase
entrance fees for health and safety projects
and (2) appropriate funds resulting from
increases in entrance and camping fees in the
Parks and forests

Concessioner improvements

Improvements

Concessions may be willing to amend
present contracts or enter into new
contracts to repair or upgrade deficient
facilities to meet health and safety standards.
This was done by concessioners
in Everglades and Yellowstone National
Parks in 1979. Recovering the cost of
health and safety improvements would have
between the National Park Service and the
concessioner. (See p. 24.)
safety standards. (See pp. 25 and 26.)
they are intended to meet all health and
they are collected.

the parks and forests were
protection for health and safety
and camping fees for health and safety
funds resulting from increased entrance
fee to increase entrance fees and direct
(93 Stat. 666) to permit the Park Service
--Repeal section 42 of Public Law 96-87
Forests.

hazards at our national parks and
with the most serious health and safety
furnishing and upgrading facilities
--give priority to funding projects for
only one or more of these

Recommendations to the Congress:

Recommendations to the Congress:

safety standards. (Sec. 1.
and bring them up to acceptable health and
sections to facilitate the most serious
from the

Congress to correct the most serious

safety and health standards.
request a special appropriation from the
request a greater share of their con-
not meet health and safety standards.
restrict the use of facilities that do
and safety problems with available funds
--take immediate action to correct the health

recommends that the Secretaries:

OF AGRICULTURE AND THE INTERIOR

RECOMMENDATIONS TO THE SECRETARIES
The Departments of Agriculture and the Interior agreed that health and safety deficiencies exist in areas they manage, and that more funds are needed to correct them. The Departments sometimes differ, and additional funds should be obtained. Congress was opposed to the Interior's request for construction funds. The Department of Agriculture was opposed to the Congress's request to correct the most serious health and safety hazards but did not oppose this recommendation. (See pp. 104 to 117.)

As pointed out in this report, it will cost the Park Service an estimated $16 billion to correct identified health and safety deficiencies in national parks and forests. These deficiencies greatly exceed annual construction appropriations. Therefore, the agencies must find other means to finance these improvements.

The concessioners (1) informed GAO of many improvements they have made since GAO visited their facilities, (2) requested that GAO correct minor errors made in describing their facilities, and (3) sometimes stated that even though their buildings were reasonably safe, GAO either modified the report based on the additional information or provided additional support for its position. (See app. VII.)
Appendix

Recommendations to the Congress
of Agriculture and the Interior
Recommendations to the Secretaries

Conclusions

Improvements

Regulatory recommendations to make

Use changes

Alternative funding methods

Health and safety procedures

Other procedures funded instead of

pelled, upgraded, or use-restricted

why dedicated facilities were not re-

bridges and tunnels

lodges and dormitories

sewer systems

water systems

Types of health and safety problems

Health and safety detection and

HEALTHIER AND SAFER

NATIONAL PARKS AND FORESTS MUST BE MADE

Introduction

Chapter

Digest

Contents
Public Health Service
General Accounting Office
Federal Highway Administration
Environmental Protection Agency

ABBREVIATIONS

| AT | Travel Systems, Ltd.             |
| 14B | Stevens Pass, Inc.               |
| 14C | Thomas G. O'Connel              |
| 13D | Kosmulate Park & Curry Co.       |
| 13E | Outdoor World, Ltd.             |
| 13F | Ketite Falls Hotel, Inc.         |
| 12G | Chateau Park, Inc.              |
| 12H | General Host Corporation         |
| 11I | Fred Harvey                      |
| 11J | Concessions, Commentaries   |

The Interim
and Administration, Department of
Assistant Secretary, Policy, Budget,
Letter dated August 7, 1980, from the

Agriculture
Chief, Forest Service, Department of
Letter dated July 28, 1980, from the

Proposed by the National Park Service
unlimited health and safety procedures
Method used to estimate the cost of

Wenatchee National Forest
Superior National Forest
Shasta-Trinity National Forests
Olympic National Forest
Nantahala and Pisgah National
Mount Hood National Forest
Chippewa National Forest
Mount Baker-Snoqualmie National
Lake Tahoe Basin Management Unit
Glacier National Forest
Chippewa National Forest

APPENDIX
The National Park Service manages 154 national forests, 19 national grasslands, and 17 land utilization projects. In 1979, these areas encompassed about 292,188 square miles. These areas are found in those found in Park Service areas and those that were surveyed and that were surveyed and that were reclassified as National Forests. In 1979, over 50 million visits were made to the National Park Service areas that were surveyed and that were reclassified as National Forests.

**Recreation Areas**

<table>
<thead>
<tr>
<th>VISITS TO FEDERAL</th>
</tr>
</thead>
</table>

The National Park Service manages 154 national forests, 19 national grasslands, and 17 land utilization projects. In 1979, these areas encompassed about 292,188 square miles. These areas are found in those found in Park Service areas and those that were surveyed and that were reclassified as National Forests. In 1979, over 50 million visits were made to the National Park Service areas that were surveyed and that were reclassified as National Forests.

**Recreation Areas**

<table>
<thead>
<tr>
<th>VISITS TO FEDERAL</th>
</tr>
</thead>
</table>

The National Park Service manages 154 national forests, 19 national grasslands, and 17 land utilization projects. In 1979, these areas encompassed about 292,188 square miles. These areas are found in those found in Park Service areas and those that were surveyed and that were reclassified as National Forests. In 1979, over 50 million visits were made to the National Park Service areas that were surveyed and that were reclassified as National Forests.

**Recreation Areas**

<table>
<thead>
<tr>
<th>VISITS TO FEDERAL</th>
</tr>
</thead>
</table>

The National Park Service manages 154 national forests, 19 national grasslands, and 17 land utilization projects. In 1979, these areas encompassed about 292,188 square miles. These areas are found in those found in Park Service areas and those that were surveyed and that were reclassified as National Forests. In 1979, over 50 million visits were made to the National Park Service areas that were surveyed and that were reclassified as National Forests.

**Recreation Areas**

<table>
<thead>
<tr>
<th>VISITS TO FEDERAL</th>
</tr>
</thead>
</table>

The National Park Service manages 154 national forests, 19 national grasslands, and 17 land utilization projects. In 1979, these areas encompassed about 292,188 square miles. These areas are found in those found in Park Service areas and those that were surveyed and that were reclassified as National Forests. In 1979, over 50 million visits were made to the National Park Service areas that were surveyed and that were reclassified as National Forests.

**Recreation Areas**

<table>
<thead>
<tr>
<th>VISITS TO FEDERAL</th>
</tr>
</thead>
</table>

The National Park Service manages 154 national forests, 19 national grasslands, and 17 land utilization projects. In 1979, these areas encompassed about 292,188 square miles. These areas are found in those found in Park Service areas and those that were surveyed and that were reclassified as National Forests. In 1979, over 50 million visits were made to the National Park Service areas that were surveyed and that were reclassified as National Forests.

**Recreation Areas**

<table>
<thead>
<tr>
<th>VISITS TO FEDERAL</th>
</tr>
</thead>
</table>

The National Park Service manages 154 national forests, 19 national grasslands, and 17 land utilization projects. In 1979, these areas encompassed about 292,188 square miles. These areas are found in those found in Park Service areas and those that were surveyed and that were reclassified as National Forests. In 1979, over 50 million visits were made to the National Park Service areas that were surveyed and that were reclassified as National Forests.

**Recreation Areas**

<table>
<thead>
<tr>
<th>VISITS TO FEDERAL</th>
</tr>
</thead>
</table>

The National Park Service manages 154 national forests, 19 national grasslands, and 17 land utilization projects. In 1979, these areas encompassed about 292,188 square miles. These areas are found in those found in Park Service areas and those that were surveyed and that were reclassified as National Forests. In 1979, over 50 million visits were made to the National Park Service areas that were surveyed and that were reclassified as National Forests.

**Recreation Areas**

<table>
<thead>
<tr>
<th>VISITS TO FEDERAL</th>
</tr>
</thead>
</table>

The National Park Service manages 154 national forests, 19 national grasslands, and 17 land utilization projects. In 1979, these areas encompassed about 292,188 square miles. These areas are found in those found in Park Service areas and those that were surveyed and that were reclassified as National Forests. In 1979, over 50 million visits were made to the National Park Service areas that were surveyed and that were reclassified as National Forests.

**Recreation Areas**

<table>
<thead>
<tr>
<th>VISITS TO FEDERAL</th>
</tr>
</thead>
</table>

The National Park Service manages 154 national forests, 19 national grasslands, and 17 land utilization projects. In 1979, these areas encompassed about 292,188 square miles. These areas are found in those found in Park Service areas and those that were surveyed and that were reclassified as National Forests. In 1979, over 50 million visits were made to the National Park Service areas that were surveyed and that were reclassified as National Forests.

**Recreation Areas**

<table>
<thead>
<tr>
<th>VISITS TO FEDERAL</th>
</tr>
</thead>
</table>

The National Park Service manages 154 national forests, 19 national grasslands, and 17 land utilization projects. In 1979, these areas encompassed about 292,188 square miles. These areas are found in those found in Park Service areas and those that were surveyed and that were reclassified as National Forests. In 1979, over 50 million visits were made to the National Park Service areas that were surveyed and that were reclassified as National Forests.
the National Fire Protection Association standards, which
are designed to prevent and reduce the loss of lives and property in
forested areas. The standards include guidelines for the design and
construction of buildings, the use of fire suppression systems,
and the training of personnel to respond to fires.

The National Fire Protection Association standards, the National
Forest Service, and the American Forest Institute have developed
standards for forest management practices.

State and Federal Standards

In the states having an EPA-approved program,
and those having a state-approved program,
and those having a local, regional, or national
requirements, the state must comply with Federal
requirements. The state must also comply with
Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
with Federal requirements. The state must also comply
forest service.

Objective, scope, and methodology.

Objective.

The use of construction funds for forest service bridges are inspected either by FHWA or the

Forest Service. Bridges are inspected at inspection teams by FHWA.

Highway Administration (FHA) and the Federal

Department of Transportation.

In 1980, inspection teams conducted a federal

The federal inspection teams conducted a federal

survey of all bridges, including those on federal lands, using the

Act of 1978 (Public Law 95-599) requirements that all bridges

Section 124 of the Surface Transportation Assistance

Codes.

The inspectors use the most stringent portions of both

place primary emphasis on protecting lives, forest ser-

Regional and district offices were included in our review.

The following areas and the corresponding headquarters,

hosted by all national forests that year.

Visits in 1979, about 20 percent of the visits.

Visits in 1979, the 1979 Forest Service acres had over 45

The 1979 National Park Service acres, including several of

the most frequently visited acres, had over 25 million visits.

Of the regions were expressed concern about

which the Congress had previously expressed concern about

and include acres in

geographic areas,

include some of the largest and

some of the smaller.

include at least 45 acres in

and national parks, service areas, and 10 Forest Service

and national forests.

Our review was directed toward determining the condition

member, Senate Committee on Energy and Natural Resources,

in response to the request of the Ranking Minority

Forest Service.

To inspect all park bridges and tunnels by that date.

so that the

to the

on public roads, including those on federal lands, be in-

act (Public Law 95-599). The

requirements that all bridges

Section 124 of the Surface Transportation Assistance

Codes.

The inspectors use the most stringent portions of both

place primary emphasis on protecting lives, forest ser-

Natural Park Service Areas
The method we used to estimate the cost of National Park Service health and safety precautions that were proposed areas and agencies reviewed laws, policies, regulations, procedures, and records at the State Health and Safety Office, the NPS, the OSHA, and the EPA.

Public Health Service (PHS), FHWA, and EPA officials, and the Federal Highway Administration.

We interviewed Park and Forest Service officials at.

From the Park Superintendent or Forest Supervisor.

Also, we obtained agreement on facility conditions in Appendix A and II, and we obtained agreement in Appendix B on facility conditions at each example included in Appendix B. We reviewed a sample of agency officials who are responsible for safety and compliance actions needed to protect employees or those held by Federal, State, and local governments.

We relied upon qualitative health and safety inspectors to identify what is unacceptable and what is acceptable.

At each of these areas, we ascertained whether the

Wenatchee National Forest (Washington)
Superior National Forest (Minnesota)
Shasta-Trinity National Forests (California)
Olympic National Forest (Washington)
Mount Hood National Forest (Oregon)
Mount Baker-Snoqualmie National Forests (Washington)
Take Tahoe Basin Management Unit (Nevada and California)
Glacier National Park, National Forest (Washington)
Cibola National Forest (New Mexico)

Forest Service Areas
LOCATION OF PARK SERVICE AND FOREST SERVICE AREAS REVIEWED
AND SAFETY DEFICIENCIES

Efforts to Identify Health and Safety Improvements on facilities they own or manage

Negotiating with concessions to make health and safety requirements in annual contracts

Negotiations with concessions to make health and safety requirements in annual contracts

Erosion of higher entrance and camping fees at parks

Which could help fund corrections are appropriate or administratively funded methods. Two methods would require substantial increases in annual contracts:

Immediate correction of health and safety deficiencies could take more

than twice as long.

Despite health and safety deficiencies could take more

than twice as long.

As a result, correcting the

deficiencies is not

practical or safe. The

One-third of the forest service's construction funds re-

one-third of the forest service's construction funds re-

One-third of the forest service's construction funds re-

One-third of the forest service's construction funds re-

One-third of the forest service's construction funds re-

One-third of the forest service's construction funds re-

be limited.

Annual revenue to be spent on upgrades, corrections, bridges, and

Annual revenue to be spent on upgrades, corrections, bridges, and

Annual revenue to be spent on upgrades, corrections, bridges, and

Annual revenue to be spent on upgrades, corrections, bridges, and

Annual revenue to be spent on upgrades, corrections, bridges, and

Annual revenue to be spent on upgrades, corrections, bridges, and

We estimate that underused health and safety projects total

MADE HEALTHIER AND SAFER

NATIONAL PARKS AND FORESTS MUST BE

CHAPTER 2
case study, even though as many as 25 sometimes existed.
describing 2 or 3 different facilities of each type per
cent facility is included in this chapter; more case studies
areas reviewed. At least one example of each type of dete-
health and safety deficiencies at park and forest service

The table on page 8 shows the types of facilities with

TYPES OF HEALTH AND SAFETY PROBLEMS

ings on health and safety deficiencies. We reviewed the reports on some of the parks included

including dormitories.

lar attention should be given overnight lodging;

showed filmmaker James, at the present time, particu-

analyze what must be done on marinas, which
cost of correction. This figure does not include the
to evaluate the total impact, countrywide, on the
26 parks where the issue must be addressed in order
the analysis at character. Those are an additional
ct resources and we are expecting further thorough
this process has already been completed.

nding the problem, above and beyond the basic rpg

n the process, cost that out, and find a means of solv-
the facility, sanitation, and deterioration. Finally

" What we must do is establish a process to identify


*

problem."
good picture of the countrywide scope of the
suces before the crisis arrived, nor do we have a
sance planning to design and land management, costs and for employees. We have not had enough ad-
which have other lodging structures, both for visits,
could have a similar result in several other parks
modifications in two parks. An on-going check
have receded the course of visitor lodging accom-

During the past year, fire and safety concerns

This memorandum to all park service regional directors stated:
yency survey of concession facilities" in 62 national parks.

1979 the director, national park service, called for an "emerg-
fort to identify health and safety deficiencies. In November
The National Park Service recently accredited its et...
A. "Facilities that did not meet any of the Federal safety and health standards."

<table>
<thead>
<tr>
<th>National Forest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wenatchee National Forest</td>
</tr>
<tr>
<td>Superior National Forest</td>
</tr>
<tr>
<td>Sierra National Forest</td>
</tr>
<tr>
<td>Olympic National Forest</td>
</tr>
<tr>
<td>Natchez National Forest</td>
</tr>
<tr>
<td>Mount Hood National Forest</td>
</tr>
<tr>
<td>Inland National Forest</td>
</tr>
<tr>
<td>Mount Baker - Snoqualmie</td>
</tr>
<tr>
<td>Management Unit</td>
</tr>
<tr>
<td>Lake Tahoe Basin</td>
</tr>
<tr>
<td>Olympic National Forest</td>
</tr>
<tr>
<td>Cibola National Forest</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Forest Service Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yosemite National Park</td>
</tr>
<tr>
<td>Yellowstone National Park</td>
</tr>
<tr>
<td>Voyageurs National Park</td>
</tr>
<tr>
<td>Rocky Mountain National Park</td>
</tr>
<tr>
<td>Mount Rainier National Park</td>
</tr>
<tr>
<td>Mount McKinley National Park</td>
</tr>
<tr>
<td>Ice Caverns National Park</td>
</tr>
<tr>
<td>Glacier National Park</td>
</tr>
<tr>
<td>Everglades National Park</td>
</tr>
<tr>
<td>Great Basin National Park</td>
</tr>
<tr>
<td>Blue Ridge Parkway</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>National Park Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
</tr>
<tr>
<td>12</td>
</tr>
<tr>
<td>Forest Service</td>
</tr>
<tr>
<td>12</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>National Park Service</td>
</tr>
<tr>
<td>12</td>
</tr>
</tbody>
</table>

Meet health and safety standards at

types of facilities that did not
facilities.

Round, including 1797 over 65,000 park visitors used these room swimming areas in Creek. Many other sites cup-

drinking water to the 217-room many cupper hotel, the 66-

systems. The system supported from the many cupper water systems. Employees became ill with gastroenteritis after drinking water. In September 1977, 55 park visitors and concessionaron

Sixteen of Cupper National Park's 25 drinking water systems do not meet EPA, PH, and Monona standards for drinking water.

Cupper National Park

drinking water standards.

drinking water to comply with PH, EPA, and applicable state

However, many water systems still do not meet state regulations.

have made major efforts to upgrade their water systems. In the last 5 or 6 years, the park and forest services

2 billion standards require.

bacteria in systems which were not tested for bacteria or lur-

health standards in the table on page 8, a water forest

Forest Service District drinking water systems were shown at not meet-

and that other water systems should be improved to assure

closed drinking water systems before they could be reopened.

filtration systems would have to be replaced or added to.

Forest Supervisors notified us that distribution and/or

bacteria or turbidity levels exceeded state or federal stand-

were closed down prior to our review after tests showed the

most destructive forest service drinking water systems.

Still Pending.

$400,000 in tort claims. Legal actions for $8 million are

after drinking the water. To date, the government has paid

park visitors and employees came down with gastroenteritis

example, In June 1975 waterborne sewage contamination a drink-

visitors who became sick from the drinking water.

The federal government can be sued for damages by park

gastroenteritis by drinking water from unsanitary systems.

peace visitors and employees have contracted gastroenteritis or

of Crater Lake, and Rocky Mountain National

Drinking water systems at 14 of the 22 park and forest

Water systems
drinking water standards. The Merced River, which is used
do not meet at least one section of the California State
Nineteen of Yosemite National Park's 25 water systems

Yosemite National Park

(see p. 37).

can be built, the park will continue to use a temporary
that did on the project to lower its bid. Until the company
The park service is trying to negotiate with the company
built because the construction bid was over the estimates.
glaciers drinking water system. The system has not been
authorized to spend $357,000 to reconstruct the many
Shortly after the outbreak occurred, the park was
the well cannot produce enough water
During periods of high drinking water use because
--the park continues to draw water from Wither Creek

disturbed

--the drinking water is not filtered or disinfected

said that this was only a temporary solution because
drinking water distribution system. The Chief of Maintenance
Martaniencia Camps to connect a new well to the Many Glacier
using Wither Creek as a drinking water source. The park used
After the outbreak occurred, the park service stopped

After the glacial dams outbreak in 1977,
priority to request that the Congress fund the project until
However, the park service did not consider it a high enough
intended proposal a project to upgrade to the water system.
be the glaciers' outlet. In 1972 the park service
meet PH's, EPA, and Montana State drinking water standards.
water that the Many Glacier drinking water system did not
The park's chief of maintenance and superintendent were

packaging area in the park.

Water from Wither Creek, which drains a popular hiking and back-
The system drew the water
was chlorinated but not filtered. The system drew the water
of the outbreak. The Many Glacier drinking water system water
creeks and lakes, be disinfected and filtered. At the time
drakes, the PH's, EPA, and Montana State drinking water stan-
contaminated by human or animal feces. To prevent gastrointestinal
Gastrointestinal is caused by drinking water that has been
became ill.illness from diarrhea for an average of 25 days.
were weight loss, and nausea. The 29 cases were associated with
Symptoms include diarrhea, abdominal cramps, fatigue,
Gastrointestinal can be a discomforting and debilitating disease.
example, forest supervisors told us that some pit toilets
health or safety of visitors or employees in the future. For
measures needed to assure that conditions do not jeopardize the
instances in which forest supervisors interviewed us of improve-
the forest service summaries in Appendix II describe
Service areas reviewed.

Line of the National Park service and two of the forest
did not comply with EPA and applicable state standards at
however, there were still severe systems in operation that
however, water sanitation problems in recent years.
reached, and irritating the water, as California standards
however, no tests are made to detect such organisms as
any system that engenders violent or quick emergency clean-
only the water enters the park service to quickly shut down
which because this would depict violations of drinking water
sewage systems in Yosemite National Park were not
The assistant park superintendent told us the 19 deli-
has not renewed the Congress to fund such programs.
the California state standards. However, the park service
the park superintendent has proposed projects to bring
also such as giardiasis, hepatitis, and amoebiasis.
drinking this inadequately treated water could cause
drinking water used for drinking. The park service said that
pretreated or filtered as California requirements for surface
although the drinking water is chlorinated it is not
--the park's most heavily used backcountry area.
--an exposed sewer line that could break, and
--a heavily used horse and hiking trail.
drinking water intake there is
pollutant for contamination because upstream from the
by the Yosemite Valley drinking water system, has a high

Sever systems
"All sewage must be channeled away from the well. Efforts must be made to find a new drainage."

If the breakdown occurs, 150 feet from the well, and at an approximate depth. The sewage has been suspecting approximately the same elevation. A Phis has been a problem with the main drain - Voyager National Park

The water and sewer systems. (See p. 48.)

Congress for funds for this project and was still using the water system that services the Kettle Falls Hotel is

As of May 1980 the Park Service did not ask the

separate trenches. which serves the Village of Grand Canyon

The water and sewer systems, to the Park Service.

In 1974 the railroad donated the water and sewer lines in the 1979 the Park Service.

The railroad developed the Village's water and sewer sys-

In January 1979 the Park Service had not asked the

The determined sewer lines serving the Village of Grand Canyon

The determined sewer lines serving the Village of Grand Canyon

funds from the Congress to correct the other deli-

water systems and were not listed as a noncompeting

The Park Service has not re-

upgraded all these sewer systems but has received funding

The Park Superintendent received funds to -

and thus, do not concern the State of Arizona or FHS

Grand Canyon Village do not adequately treat human waste

visit accommodations at Phantom Ranch, Indian Gardens, and

The sewer systems which serve the Park's overall

Early system on the table on page 8.

safety standards and were not listed as noncompeting. It is not

know to be treating sewage but not valley toilets. Pit toilets

waste into drinking water sources, streams, and
The following structures had fire safety or structural defects:

- Old Potawatomi Inn, Mammoth Motor Inn, and Mammoth Hotel
- Paradise Inn, Mount Rainier National Park
- Paradise Inn--Mount Rainier National Park
- Paradise Inn--Mount Rainier National Park, and their employees
- Paradise Inn--Mount Rainier National Park, and their employees
designed, constructed, and owned.

Our investigation in December 1979, revealed that there were no deficiencies in the construction and design of the structures at the time they were completed. None of the deficiencies identified were in the design of the structural elements or in the design of the structural components. None of the deficiencies reported were due to material defects or design errors.

The following structures are required to be corrected by the end of the fiscal year 1980:

- Old Potawatomi Inn, Paradise Inn, and Mammoth Motor Inn
- Paradise Inn--Mount Rainier National Park, and their employees

The park received $55,000 in lump sum construction funds in December 1979.

Water

The drinking water system was in poor condition, did not meet all the standards, and was a potential hazard to the drinking water. The manager said the water system was in poor condition, did not meet the required standards, and the system operated throughout the 1978 and 1979 tourist seasons. In November 1979, the park facility and the system operated throughout the 1978 and 1979 tourist seasons. In November 1979, the park facility and the system operated throughout the 1978 and 1979 tourist seasons.

The facilities are not open in 1979.

The inspector said that these deficiencies must be corrected immediately and that:

- The structures with multiple structural defects and employee protections need to be corrected.
not closed any of the structures to volunteer to
1979, and park superintendents and forest supervisors had
still existed when we completed our fieldwork in December-
seriously. However, many of the deficiencies
action is taken immediately the structures should be closed.
Some of the inspection reports stated that unless corrective
made or contracted for by the Park and Forest Service.
Structures visited had been identified in inspections
domitories and structures identified at the lodges and

The fire and structural deficiencies at the lodges and domitories

rotten support timbers.

by structural deficiencies caused by heavy snow loads or
codes. In several cases, these shortcomings were compounded
comply with several standards of the present building code.

most structures were visited, nearly all buildings failed to
required when many of the lodges and domitories were built.
emergency exits now required by national codes were not
satisfactory, emergency lighting in stairwells, and multiple
sprinkler systems, fire retardant materials in hallways and
smoke alarms. Fire alarms, the sirens,
the requirement for many years. Smoke alarms, fire codes that have
they fail to meet the National Fire Protection Association
may have been considered safe when they were constructed,
old and are built entirely of wood, while these new buildings
Many of these domitories and lodges and domitories are over 50 years

National Forests

- Seven Lakes Basin Management Unit
  * Lake Tahoe Management Unit
  * Tahoe Basin Management Unit
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * CampRichardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richardson Lodge
  * Camp Richard Jo
The forest service owns three resorts in the Lake Tahoe Basin—Meeks Bay, Camp Richardson, and Zephyr Cove. During the winter months, the resorts are not open to the public.

**Lake Tahoe Basin Management Unit**

Porter, (See p. 37.)

The Lodge's balconies were rotten or inadequately supported. The service inspectors also reported in 1979 that many

the use of the flammable materials in hallways and

fire detection and alarm systems is lacking, and

The overfilled guesthouses may not be warned of a fire

power failures,

lights to light the halls and stairways during

which increases the chance of a fire occurring and

The walls of the guestrooms and hallways are bare.

spreading throughout the hotel;

Park service inspectors found the following unsafe conditions


Park service inspectors noted these deficiencies when they

Structural components are defective. Fire detection and

accommodate 338 overnight guests.

By adding a new wing, the hotel has 221 rooms that can

The four-story Many Glacier Hotel, with its wood-frame,
need by the public at the Forest Service. Substandard bridges are present at several
Forest Service bridges are improved after being
In 1979, the National Park Service contracted with

Bridges and Tunnels

--Zephyr Cove lodge had been remodeled. (See p. 86.)
--Zephyr Cove lodge had been renovated.
--Most critical deficiencies at Camp Richardson had
--Most park resort cabins were being improved.

Since our visit there:
- Reservoirs safe. In May 1980, the administrator stated that
- Reservoirs safe. In May 1980, the administrator stated that
- Since our visit there:

The system.

- Adequate second story fire escapes and an automatic sprinkler
- Adequate second story fire escapes and an automatic sprinkler
- Adequate fire detection and alarm system, a sprinkler system.
- Adequate fire detection and alarm system, a sprinkler system.
- Zephyr Cove Lodge, the Camp Richardson Lodge, and Camp Richardson have two-story

Zephyr Cove Lodge and camp Richardson also have two-story,

Zephyr Cove Lodge and Camp Richardson also have two-story.

Hazards for public use.

Hazards for public use.

Hazards, such as adequate fire detectors and alarm systems.

Hazards, such as adequate fire detectors and alarm systems.

Three resorts have small wooden cabins for rent.

Three resorts have small wooden cabins for rent.

The Forest Service Recreation Specialist Officer said that the building which burned at Zephyr Cove Lodge, the Forest Service

The Forest Service Recreation Specialist Officer said that the building which burned at Zephyr Cove Lodge, the Forest Service

Zephyr Cove and Camp Richardson also have two-story.

Zephyr Cove and Camp Richardson also have two-story.

1979, they accommodated 2,700 visitors. All three resorts

1979, they accommodated 2,700 visitors. All three resorts
Tunnel. The roadway wearing surface and the rock
the presence of ground water seeping into the
tunnels are exhibiting various degrees of deteriora-
"All of these [eight] tunnels are exhibiting

to one-half of the tunnel length. An FHA official wrote:
that the Blue Ridge Parkway, Inspectors found that the amount
of binding in eight of the tunnels Inspectors have not
inspected 14 of the 27 tunnels on

In August 1976 FHA Inspected 14 of the 27 tunnels on the Blue Ridge Parkway

Blue Ridge Parkway

are replaced. (See p. 57.)

trucks and suv have caused any of the bridges nor have they prevented heavy
trucks and suv have caused any of the bridges nor have they prevented heavy
crossings. However, the parkway superintendent said that the

lacks resulting from the tunnel collapse endanger

partially maintained and exhibit various degrees of deterioration.

The parkway surface has not been rehabilitated or replaced any

meet FHA bridge standards and were structurally deficient.

During an inspection made in August 1976, FHA personnel

maintenance, sometimes deteriorate into an unsafe condition.

adverse conditions, bridges, even with the most persistent

structural supports, foundations, and beams. Under these

centric. The bridges are exposed to the harsh Alaska climate;

Many of the bridges in the park are structurally defi-

Mount McKinley National Park

motorists using the Blue Ridge Parkway.

Also, rocks falling from unlined tunnel ceilings endanger

--Wasatche National Forest.

Mount McKinley National Park, and

--Glacier National Park.

Gifford Pinchot National Forest,
sewage into a nearby drinking water source in phases. Ranging from $5,000 to $50,000, the cost of bringing facilities up to standard, but not conclusive. The cost of bringing facilities to the standards of the health and safety inspectors' recommendations or upgrading them in order to meet health and safety standards is not upgrading them to meet health and safety standards. The condition of the facilities and the cost of repair.

Even if health and safety codes and standards are met, the public may apply to national park and forest rangers. Many health and safety codes and standards to protect

WHY DEFICIENT FACILITIES WERE NOT

any immediately needed repairs. (See p. 28.)

Regesected funds from the congress for this purpose. Because funds from the congress for this purpose. The portals were upgraded, and a new drinking water well was upgraded and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drained, and upgraded in March 1977 that all eight tunnels be drain...
conveniences and employees, or allow the facilities to remain
downwards the perception of the existence of these hazards, the theory
focused to gather close hazards at locations repeatedly.
A result, Park Superintendents and Forest Supervisors were
more closely monitor detections in many facilities. As
However, resources were not available to correct or
standard fire detection and suppression systems.
requiring night watchmen in some buildings with sup-
water provided by subcontractor water systems.
requiring the frequency of inspections of drinking
More costly detections,
requiring new concessions to correct some facility
less costly detections,
using operation and maintenance funds to correct

Park and Forest Services have attributed health and
and safety projects.

Money's budget request for projects other than health
Superintendents and Forest Supervisors, and funds to fund only about 5 percent of all health and
and Forest Service annual construction appropriations are
park funding process takes several years to complete. (2) The
and safety detections, few were funded because (i) the
although many projects were proposed to correct health

The Park and Forest Services took a broad range of
hazards at Old Faithful Inn in Yellowstone National Park.
As shown in Tables I and II, for fiscal years 1979 to 1982, the Department of the Interior's Office of Natural Resources Management has requested and received 65 percent of the federal recreation budget for national parks, and 50 percent of the recreation budget for national forests. This percentage is expected to continue through 1983.

Existing facilities needed to be rehabilitated or replaced, and the construction of new recreation facilities with attendant service improvements have been requested by the Congress to fund the program, both agencies have requested the Congress to fund the program, both agencies have been required to meet the demands of visitors and employees of the park and forest service to improve their welfare and safety. The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.

The need for new facilities is clearly evident, and the Congress has been informed of our needs.
TABLE III

<table>
<thead>
<tr>
<th>Other Types of Projects</th>
<th>Percent of Total (000 omitted)</th>
<th>Amount Requested (000 omitted)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50.0</td>
<td>45.1</td>
</tr>
<tr>
<td></td>
<td>62.1</td>
<td>36.3</td>
</tr>
<tr>
<td></td>
<td>50.0</td>
<td>54.9</td>
</tr>
<tr>
<td></td>
<td>31.8</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Park Service Requests for Construction Funds

<table>
<thead>
<tr>
<th>Health and Safety Projects</th>
<th>Percent of Total</th>
<th>Amount Requested (000 omitted)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>54.4</td>
<td>34.3</td>
</tr>
</tbody>
</table>

TABLE II

*Unhealthy conditions in national parks and forests. Under these conditions, they are not suitable for public use.*

<table>
<thead>
<tr>
<th>3-Year Average</th>
<th>FY 1979</th>
<th>FY 1980</th>
<th>FY 1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount Requested</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Increased revenue that could be used to enhance parks and camping fees at national parks and forests could result in higher or more widespread entrance fees at national parks and campgrounds. Users of user charges are discussed in more detail in our report.

Burden on taxpayers: They are also a source of revenue that can lighten the cost burden of public services on the recipients and (2) because they are equitable as they place the user charges for publicly provided services.

We also need to correct health and safety deficiencies at additional locations that are raised or collected at additional locations could have to correct identified health and safety deficiencies. In addition, the Forest Service relies on these 5.1 billion dollars to enhance and maintain facilities, and to award grants to other organizations. The Congress would have to appropriate to meet these needs.

By Federal agencies' (PA-D 80-25, March 26, 1980), the Appropriations Committee of the House of Representatives passed the fiscal year 1981 budget, the appropriate level of appropriations for the Forest Service was increased over the 5-year period, about a half billion dollars. The Congress would have to appropriate to meet these needs. The Forest Service relies on these for maintenance and to meet additional funding needs.
collected.

and safety projects in the parks and forests where they are

long from increases in entrance and camping fees for health

(2) Appropriate Funds Result

To increase entrance fees and

have to (1) enact legislation permitting the park ser-

vice to replace any other park service funding.

otherwise be funded and that the revenue should not be used

collect because we believe that all revenue from increased fees

should be used for health and safety projects. That would not

result in a significant amount of the increase in fees.

the park service's plan to reduce the park service ma-

taineering fees was that the Congress disagreed with the

Legislative history shows that a major reason for

areas and rates which were in effect on January 1, 1979.

areas charged at units of the national park system to those

cocessional registration (public law 96-87) limited entrance

to increase fee revenue by $12 million in 1979. However,

ees at some units and charge fees at some additional units

The National Park Service attempted to raise entrance

rates per night.

users. The camping fees ranged from $1 to $4 per

$6 million in core fee. The park and forest services each

In 1979 the park service collected $7.96 million in

money that charged entrance fees. Fees range from 50 cents

The National Park Service is the only Federal Recreation

sites.

camper fees.

in areas with low visitation use and at multipurpose-access

ceed the revenue generated. This is most likely to be the

areas is impacted because the collection causes would ex-

The imposition of entrance and camping fees in some

--Reduced use of Federal campgrounds that are now

--For free or for a small fee.

--Widespread complaints and protests from people

areas.
SERVICES

Historically, areas managed by the National Park and Forest
Service, like the lake Tahoe basin, or one of the many other scenic and
challenging, and overburdened National Park\'s national forests in
modern life by visiting Grand Canyon, Yellowstone, Yosemite etc.

Every year millions of people escape the pressures of

CONCLUSIONS

Public (CED#80-102, July 31, 1980).

Park concessions can improve services provided to the
people by improving management practices are discussed in
the case studies. Changes needed in the National Park Service
by comparison between the National Park Service and the

concessions in Grand Canyon National Park and Yosemite

deficit situations they manage or desire to manage, the

contracts or other into new contracts and report or upgrade

concessions may be willing to amend their present

330,000 a year for facilties repairs and improvements.

This would amount to $2.1 million a year. The conceder

receipts, based on the 1979 receipts of $1.6 million

gross receipts for repairs and improvements to the concesser-

Park which requires the concessionaire to spend 1 percent of

contract with the new concessionaire at Yellowstone National

In 1979 the National Park Service signed a 2-year

contract that required the concessionaire at Ever-

For example, in 1979 the Park Service negotiated a

of the contract.

To make improvements

Requiring concessionaire
CAN RECOMMEND THAT THE CONGRESS:

RECOMMENDATIONS TO THE CONGRESS

- Standars.
  - Bring them up to applicable health and safety
  corrections to facilities they own or operate to
  negotiate with Congressmen to have them make
  - Request a special appropriation from the Congress
    to correct the most serious health and safety haz-
    - Request a greater share of the appropriation
      for health and safety
      - Standars.
  - Of facilities that do not meet health and safety
    - Take immediate action to correct health and safety

INTERIOR:

GAO recommends the Secretaries of Agriculture and the

RECOMMENDATIONS TO THE
SECRETARIES OF AGRICULTURE

Fifty methods of funding the projects will be needed.
- An estimate for the Forest Service.--is now so great that alteration
  projects.--2.6 billion for the National Park Service and 49
  projects. The cost of each agency's proposal is under par and hazard
  facilities that are needed to reestablish function have been included.
  Congress did not request funds for the construction of new
  correction or recondition or, more to the point, both agencies
  discontinue but much more is needed. Both agencies
  health or safety standards. Some action has been taken to
  at least one facility did not comply with Federal or State
  At 25 or the 22 Park and Forest Service areas reviewed,

TOGETHER, employees of the Corps of Engineers, Forest Service, National Park
  posing by subsurface water and sewer systems and hazardous
  have to protect themselves against the man-made dangers.
  however, visitors and employees should not aliso
  others would find the outdoor experience that many visit.
  dealt with in many parks and forests. Eliminating these
  visitors recognize that raging rivers, steep mountain
In describing their facilities, and (2) sometimes stated
facilities, (2) required that we correct many errors made
they have made, or plan to make, since we visited their
The consequences (1) informed us of many improvements

force to correct health and safety deficiencies.

our recommendation should assist the agencies in their ef-
find other means to enhance these improvements. Improving
construction appropriations, therefore, the agencies must
must greatly exceed annually.

$419 million to correct health and safety deficiencies in
service on estimated $4.6 billion and the Forest Service
As pointed out in this report it will cost the park

(see pp. 104 to 117).

oppose this recommendation. (See pp. 104 to 117).

safety hazards but the Department did not
from the Congress to correct the most serious health and
construction appropriation Funds, the Department of Agri-
example, neither department agreed to include a greater share
for each other. All non-additional funds should be allocated. For

The departments sometimes differed with OAO and with

The agencies and state agencies.

agency and Commissioner Comments

and safety standards.

facilities until they are improved to meet all health
in part report on the condition of the
---require that the secretaries of agriculture and the

Where they are collected.

Several hazards at parks and forests.

---require sections 402 of Public Law 96-87 (93 Stat. 666)
---repeal section 402 of Public Law 96-87 (93 Stat. 666)
---repeal section 402 of Public Law 96-87 (93 Stat. 666)
---repeal section 402 of Public Law 96-87 (93 Stat. 666)
---repeal section 402 of Public Law 96-87 (93 Stat. 666)
---repeal section 402 of Public Law 96-87 (93 Stat. 666)
---repeal section 402 of Public Law 96-87 (93 Stat. 666)
that even though their buildings had fire and building code deficiencies they were reasonably safe. We either modified our report based on the additional information from the consultants or provided additional support for our position.

(See app. VI.)
and camp store on the parkway adjacent to the Inn's parking lot. The concessionaire also operates a service station, restaurant, and a gift shop just off the parkway at Mount Pisgah-operated Pisgah Inn provides overnight lodging.

Mount Pisgah National Forest in North Carolina, about 60 miles from the southern end of the Blue Ridge Parkway. The con-

The 5,721-foot Mount Pisgah lies in the heart of the

are a fire hazard

Mont Pisgah employee residences

To warrant their closure.

supervised entrant said that the entrances are not dangerous enough

motorists driving through the tunnels. However, the parkway

tion, rocks falling from the tunnel ceiling and debris, and other hazards encountered in the tunnels. The tunnels are partially unlined and exhibit varying degrees of deterioration.

Light of the parkway's 37 tunnels are completely or

the tourist season.

buildings remaining in use until November 1979, the end of

buildings removed. A few of the damaged walls were corrected and both

buildings be closed until the hazardous conditions were cor-

buildings on September 5, 1979, and recommissioned for use.

national park service's regional safety manager inspected these

meet fire, structural, and electrical safety standards. The

47 tunnels are not safe because the buildings fail to

employee residences, in the old lodge and tree-top cottage,

Employee residences at Mount Pisgah

parkway's 15.3 million visitors in 1978.

trailside, and wayside exhibits, provided recreation for the

border the roadside, overlooks, knobwood, azaleas, white pine, and other native plants.

located experiences. Views are enlivened by highland lakes.

is to provide a scenic route for leisure travel and recreation.

mountains national parks. The primary role of the parkway

and North Carolina between the Shenandoah and Great Smoky

established in 1936, the Blue Ridge Parkway extends 469

Blue Ridge Parkway

national park summaries

Appendix I

Appendix I
The regional safety manager said the building were not good for overnight occupancy but that they added: "The fire and safety hazards could not be close these hazards.

The fire service's regional safety manager was part of the problem.

The building until the detectors could be "I cannot see the detectors" and other employees could not reach them.

The fire marshal's report recommended vacating the old lodge. Some of the detectives said that section of the old lodge had hazards that were not expected.

The state of North Carolina's fire marshal confirmed these hazards.

- Lack of an automatic sprinkler system.
- Lack of smoke detectors with an alarm system.
- Lack of illuminated exit signs.
- High combustible fireproofed walls and ceilings.
- Warped floors and walls caused by structural failures.
- Electrical code and construction a high fire potential.
- Lacking fire rating that does not meet the national.

The detectives included.

For overnight occupancy until the detectors can be core-cept that the old, wooden frame structures shall be closed.

1979, the safety manager of the service's south eastern region called the July 28, 1979, in the service's report, issued a September 2, 1979, at the service's southeast region.

The fire service did not make a comprehensive inspection survey of the buildings for several years. Although inspections have discovered health and fire hazards that were first used as guest houses, but were con-

Concessionaire employees live in the old lodge and

Appendix I
PHRA inspected the tunnels.

and tunnel drainage work be done. This was done months before.

Eight tunnels were inspected, the portals be upgraded, and road

condition of the tunnels and proposed in March 1977 that all

The parkway superintendent had recognized the hazardous

An FHA official further stressed in a May 1979 letter

the tunnels, "Within the tunnels, the sand and rock build-up along the ditch line

cutting rocks. Thus deterioration is witnessed by

severely affected the motorors to the hazard of

rocks from the unlined tunnel sections and con-

flow cycles in the winter months tend to loosen

covered with a thick sheet of ice. The freeze-

water seepage can be especially hazardous in the

see water seepage within any particular tunnel. Thus

door condition depending on the amount of water

position of the tunnels are in clear to

usually wearing surface and the rock

various degrees of deterioration the pavement to

the tunnels (eight) tunnels endanger motorists

the tunnels (eight) tunnel length. An FHA official wrote:

In August 1978 the FHA inspected 14 of the 27 tunnels

Eight unlined tunnels endanger motorists

state fire marshal's office.

Safety reports provided by the regional safety manager and

the building's should "eliminate the deficiencies noted on the

letter the superintendent also directed that rehabilitation

and safety improvements at substantially structural

On December 14, 1979, the parkway superintendent in-

...funds for this purpose.

The parkway superintendent said that the concessionaire

APPENDIX I

APPENDIX I
Comments:

From the Congress for this work, (see p. 146 for congressional
January 1980 the Park Service had not yet requested funds
facing and upgrading the eight tunnels in March 1977, as of
Although the parkway superintendent proposes rehabili-

Any immediately needed repairs
plan to close them as maintenance will be sufficient for
February 1980 the parkway superintendent said he does not
despite the hazardous condition of these tunnels, in

Delayed rehabilitation
order that known safety hazards are
and accomplished as soon as possible in
"needed rehabilitation should be programmed

Hazards to out-of-control vehicles.
and rocky and jagged walls are potential
thawing causes rock falls within the tunnels
icy pavement in winter! Freezing and
hazards such as slick and wet pavement or
"water seepage in the unlined tunnels causes

emitted in June 1979, describe tunnel conditions as follows:
A revised park proposal covering all eight tunnels, sub-

Appendix I

Appendix I
The major findings are the same as those identified in

quite a care.

the automatic sprinkler system does not provide ade-

cut to use, and

extreme and most of the existing fire exits are dirty -

fire because the lodge does not have enough fire.

-grounds may become triped in bright rooms during a

throughout the lodge.

-exterior and interior walls were not fire resistant

examined the lodge in 1979. The inspections disclosed that

the instructions disclosed that

the exterior and safety in the interior exits were satisfactory, the first structural

safety exits and fire and safety exits were made an intensive structural

In the summer of 1979, the park service had an acclim.

least 1933, but only minor corrections have been made.

The park service has known about these deficiencies since at

cause it has numerous structural and safety deficiencies.

the lodge does not meet the Uniform Building Code he-

open from mid-June until mid-September each year.

The lodge can accommodate 180 overnight guests and is

since 1967, before 1967, the congression-approved, and congression-approved

lodge has been government owned and congression-approved

is the park's only lodge. The wood and structurally-stabile

The 80-room, 4-story crater lake lodge, built in 1911,'

meet the Uniform Building Code

Crafter Lake Lodge does not

campgrounds are about 6 to 8 miles below the rim.

lodge is located at the rim of the crater, while the two

lake lodge are at one of the park's two campgrounds, the

than 4 hours. The remaining visitors stay at either crater

located annually. About two-thirds of the visitors stay less

not exceed 36 acres. Crater lake, crater lake, crater lake, crater lake, crater lake,

Deschutes National Forest, and most popular attraction is the

scenic views, basalt cliffs, and stark rock slopes. In the park,

park encompasses 160,290 acres. About 22,000 acres is

Crater Lake National Park, located in southwestern

Appendix I

Appendix I
Life and safety inspection report is furnished.

Propose a project to correct the deficiencies when the 1979 recognize the lodge's hazardous condition and plans to
rectify them. The park superintendent stated that he now
addressed serious enough to warrant proposing a project
deficiencies serious enough to warrant the department's
stated they were not considered the
Superintendent said that, after the government bought the
site for correcting the lodge's deficiencies. The park
consistently, in its opinion, the conclusion, when proposed
until 1967 the lodge was considered, owned and operated.
ec to correct the deficiencies was not proposed because
- In addition, the park superintendent stated that a proposal-
- Closing the lodge was not politically acceptable.
- Moving the lodge to another park; and
- Closing the lodge would drain visitors' enjoyment.

enough to warrant closing the lodge;
and the remaining deficiencies were not serious,
some of the major deficiencies had been corrected,

Jensen said that the lodge was not closed because
a project to correct the deficiencies. The park superintendent-
and his predecessors have not closed the lodge or proposed
deficiencies. Since at least 1959, the park superintendent
Although the park service knew about the lodge's major
Hat's sake for guests and employees. Responsible interpretation is required to make the Flamengo Inn and Smith Park service more effective. However, neither the con-}

Dr. UU100, WU1100, and Smith Park service more effective. However, neither the con-}

The national park service spent about $21,000 a year to execute such a con-}

The park service intended to find a new concessionnaire to operate the Flamengo concession in 1979.}

The Flamengo Park service purchased the Flamengo concession in 1979.}

Severely damaged by fire on February 12, 1979, the Flamengo Inn on February 12, 1979, the Flamengo Inn was}

Visitors who enter the park are greeted by a millionaire.

The park, since 1966, the park has attracted over a milllion visitors each year.
A year later the most critical electrical hazards – those until replaced or redone to curb building stand –
only after extensive repairs remain on the building site. The 1978 report that improvements could not be implemented due to the
The assistant safety manager recommended in his November

--4 strict housekeeping code be enforced.
--the building maintenance be improved, and
--an automatic smoke detection system be installed.

--a fire alarm system be installed,
--electrical code standards,
--the electrical system be brought up to national

The assistant safety manager recommended that

on good luck, to protect the operation.

U.S. Government inspectors. We can no longer rely
existed for many years under concession and now the
of the lives of its occupants. Their statement was
The Smith Hall complex represents a serious threat

Inspection report

The assistant safety manager for the southeast region stated in his safety

manager, the park security, and a recognition room for concession employer –
28 living units and a recognition room for living units which reside

The Smith Hall complex consists of five substantial

Smith Hall employee housing

to existing life and safety hazards.

structural deficiencies, that these are the major contributors

to the rehabilitation of electrical systems, utilities, and

two involved and because the problems greater emphasis on

are not a mandatory code requirement for the type of structure

of the 6-year installation schedule. Cause smoke alarms

The park superintendent said – recommended approval

alarms, does not have to be completed until December 1984.

that one of the major improvements, improvements specific –
the contract. However, the schedule of improvements special

to make improvements totaling $1,794,000 during the life of

Utica, the contractor required the concessionaire

With a concessionaire to manage the money and other costs.

In 1979 the park service entered a 15-year contract

APPENDIX I

APPENDIX I
should become safe residences for concessionaire employes.

This work is completed as planned, the Smith Hall Buildings
maintenance funds to rehabilitate the other buildings. It
repairs to the fire-damaged building and $1,000,000 in cyclic
amount includes $52,000 in jump sum construction funds to
corrected in 1980 at an estimated cost of $263,000. This
Smith Hall Complex would be renovated and all defects
uninhabitable units and the other hazardous units in the

The park superintendent informed us that the

more from the workforce.

employees would have to find housing 50 miles or
suit in a course of the concession operation since
--closing the employee housing facilities could re-

--serious fire hazard associated with electrical

In early 1979,
system deficiencies were scheduled to be reported

The park superintendent considered closing the Smith

Hall Complex after the February 1979 fire, but decided not

Smith Hall Complex still housed concessionaire employees.

remained, and except for the fire-damaged building, the

had been corrected. However, basic structural deficiencies

Appendix I  Appendix I
require that water drawn from surface sources, such as
drills, EPA, and Montana state drinking water standards
characteristics is caused by drinking water that has been
remained for 26 who became ill were park visitors,
emergent diarrhea for 5 days or more,
levels of core 88 percent of employees showed that the 29
include: diarrea, abdominal cramps, nausea, weight loss, and
from the park. Many Glacier drinking water system, Glaciera-
ly and park visitors and employees became ill with
these symptoms provide the drinking water used by a majority
meet PHS, EPA, and Montana state drinking water standards.
ities of the park’s 25 drinking water systems do not
meet federal and state drinking water standards
and became seriously ill.
that do not meet health and safety standards. During 1977
health and safety standards. During 1977, the
Glace National Park’s inadequately treated water
water and sewer systems’ bridges, and
together with facilities do not meet health
and safety standards
so we need our health and safety standards and jeopardize the
sewage, defective bridges, and hazardous overground electric

Each year nearly 1.6 million visitors enjoy the park’s

200 lakes.

The lakes are approximately 200 miles
river valleys and rocky mountain peaks, nestled among
a million acres of active glaciers, alpine meadows, deep
by the congress on May 17, 1910. The park encompasses over
among the crest of the continental divide, was established
Glacier National Park, located in northwestern Montana

Appendix I

Appendix I
Portary system. The system can be built, the park will continue to use the tem-
pany that bid on the system to lower the bid, until the tem-
ark service is trying to negotiate with the ma-
 system has not been built. The system was
shortly after the outbreak occurred, the park was
wet cannot produce enough water. The out-
years of high drinking water use because the
--the park continues to draw water from Whiter Creek
--the drinking water is not filtered or adequately
distributed and
art solutions, since
the many chloride drinking water distribution systems. The
service used maintenance funds to connect the rest of the
using Whiter Creek as a drinking water source. The Park
After the outbreak occurred, the Park Service stopped
After the outbreak occurred, the Park Service stopped

drill a test well to show the feasibility of using wells
supervision, the Park used some of the maintenance funds to
was to be only a temporary
since the Park Service did not consider the project to be a high priority.
agreed the project is high cost funding the system in 1972
the project received funds to remediate the system. The
EPAs, PHS, and the State of Montana drinking water standards.
filtration plant. The Park Service did not have the funds to connect the
Park Service did not have the funds to connect the
creeks and lakes, be chlorinated and filtered. At the time
Appendix I
Appendix I
Complete this project.

Service has not been received from the Congress to
willing will be needed to complete the project. The park
be exhausted by the summer of 1980, and in addition a 3.9
will use the park received to start the project with

The project’s funding was inadequate.

The project had to delay this water line from the project because
lake and causing a health hazard. However, the park ser-
septic systems that are leaking human waste into the
restroom, and overnigh accommodate the
Kriminal Sun Campground and a convenience store.
This system originally included an 8-mile sewer line.

million and started to build the new system.

cited sewer lines. In 1978 the park service received 31.6
requested 31.6 million to construct the plant and asso-
systems created a health hazard. In 1975 the park ser-
serve has recognized the need for building a wastewater
since 1976, the park

the small town of ST. Mary.

Camping grounds—on the east side of the park, along the
ST. Mary disposal system and Rising Sun and ST. Mary

and for each year thereafter.

976, 9000. The park requested funding for the project in 1976.
request for human waste. The existing systems cost
able to be built to stop them from draining into the wastewater
ance made that the facilities, sewer drainage systems need
not been updated. The campsite in question—
for human waste drainage systems are not meeting EPA
The camper’s were built in 1972 before modern standards

foot or horseback.

only during the summer. The only access to the campsite is by
in question, the backcountry areas from any roads are open
in question. The camper’s backcountry areas are not open


campers and the Rising Sun Campground do not meet EPA

The sewer systems servicing the park’s two backcountry

Federal Standards

Sever systems do not meet

APENDIX I

APENDIX I
help support the bridge. Built in the early 1930s, during
construction, the bridge had three temporary supports added to
it.

Fern Creek Bridge—The Fern Creek Bridge is a 24-foot,
maximum load of 4 tons.

The bridge, which is unspaced, should be posted for a
to 10 tons; and

the logs protecting the approaches from erosion were

Some deck planks were loose.

Replaced within 5 years, the inspectors noted that
these bridges were structurally deficient and should be
detected and had an estimated remaining life of 5 years.

PHWA inspectors found that the bridge was structurally
insufficient and too many vehicles, including trucks, were
using the bridge each day.

To prevent future problems, the inspectors recommended
that the bridge be closed to all traffic except pedestrians,
and that the remaining bridges be inspected and tested.

The inspectors found that the bridge was structurally
deficient and should be replaced. The inspectors also
recommended that the bridge be closed to all traffic except
pedestrians.

Federal standards

Some bridges within the park are structurally deficient.
would collapse. Then a room crossed the bridge, the bridge probably
chose of maintenance said that it a vehicle weighing more
than 4 tons crossed the bridge, the bridge was not posted. The park's
time of our return, the bridge was not posted to 4 tons. At the
5 years and should limit the maximum load to 4 tons. At the
condition and that the park service should replace it within
the inspectors concluded that the bridge was in poor

6 inches in some missing.
was badly cracked, with chunks of concrete up to
--The concrete foundation supporting the bridge girders

--The bridge girders sagged 4 to 5 inches and

noted that the
found it to be structurally deficient. The inspectors and

A previous examination of the bridge in July 1979 and

recreational vehicles.
vehicles range in weight from sedans to 4-ton trucks and
the summer, 400 vehicles use the bridge daily. These
bridge was built in 1965 and is about 77 feet long. During
score and restaurant area located. The street-deck-and-strutter
Campanoground and the areas where the concrete superstructure
doors Creek bridge provides access between the rising Sun

how Creek bridge at Rising Sun Campanoground. This second

The bridge was not posted.
accommodate no more than 4 tons. At the time of our visit,
the inspectors noted that the bridge should be posted to

required immediate repairs.
--The deck was in an intolerable condition which

and

erosion were setting in and sometimes were rotten.
--The loss protecting the bridge approaches from

--The condition 15 percent of the top layer became rotten.

5 years, the inspectors noted that
structurally deficient, with an estimated remaining life of
the inspectors inspected the bridge and found that was
recreational vehicles and park service trucks daily.
the summer the bridge accommodates 300 sedans and 4-ton
Structural defects include:

correct the defects would cost near $468,000. The
are dangerous. Park Service inspectors noted that to
detection and alarm systems are inadequate and fire escapes
some of the structural components are defective. Fire
The hotel--the many glacier hotels is combustible, and

Individually.

Each structure's hazardous nature is discussed.

1974 and again in 1979, because of the large number of
the Park Service inspected the structures in

Fire Protection Association standards do not meet the National
The hotel and its dormitories do not meet the National

owned and operated.

su gemmer season. All of the facilities are concessioner
most of the hotel's 16 employees reside in dormitories during
other a smaller, two-story wood-frame structure built about 1930, and the
a four-story wood-frame structure built about 1970. Adjoining the hotel are two emplyee dormitories, one
summer, it housed over 36,000 park visitors during

Glaicer Hotel, with its wood-frame Alpine mall, was built

to operate.

Many Glacier hotel and dormitories--the four-story


describe study estimates that the park service needs $693,975

wheel chairs when the improvements were made. The

park service had not furnished its study, nor had it deter-

the exact condition of the facilities, the

unusually recently had the park service began to deter-
dormitories could endanger visitors, guests, and employees, safety.

was been aware ever at least 5 years that the Lodge and

The park's chief of maintenance said the park service

adequate fire detection and suppression systems.

Many Glacier hotel and lodge, and their employees dormitories

do not meet fire safety codes.

Many Glacier hotel, lodge and employees dormitories.
various porches and stairs need extensive repairs or
should be replaced because of severe deterioration.

Park Service inspectors noted that
door's do not have safe fire escapes.

The dormitories do not meet National Fire Protection Association standards or
measures. Overcrowding and poor fire codes, the dormitories contain
numerous structural defects, and fires can easily start and
spread throughout the structures. Fire detection is poor,
untrained building and fire codes, the dormitories contain
- The dormitories on the second and employees dormitories
- Corridors are used as fire escapes.
- Stairwells and hallways and unsafe ball
- The hotel has an inadequate number of emergency

Park Service inspectors noted that
had been designed and maintained fire escapes.

If a fire occurs, the overburdened guests will have a
difficult time escaping because of an inadequate fire escape.
Hallways and stairwells have automatic closing devices
rear doors, and many of the doors between the
because the hallways are not separated with fire.

- The hotel does not have firefighting
- The electrical wiring needs improving.
- The walls of the guestrooms and hallways are either

In addition, Park Service inspectors found the following
- The fourth-floor walkway that stops steeply
- Second-floor walls that tilt unexpectedly throughout and
- Unevenly supported and
- Room balconies that are missing, rotten, or inadequte.
correction the most hazardous defects, but that to
fire escape, park service, and alarm system and hazardous
structures. The larger number of detectors are needed, but
many of the structures are still in use. The park service
inspected the structures during the fire department's
summer season. While the park service covers the lodge,
the nearest 22 employees reside in the dormitories during the
summer season. The fire department's inspection to large
structures, many of which are two-story dormitories,
resulting in some from small single-story structures
in 1974, associated with the lodge are 10 employees.

The complex, which is open from June to September, can accept
capsule units and a nearby 22-room motel, which was built in 1956.
The wood-frame structure has 33 rooms and is equipped by 12
take woodsmen's lodge was completed around 1914. The
lodge is surrounded by the walls and ceilings of the boiler and heater

The inspector also recommended applying fire-retarding
some of the electrical wiring should be improved.

The emergency stairway should be improved,
and
the chimney should be reported.

The foundation is washed out on one side of the large
From Title

Stairwell walls need to be flame resistant to protect guests

and doors. The lodge's hallways and

mountains and down the stairwells. The lodge needs emergency lighting to guide guests through the

areas and alarms to alert guests promptly. In addition, the

to enter safety from the structures. The

quickly or a fire to exit safely from the structures. The

hazardous conditions, park visitors need to be alerted.

The park's safety officer said that because of these

- Retaining doors.

ways and stairwells should be separated with fire-

- The lodge's stairwells need to be enclosed, and half-

- The ceilings of the lodge's boiler and pent room need

- Replaced

- All of the combustible fiber panels should be

- Cabinets, where the chance of a fire spreading, the in-

- The fire spreading quickly through the lodge and

- the fire, the chance of a fire spreading is high and the

- The park's safety officers are concerned with maintenance.

- The lodge and cabin exteriors are made of logs and

- The roof and cabin exteriors were rotten and loose.

- The balcony railings were rotten and loose.

- The structural defects found at the lodge were:

- could be corrected for $12,600.

- Structural defects needing correction, cabin deficiencies

- smokes detectors and alarm systems. Three cabins have

- $99,700. The cabins are also highly combustible and need
Substandard facilities still in operation.

Within the room in which the fire started, needed on each guestroom to keep a fire contained --
- Smoke core doors and automatic door closer needed.
- A fire alarm system was needed to alert guests of
- A second exit off the second-floor balcony was needed.

The motels -- the 22-room, two-story motel has detection -- installed.
- Smoke improved and smoke detection and fire alarm systems
  other dormitories needed with portions of the sprinkler
  across which would cost $5,200 to correct. The Park Service:
- The other live dormitories, small, one- and two-story
  buildings, were constructed concrete and needed only minor
  refurbishment costing $9,500. One dormitory needed only
  major repairs.

If needed, improved.
- Fire escapes from the second story were either missing
  replaced with a fire-resistant material.
- Interior walls were combustible and needed to be
  - Metal walls.

Sirens, horns, fire investigator's employed to signal awareness of a fire and a safe escape, according to the actual incident report, the cost
- Recent type hazardous conditions would cost $50,750. The
- The probability that a fire will spread and deny the con
- These structures contain various detectors, which increase
  from standards of the national fire protection association.

The dormitories -- the live dormitories owned by the

Appendix I

Appendix I
The park superintendent has not requested funding to repair the 84.3 million necessary to correct these deficiencies. However, the Congress, for only $1.5 of the service, has asked for the rest of the water and sewer system deficiencies. The superintendent has requested funds to correct the deficiencies in the park's service available estimate. It is calculated as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>$5,015,775</td>
</tr>
<tr>
<td>Hotels</td>
<td>$693,775</td>
</tr>
<tr>
<td>Bridges</td>
<td>(a)</td>
</tr>
<tr>
<td>Sanitation systems</td>
<td>$3,010,000</td>
</tr>
<tr>
<td>Water systems</td>
<td>$1,312,000</td>
</tr>
<tr>
<td>Estimated cost</td>
<td></td>
</tr>
</tbody>
</table>
The Phantom Ranch area accommodates about 260,000 visitors annually. In use, however, two dependent systems are still not meet State standards. The park service has received funding to upgrade the surfaces, however, the use of permit is required to use these facilities. Only recently have the park service re-opened these facilities to the public. Many of the park’s sewer systems and lodgng facilities do not meet health and safety standards. The park service is working to upgrade these systems to meet public health and safety standards.

In the canyon, the overall health and safety of visitors is a concern. The park service has implemented additional safety measures for visitors, such as increased monitoring and educational programs. The park service also encourages visitors to be aware of their surroundings and to respect the natural environment.

The Grand Canyon National Park is located in the northwestern corner of Arizona. The park includes the entire Grand Canyon, which stretches 277 miles along the Colorado River. The park service is working to protect the unique ecosystems and geological features of the Grand Canyon.

APPENDIX I
The park superintendent, responded to the health department

protection visitor and employee health.

to advise the state within 14 days of the solution for
inspection, the health department requested the park service
discharge of septic waste onto the ground. After the 1978
years, the Arizona state health regulations prohibit the
officer said that this has been a problem for the last 7 or 8
waste was being discharged above ground. A park sanitation
stated that the septic system's leach field was saturated, and human
and park personnel, the health department inspector stated
be instructed to ensure the health and safety of visitors
collection system, two lift stations, two septic tanks, and a
teach leach field.

The sewer system serving the area consists of sewage
tours a day during the summer.

employees. In 1978 the area accommodated about 1,200 visit-
was causing a potential health hazard for visitors and park
that wastewater from the septic system serving Indian Gardens
There were enough people to require a sewage treatment system.

mer of 1980. To begin the project, work is scheduled to begin in the sum-
looked at an attempt to construct a sewage treatment system at

In September 1976 the park superintendent developed a

of either septic system.

The park service has not restricted use
health standards. The park service has not restricted use
leach field area which is protected by Arizona state
from manholes, cover boards, and septic field water has not reached the
1980 the park service reported that raw sewage overtopped
separate sump at the top of the field. The septic system served all overpark,
leach field. These septic systems serve all overpark,
system consists of two septic tanks and their associated
In 1976 the park service reported that the 20-year-old

Appendix I
The palm grove and oases and 12 miles of the numerous canals accommodate 2,492 guests a night. The hotel also features 77 rooms and a wood.

El Torre Hotel—The four-story, four-story hotel is a wood-

The improvements still needed to make them safe. Of the improvements made to these facilities at one of the numerous

In April 1980 the acting superintendent addressed us

The park service determined the exact condition of

These facilities have existed for at least 10 years. In

The El Torre Hotel on the north rim have overright

The El Torre Hotel on the south rim, and the Pioneer

Coxes

Residences do not meet fire and safety

and western cabins and their employees

El Torre Hotel and Pioneer, Pionter,

sewer system.

from the Congress for this project and has not requested funds

As of May 1980 the park service had not requested funds

The project to place the water lines in separate trenches because

In January 1979 the park superintendent proposed a

In 1974 the cattle donated the water and sewer systems to

the railroad developed the village’s water and sewer systems.

The south rim of the canyon in 1979, between 1970 and 1975

To an estimated 7,000 visitors per day in 1979.

Canyon Village—The deteriorated sewer lines

Grand Canyon Village—The deteriorated sewer lines
The cabins, the alarm system were inoperable; and
built cabin complex, because the concrete floor
could spread quickly throughout the closely
noted that
condition of these cabins. However, the park safety officer
inadequate fire and safety inspections to determine the
of November 1979, the Park Service had not performed
are open from mid-May through mid-October each year.
cabin are government owned and co-leased and occupied and
1925-1930 and can accommodate about 400 guests a night. The
the park safety officer, these log cabins were built about
3000 and can accommodate over a thousand
cabin at the Grand Canyon's north rim. According to
Fronter, Fronter, and Western Cabins—The Pioneer,
cabin is not provided an adequate water supply to support the hotel's
concern section of building. Also, the Park Service has
however, the center stairwell remains unprotected in the
and alarm systems and reported the sprinkler system.
water, exit signs, emergency lighting, and smoke detection
hazardous conditions; however, other hazardous conditions
scene about $52,000 to correct some of the
The conessional officer chief of maintenance told us the con-
the projection association standards in 1977.
noticed that the E Tcalar, Hotel did not meet the National
because these conditions existed, the inspectors
the primary egress routes.
never have an assured means of escape if a fire blocked
--Necessary on the top floor on the south and would not
operate the sprinkler system.
the hotel's water supply is inadequate to property
and could become flaming or gas-fired chimneys.
--The present interior stairs are not protected
--The hotel was very flammable.

Unsafe conditions:
inspectors examined the hotel in 1977 and found the following
The structures are congressioner accommodated by employees. The congressioner accommodations built in 1973 and can safety officer these buildings were taken to the park block and wood-frame construction. According to the park's annex, located on Grand Canyon South Rim, are of congresser Victor Hall and annex--the two-story, Victor Hall and

2

Although fire hazards still exist, many fire detectors did not meet the National Fire Protection

Association standards. The inspectors noted that employee residences with these

emergency lighting and exit signs--

--Inadequate or non-existent corridor and atrium

--Hazardous electrical wiring

--Fire hoses that should be replaced.

Syllables

--Inadequate or nonexistent fire detection and alarm

--Inadequate and unsafe exits.

--Spreading fire, smoke, and toxic gases.

--Open stairwells which act like chimneys for
detach thieves.

1977 park service inspectors found the following types of

employee residences in hazardous condition. In the park's 19 employee residences, all 19 park service employees reside. Seventeen congressioner-occupied residences live in the park's 19 employee residences. The employee residences according to the park safety officer said that these deficiencies cause

the cabin area's fire suppression system was inade-
a dormitory for only another 60 days, and for that period formed the consciousness that Shirley Hall could be used as
In the summer of 1979, the park superintendent in-
conceivable to use the dormitory through September 1979.
although the park superintendent and safety officer within 3 months and in no circumstances be used as a dormi-
not corrected the building should be condemned and razed.
The inspectors concluded that if the deficiencies were
--the electrical wiring was hazardous.
dead end; and
--the 40-foot-long, second-floor corridor leads to a

The story in which a fire to spread from the floor,
--the stairwell to the second floor was not enclosed;

hazard.
--an attached wood-frame building presents a fire
Park service inspectors reported that

The national fire protection association standards, The
levels of occupants, because it did not conform
Hall and found that the structure presented a serious
In December 1977 the park service inspected Shirley
round basis. The hall is not constructed, owned, and occupied.
before 1930 and can accommodate 50 employees on a year-
ute, according to the safety officer, the hall was built
South Tram is a two-story concrete block and stucco structure
Shirley Hall--Shirley Hall, located on Grand Canyon's
employees.

However, the structures continued to be used to horse
not enclosed the stairwells or reported fire escapes.
rected the suppression systems in all dormitories, but had
had installed fire alarms and emergency lighting and cor-
building's fire hoses needed replacing. In April 1980
structures do not meet national fire protection association
that needed repairs. According to the safety officer, the
that needed repairs. According to the safety officer, the
open stairways which allow fire to spread rapidly, (2) did
can form that they were hazardous because they (1) contained
The park service inspectors the structures in 1977 and
The park superintendent told us that even though the customer's responsibility!

letters because he considered the improvements to be the con-

hazards. Facilities or restricted their use

The park service has not requested that the Congress

then.

ing was vacated in September 1979 and has been vacant since

established. All these precautions were taken. The build-

added, smoke alarms were installed, and a fire watch was

it only the first floor was used, an additional exit was
to the letter of June. In February 1980, a Park Service

developed into aquatic cysts, which usually attack the
thistles. The eggs

carry white, consuming invertebrates in the water. The eggs

humans can become infected if they ingest the tapeworm

and the cycle starts over.

and ingest the cysts. The larvae mature inside the host

of larvae, when the host is killed the host eats the host

reproduce sexually and the larva form cysts in the

lungs. The reproduction, the host ingests the eggs, and so on.

The eggs are passed with the feces into the water and onto

shores to an adult intestine the host. Thousands of eggs from

prey (white moose) containing one, or more, of the predation

contaminates with the eggs of a tapeworm called Dracunculus

water systems because the water is not filtered.

Serious health hazards exist for the users of these waters. A

potential dilemma is that only one type of this system is

useful in Royale's water systems. Surface water from

lakes, seepage and interception, and the act regulating the

treatmennt for surface water, including drinking water, complies

state regulations implementing the act requires complete

the requirements of Michigan's Safe Drinking Water Act.

The four public water systems on Isle Royale violate

State of Michigan requirements

Public water systems violate

transfers for the park's 16,400 visitors in 1978.

and 21 campsgrounds were available for overnight accommodations.

boats. The Rock Harbor lodge, 20 nearby housekeeping units,

and the numerous inland lakes and hundreds of small streams provide access to

Isle Royale is accessible only by boat or floatplane.

people, prey upon the moose, cutting the lumber and keeping

for fox, snowshoe hare, and moose. Wolves, tawny, bear, red

other common mammals include the red squirrel, beaver, and

more than 200 kinds of birds have been sighted on the island.

Isle Royale National Park consists of more than 200 sq.

Isle Royale National Park
graded.

to close these three water systems until they can be up-

1984-87 period. The park Superintendent has no plans
wants to the other three public water systems until the
public water systems in 1980 but has not scheduled imple-

$3 million, the park Superintendent plans to upgrade one of the
renewer stations to meet these requirements with cost
royale public drinking water systems and two systems at
park Superintendent estimated that to upgrade the four Iowa

The potential danger associated with the tapeworms
would be eliminated if the water supply were filerated as
reflected by Michigan's drinking water requirements. The
water from these systems may not show up for many years.

Some of the tapeworm disease may not show up for many years.

the presence of the tapeworm eggs in water. Also, the symp-

symptoms characteristic of and quickly less that are related
data, and lab studies have been conducted by the Iowa State

may cause to boil or filter the water. Although there has

water, for at least 5 minutes or to filter the water. However,

The methods of prevention possible include the boil or filter

The tapeworm eggs are very small and have a hard shell.

for those having hydatid disease. The disease cannot be

consultant reported that to date, no effective medical treat-

Appendix I

Appendix I
During our 1979 review, the Park Superintendent stated that all bridges were structurally deficient. Some of the bridges did not meet FHA inspection standards and were structurally deficient. A 1979 FHA inspection found that all of Monte McKinley National Park's 19 bridges did not meet FHA standards. Many bridges within the park are structurally deficient.

During our 1984 inspection of bridges, we found that 12 bridges were structurally deficient. These defects were not corrected by the park. The Park Superintendent's report did not mention any of these defects. However, during our review, we observed that the bridges in the park were in poor condition. Some of the bridges had not been replaced.

The park is not designed to accommodate heavy trucks and any bridge replacement has not yet been completed. The Park Superintendent noted that the bridges are not designed to accommodate heavy trucks and has not yet been replaced. The bridges in the park are not designed to accommodate heavy trucks and have not yet been replaced.

The McKinley National Park, 19 miles north of Anchorage, Alaska, is the highest peak in North America. It is located on the Alaska Range, 1,000 miles from the park entrance.

Appendix I

Mount McKinley National Park
Hogan Creek Bridge - The 79-foot Hogan Creek bridge was built in 1959 using treated timbers and boards. The 79-foot Hogan Creek bridge was built in 1959 using treated timbers and boards.

In 1976 FHWA inspectors found that the bridge was structurally deficient and that the bridge be replaced. The bridge was structurally deficient and that the bridge be replaced.

For the bridge to be replaced, the bridge was structurally deficient and that the bridge be replaced. The bridge was structurally deficient and that the bridge be replaced.

For the bridge to be replaced, the bridge was structurally deficient and that the bridge be replaced. The bridge was structurally deficient and that the bridge be replaced.

For the bridge to be replaced, the bridge was structurally deficient and that the bridge be replaced. The bridge was structurally deficient and that the bridge be replaced.

For the bridge to be replaced, the bridge was structurally deficient and that the bridge be replaced. The bridge was structurally deficient and that the bridge be replaced.

For the bridge to be replaced, the bridge was structurally deficient and that the bridge be replaced. The bridge was structurally deficient and that the bridge be replaced.
although the park superintendent was aware of the hotel's condition, he did not restrict the use of the hotel.

--the electrical wiring was hazardous.

--the fire escape doors were too few, dangerous to use.

--the stairs and exit halls were not fireproof and water to control a major fire.

--a 1979 park service report showed that the hotel does not meet national fire protection association standards.

The condition is hazardous because the federal government owns the hotel. kitchen and lobby which the federal government owns. The federal government owns the hotel company all these structures, except for the structure that was completed in 1973. The hotel consists of a 500-room wing, four converted railroad cars, and a 400-room, single-story, wood-frame, modular hotel. The hotel consists of a 500-room wing, four converted railroad cars and a 400-room, single-story, wood-frame, modular hotel. The hotel consists of a 500-room wing, four converted railroad cars and a 400-room, single-story, wood-frame, modular hotel.

--the park superintendent did not propose a project to replace the hogan creek bridge until we brought the bridge's condition to his attention. The park superintendent did not propose a project to replace the hogan creek bridge until we brought the bridge's condition to his attention. The park superintendent did not propose a project to replace the hogan creek bridge until we brought the bridge's condition to his attention.

--noted that some of the structural timbers had shifted on the bridge. They also stated that the wooden deck was severely worn. They also stated that the wooden deck was severely worn.

--referred.
did not require the concessionaire to make the corrections.

For correcting the distortions to make the hotel safe, but
his predecessors thought the concessionaire was responsible
hazards or restrict the hotel’s use. He stated that he and
park superintendent did not propose a project to correct the
distortion for at least 10 years before the fire occurred. The
park service knew about the hotel’s hazards con-

The building was evacuated when the alarm sounded a second
fire, and smoke began rising through the floor. The alarm
began to spread; the hotel burned rapidly, and all
stalled, warned the guests about the fire while they were
out of the hotel. No parking violators were injured because
the fire spread too quickly, and all
evected until 7 p.m. The concessionaire said that the hotel was not
well equipped. The concessionaire said that the hotel was not
detected early in the afternoon but was not detected
structure.

--eas his hearing had significantly altered the
--the fire detection system was unreliable, and
--the electrical wiring was hazardous,
--problems occurred when the fire alarm sounded the
to the spread of fire,
--the hotel contained open stairways that contributed
--the hotel had surface areas that were of combustible

The report stated that

The investigation report the original hotel was very hazardous.
According to the report, the park service fire
original wood-framed, two-story hotel was built in 1938 to
most of the park’s original hotels burned in 1972. The
APPENDIX I
APPENDIX I
Appendix I
and a detailed inspection was made during that summer.

1976, and a detailed inspection was made during that summer.

building rehabilitation activities. He received the funds in

1973, as part of an incentive that was designed to

company, The park superintendents requested funding in 1973

manufacturer personnel and the construction's insurance

inspection by occupational safety and health agencies

became concerned about the Jun's unsafe condition in 1972,

The park superintendent said that the park service

overnight.

overnight, I can accommodate 280 overnight guests to stay

overnight use. The park service studied the

operated. It can accommodate 280 overnight guests.

The wood-frame structure is supported and maintained,

1977 and the adjacent four-story annex was completed in 1972.

The 116-room, four-story Paradise Inn was completed in

It was the one reviewed.

In 1972, the largest and most popular of the park's two inns,

The park service has known about the Jun's unsafe condition

overnight. The Jun's unsafe condition has known about the Jun's unsafe condition.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.

Paradise Inn is unsafe.
enjoyment of the park.

Also, he stated that closing the facilities was not a policy-

ally acceptable alternative and would diminish the visitors.

The park superintendent said that he did not close the

park to save the funds. According to the report, the park

superintendent said that the building was not

suitable for the heavy winter storms. Although the building was

structurally sound, the snow piles stressed on the structure

building, and the floors were not level. The

park service had to remove snow from the grounds, and the stairs were not

suitable for the heavy snows that have

invaded the park.

The condition of the sprinkler system was a direc-

t fire and

The report did not have approved fire separations

The inspection report disclosed that

APPENDIX I
The superintendent stated that the water service tests the water quality. However, the water testing process—

1979 season a filtration system was installed. From the time of the investigation to the end of the season, a filtration system was installed. Before the camp opened for the season, the drinking water used for the 1979 season had been contaminated by humans and animals defecating on the grasslands. It is conjectured that the drinking water that has been contaminated by defecation is conjectured. And a pathogen was identified that the others had not detected.

The superintendent said that when this season’s water was tested, the pathogen was not detected. The pathogen was identified at the drinking water intake. Pathogens are known to be detected by drinking water that has been contaminated by humans and animals defecating on the grasslands. It is conjectured that the drinking water that has been contaminated by defecation is conjectured.
scheduled for completion during the summer of 1980.

clean water systems. This work began in 1979 and was
the Park Service $127,000 to improve one of the four desal-
systems. He stated that in 1978, the Congress appropriated

I APPENDIX I
Kettle Falls Hotel

The Kettle Falls Hotel is a two-story, wood-frame structure. The hotel was purchased by the Park Service in 1971 and was operated by a local family. The hotel was renovated in 1972 to meet modern standards.

The hotel is located within the National Park boundary and is adjacent to the Columbia River. It is surrounded by mountains and forests, providing a scenic and peaceful environment.

The hotel offers rooms with views of the river and mountains, as well as a restaurant and bar. The hotel is managed by a local family and is a popular destination for tourists.

The hotel received 1,750 visitors in 1979 and has received positive reviews from guests. It is considered a gem of the Northern Cascades.

The hotel is open from May to September each year and is operated by the National Park Service.

The Kettle Falls Hotel has been a popular destination for tourists and is a valuable resource for the local community.

Appendix I: Kettle Falls Hotel

Voyagues National Park

Appendix I

Kabegompa Peninsula

The Kabegompa Peninsula is located on the northern boundary of the park and is accessible by boat. The peninsula is a popular destination for bird watchers and offers stunning views of the surrounding landscape.

The peninsula is named for the nearby town of Kabegompa, which is located on the Canadian border.

Appendix I: Kabegompa Peninsula

Voyagues National Park

Appendix I
Your fire resistance, endosed by noncombustible construction having 1/2-
- The interior stairs away from the second floor was not
-- The spread of smoke and fire.
- Guest room doors were not adequate for protection from
-- Fire extinguishing system.
- The grills Fluorine was not equipped with an approved
-- The duct system grease removal device and hood over

The following:
The specific substandard conditions at the hotel include

A complete renovation of the facility is
second floor for overnight lodging to be discontinued
second floor for overnight lodging is strongly recommended
It is strongly recommended that the use of the

It is strongly recommended that the facility be unoccupied
The hotel is unoccupied as a precaution to the Ketle Falls
Regional Safety Manager that the Ketle Falls
"It is the professional opinion of the Midwest

Park Service Regional Safety Manager concluded:

"After making a safety inspection in August 1979, the

- structural damage which may result in collapse
- of the building will be in jeopardy of extreme
- footings are decaying beyond repair, Major portions
- support members, joists, rafters, and wooden
- causing additional stress and fatigue on all
- stiffness and settlement of the foundation is
- the hotel structure and interior is deteriorating

Provide all necessary utilities.
- construct预算ed overnight lodging accommodations, and
- plan for and perform enhancements of Ketle Falls Hotel,
According to a December 1979 Park Service proposal to
National Fire Protection Association Standards.
Hotel still has structural deficiencies and does not meet

Appendix I
made. Until complete renovation of the facility is

Floor for overnighs lodging be discontinued

strongly recommended that the use of the second

made it safe for overnighs lodging. It is

"Only complete renovation of the building would

stated in the report of his inspection of August 1979.

However, at the safety manager.

Implementing these plans should make the hotel a safer

visitators with hazards.

outlining safety problems at the hotel to acountant all

requiring the conecessorner to distrubute brochures

building an adittional exit from the second floor, and

any emergency.

duty 24 hours a day to warm and assist visitators during

requiring the conecessorner to provide a watchman on

prophylitng smokeing on the upper level of the hotel,

safety standards,

installing portable fire extinguishers to meet all

installing a fire extinguishing system in the kitchen,

These included

so the hotel could provide overnighg accommodtions in 1980.

were planned to avert the destructions in safety standards

reason to director, the superintendent issued 12 actions that

In a February 1980 memorandum to the park service

 LODGING TO PARK INTERPRETATION AND ADMINISTRATION FUNCTION.

The research fails hotel would be converted from overnighg

built at Ketel Falls; Subsequently, the second floor of

In December 1979, the park superintendent proposed that

fire escape time.

greatly endanger second floor occupants by reducing

underable spread of fire between the interior and

off the combustible wooden walls to prevent the

It appears that there are no firestops in the studwing

APPENDIX I
In July 1978 the Inspector reported that:

After a subsequent review of the Ketelle Falls Sewer System

...recommend that the facility not open in 1979.

...strongly recommend that the facility not open in 1979, it is strongly

"unless corrections are started in 1978 and no

immediately and that:

"The Inspector said that these deficiencies must be corrected.

...must be channeled away from the well.

"from the well and at approximately the same elevation.

"Where there has been a problem with the main deteriorated.

In February 1978 a U.S. PHS Inspector reported that:

"Falls was inadequate and could contaminate the drinking water.

At the time of our review, the sewer system at Ketelle

Ketelle Falls Sewer System

reasonably risk and cost.

If we can be assured that it can be done at a

operation of the facility for the coming season;

essential life/safety requirements to permit

considerable additional alternative actions to meet

"Our objective is to establish a protocole and

the past.

Over many improvements were recommended that should

...than a number of years without subsequent. In

...that risk has been taken unnoticed for

...should be noted.

...and/or

perhaps measures can be taken to provide for

"Perhaps measures can be taken to close.

...year and recommended that the facility be closed.

The NPS (National Park Service) Regional Safety

situated:

evaluate the Ketelle Falls project in 1980 summarized the

A Park Service proposal for an architect-engineer to
"There is still a severe problem with the sewage disposal. A drain line was discovered in the swampy area and what appeared to be septic tank effluent was running from it. It is imperative that corrections be made as soon as possible."

The Park Service did not correct the sewer system deficiencies, and the system operated throughout the 1978 and 1979 tourist seasons. In November 1979, the Park facility manager said the sewer system was in poor condition, did not meet either Minnesota Pollution Control Agency standards or EPA standards, and was a potential hazard to the drinking water. The Park received $55,000 in lump sum construction funds for fiscal year 1980 to rehabilitate the sewer system. (See p. 131 for Congressman's comment.)
area each year.

Nearly 600,000 people visit this

store, and the cafeteria. Nearly 380,000 people visit this
ten from soda and carbonated creeks. This water system serves
drinking water system did not adequately treat the water
and was suspected to have occurred because the
the illnesses were suspected to have occurred because the

25,000 park visitors to contract gastroenteritis.

In July and August, 1977 the Canyon Village drinking

eight water systems do not

eight water systems do not

meet federal standards.

Year 1980.

make improvements to these facilities began in fiscal

make improvements and has also required the new concessions to

service has received and received funds to make substantial

improvements made in the 1975-76 period. The park

during inspections made in the 1975-76 period. The park

building inspections found all three toilets to be unsafe

uniform building and fire codes, park service and private

Three of the large hotels in the park do not meet

drinking inadequately treated water.

visitors and 402 employees to contract gastroenteritis after

000 park water system in July 1977 caused an estimated 2,000

systems do not meet EPA standards. A deficiency in drinking

water systems and lodging facilities

ports, and fireholed faults.

see such attractions as Old Faithful geyser, Fountain Paint

neighbored 2.5 million people visit the park each year to

lands, lakes, streams, and active thermal areas.

established on March 1, 1872, Yellowstone National Park

YELLOWSTONE NATIONAL PARK
drinking water and prevent future illness.

Corrected.

During the next visitor season at the development area should not be opened. They also reported that the park service provide complete water treatment facilities and repair damaged sewer lines in the area. They also recommended the Park Service provide complete water treatment facilities and repair damaged sewer lines in the area.

--The area contained one of the Park's back-country

--Moose wereed and grazed in the area.

--At two locations.

--A horse trail and a hiking trail crossed the creek.

From the drinking water intake:

The Collins drilling conditions existed upsteam

They stated that the creek was an inadequate drinking

drinking hazardous treated water. They found that the

enterites outback with park visitors and employees

The Park personnel associated the cause of the gastro-

Center for Disease Control to determine the cause.

At the outlet, the Park Service asked PHS personnel from the

and those affected became more ill. About 21 days after

in increasing numbers of park visitors and employees became

water was not contaminated. However, they became concerned,

not concerned to the EPA standards, they believed that the

superintendent and superintendent knew that the water system did

water drawn from Soda Creek and Cascade Creek, although the

The drinking water system did not adequately treat the

Cascade Creek to add to the water supplied by Soda Creek.

Therefore, in June 1977 the Park Service capped the nearby

supply all the water necessary to sustain the Canyon. Soda Creek could not

Soda Creek and treated it with chlorine. In 1976, the

The Canyon Village drinking water system drew its water
The Chinookadequate fire suppression and detection equipment and safe emergency exits and has many fire hazards.

became a fire and safety hazard.

Because its previous owners had allowed the building to

violate. The park service bought the inn in 1979, partly
guests a night. In 1979 the inn housed about 22,000 park

guests a night. In 1979 the inn housed about 2,000 park

and conference center-operated inn which can house about 35

and extensively remodeled in 1975, It is a government-owned

from its three-story, 104-room structure that was built in 1917

Mammoth Motor Inn — The Mammoth Motor Inn is a wood-

time frame from 6 to 2 years.

The deed indicates the park superintendent required this estimated

plan, and design the needed corrective measures. After our

said that a 6- to 7-year time frame was necessary to identify

to the National Fire Protection Association standards. He

said that the objectives in Copenhagen make to improve the overall

hazards to adequate facilities. The park superintendent

Another $6.5 million is needed to improve the park's

include the three hotels.

the park's 1,200 conference-operated structures which

suppression and detection systems in the most hazardous of

another $442,000 is planned to be spent for installing fire

$527,000 to replace the roof and siding on Old Faithful Inn.

about $1 million for project planning for the next 5 years to spend

During Fiscal Year 1980 the park service plans to spend

Facilities' long-standing deficiencies.

1981 construction programs will be devoted to correcting the

also, he said that a large portion of the park's 1,980 and

and fire detection systems and repair the sprinkler systems.

He said that the conference center will provide the fire exits

only several years to correct the deficiencies within the last

The park superintendent said that, for at least 10 years

The Mammoth Motor Inn, Old Faithful Inn, and Lake Hotel

Life safety codes

and Lake Hotel do not meet

Mammoth Motor Inn, Old Faithful Inn,
were of little value.

- Fire escapes consist of ladders which
  - Pressure and supply, and

- The Juniata water system showed a very serious lack of

- Transoms and grilles are open over guestroom doors.

The inspectors noted that

- The personnel were concerned about the deteriorated condition.

- Made an intensive inspection of the inn because of Park Service
  - Decision since 1975, during fiscal year 1974, the Park Service

- Unsafe, partly because the previous owner allowed the inn to become
  - Service brought the inn from the previous operator in 1979.
  - The inn was completed in 1972.

- The estimated cost of $300,000 at the Mammoth Hot Springs

- The safety items will be corrected by the end of 1981 at an

- The fire department is responsible for providing fire protection for the 1980 season.

National Fire Protection Association standards.

- Numerous electrical repairs

- Fire rated interior doors, and

- Safe exits in case of emergency
  - The escape is another fire escape to provide guests with

- Repairs to one of the fire alarm systems

- A fire detection and alarm system

In 1978 the Park Service made an intensive fire and safety

APENDIX I
The lake hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.

The hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.

The lake hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.

The lake hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.

The lake hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.

The lake hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.

The lake hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.

The lake hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.

The lake hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.

The lake hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.

The lake hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.

The lake hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.

The lake hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.

The lake hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.

The lake hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.

The lake hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.

The lake hotel--the lake hotel is a large wood-frame structure--

performed. The lake hotel is government owned; 40,000 guests visited in 1979. The hotel is government owned; it housed about 600 guests a night. It housed about 201 guestsrooms.
Potable safe for overnight guests.

Eight drinking water systems and .5 million to make the
estimates that it could take .5 million to upgrade the
estimates that the hotels, safe, healthy, The Park Service
correcting the hotels, safe, healthy, The Park Service
detected drinking water systems and have only recently begun
the Park Service has not upgraded Yellowstone’s eight
upgraded, or restricted the use of

why the Park Service has not reported,

a tragedy.

for continued overnight use, since such use could result in
still exists but also confirmed that the hotel is unsafe
infections not only control, but also control that hazardous
corrected, the hotel is unsafe, to inspect the hotel. The
In September 1979, the Park Service identified the hotel
the hotel to be closed, until extensive repairs are made.
Park Service inspectors are not alone in calling for
necessary repairs.

to spend nearly $2.5 million over 2 years to make the
higher, the Park Service and the new hotel operator planed
spending money on building the Park Service has not yet ac-
corrected, the Park Superintendent told us he did not want
corrections identified by the Park Service inspectors were
when the hotel opened in 1979, none of the hazardous

taken."

of the lake hotel until correction measures are
conditions were severe enough to recommend the hotel down
the Park Service inspectors reported that “some of the

--the fire sprinkler system needed repairs.
--the alarm systems needed repairs.
--the hotel's fire exits and corridors are
--the electric systems needed repairs.
--ramps, railings, and wall breakings needed repairs.
--the hotel’s plumbing, elevators, roofs, foundations,

standards. They reported
not comply with many National Fire Protection Association
investigation revealed severe safety deficiencies that do
In 1979 Park Service inspectors reported that the
the hotel to become unsafe.

building in 1979, partly because the previous owner allowed

APPENDIX I

APPENDIX I
See p. 176 for conscious operator's comment.

Sentences to be the conscious operator's responsibility.

Project proposals earlier because they considered the local
deliction proposals earlier because they considered the local
that he and previous superintendents had not submitted
deliction water systems. The park superintendents stated
correct the three deliction lodges and live at the sight
in 1979 the park superintendents proposed projects to

enough to warrant closures.

that water systems and local deliction were not serious
distinguish visitors' enjoyment of the park. Also, he stated
substandard drinking water systems because doing so would
superintendents have not closed the park's unsafe lodges and
according to the park superintendents, he and previous
A sewer line which is exposed and could easily break.

- A heavily used horse and hicking trail.

Intake area: drinking water treatment.

State standards for drinking water treatment. drinking water systems do not meet State of California drinking water standards. The principal intake area is the park’s 17 major drinking water systems.
The park's fire service has established new standards that the hotel does not meet. A 1979 fire service fire safety inspection report stated that the hotel does exceed many other unsafe conditions. The report cited suppression and detection equipment and safe emergency evacuation as areas needing improvement. The hotel does not meet National Fire Protection Association standards because it lacks adequate fire suppression equipment and detection equipment.

In 1979, guests at a hotel near the 75,000 park visitors staying in the hotel's 97-room, rock-and-concrete structure which was built in 1971. This 90-bed, 700-foot structure was designed to accommodate over 90,000 overnight guests each year.

The park's fire service does not meet National Fire Protection Association standards. The two hotels do not meet national fire protection standards. The Ahwahnee Hotel's structure, however, does meet Yosemite National Park's Ahwahnee and Wawona Hotel Association standards.

As a result, the fire service wrote a letter to the state of California in July 1979. The state of California inspected the system in July 1979.

Garlands. Some otherwise unaffected structures, such as garlands, protect against some particulate emissions. Some structures protect against some particulate emissions. In the last few years several cases of garlands have been reported by people who have visited the areas above the water intake. The water intake is used heavily by swimmers and native Americans. In the last few years several cases of garlands have been reported by people who have visited the areas above the water intake. The park's fire service said that the area immediately above the water intake is used heavily by swimmers and native Americans. In the last few years several cases of garlands have been reported by people who have visited the areas above the water intake. The park's fire service said that the area immediately above the water intake is used heavily by swimmers and native Americans.
According to the park superintendent, the National Fire
Prevention and Life-Warning System, a dry-wood-frame pool building, which lacked a sprinkler system, a
fire detection system, and fire-rated walls and doors. The
dormitory burned quickly because it was a tinder-
box. The dormitory burned quickly because it was a tinder-
box. According to the park superintendent, the fire was caused by
the ground in 1 hour; a two-story, wood-frame structure.
The hotel complex in 1977. The dormitory, which burned to
a skeleton, was a tragic loss of life. A fire did occur in an employee dormitory at
that a "tragic loss of life" could occur if the hotel complex
were not constructed to the same standards, the park safety director believes
because of these conditions, the park safety director believes
suppression equipment and has many hazardous conditions.
The hotel complex lacked fire detection and adequate fire
prevention equipment and has many hazardous conditions.

The Waikona Hotel--The Waikona Hotel

houses about 1,200 park visitors.

Structures can house 100 guests at a time, and in 1979 they
were government owned and considered a monument. The seven
structures making the structures extremely irreplaceable. The structures are
rated and the wood frame are tinder-dry, thus
predated many times and the wood frame have stayed intact. The structures have been
ance to a 45-room hotel and annex. These wooden structures
dance to a 45-room hotel and annex. These wooden structures
seven structures, varying in size from a single-family beach-

made since our visit in September 1979.

The assistant park superintendent said that the hurricane
spread.

Gas and smoke as well as increase the rate of fire
transmission above each door permit the spread of toxic
not constructed of fire-resistant materials.

The structures do not have approved fire doors and are
not constructed of fire-resistant materials.

Fire suppression. The water supply is totally inadequate for
the hotel's water supply is totally inadequate for
fire suppression. The water system is a park service
system.

Sprinkler system. Not permitted or equipped with an automatic
sprinkler system. Large areas would be sources of rapid fire buildup, but are
not protected by automatic sprinkler systems.

APENDIX I
The assistant park superintendent told us the 19
deficient water systems in Yosemite National Park were not

requested funds from the Congress for these projects.

California standards. However, the park service has not
"adequate" drinking water systems up to state of
park's deficient drinking water systems. She attributed the
superintendent has proposed projects to bring all 19 of the
according to the park superintendent officer, the park

Queens.

about $7.2 million to make the hot water safe for overnight
or closed the hazardous facilities.

The Assistant Superintendent said that the water was

visit in 1979.

descriptor of life and safety improvements made since our

guests and employees are protected. (See, Jib for a
association standards to ensure that overnight
precaution association and that buildings brought up to National Park
problematic facilities should be corrected and the buildings brought up to National Park

The park safety officer stated that the deficient structures should

areas are not fireproofed.

The boiler, furnace, and laundry rooms and storage

[Responsibility.

The water system is a park service

structures could not supply enough water at a

The water system to the hydrants in and around the

the following hazardous conditions:

sprinkler systems. In addition, the inspection identified
structures lacked fire defense, alarm, and automatic
such inspection in 5 years. He found that all seven
inspector made an intensive fire and safety
After the dormitory fire occurred, a regional park

was vacant and no one was injured.

Association standards require the inclusion of
For concessionaire's comments, see p. 136.

National Fire Protection Association standards (see p. 136) needed in the hotels and dormitories to bring them up to safety inspection to determine what improvements are still needed. No substantiality made a comprehensive fire and service inspection made on the premises since our visit in September 1979. However, the Park Service

The Park Service Officer informed us in August 1980 that

The assistant park superintendent said he has not closed the facilities because doing so would diminish visitors' enjoyment of the park. Although the hotels are hazardous, the assistant park superintendent said he has not requested funds from the Congress to correct them.

Government-owned Wyoming Hotel detections, the assistant park superintendent proposed a project to correct the responsibility for making the hotels safer. He said that although request funds to correct the deficiencies at the concessionaire was requested because he thought the concessionaire was

parameters as gathered from the drinking water.

Tests were made to detect such organisms as giardia. Testing of water enables the park service that testing of water enables the park service to quickly shut down any system which tests indicate is providing water that endanger visitors and employees' health. However, no

Appendix I
They were replaced or repaired. The systems remained close until terms did not meet the state of Minnesota drinking water standards. The Forest Service identified six drinking water systems and 516,618 to improve and maintain sanitary facilities to continue operating safely. Prior to our report the Forest Service needs $4.850 to upgrade its drinking water systems and 516,618 to improve and maintain sanitary facilities. The Forest Recreation Staff Officer said that during our review we found no health and safety

and 18 picnic areas.

more than 560,000 visitors used the forest's 29 campsgrounds. During 1979 forest to fish, camp, boat, hunt, and picnic. Each year more than 1.5 million people visit the north-central Minnesota, contains numerous streams and 1,321 acres. Chippewa National Forest, located in

CHIEF
NATIONAL FOREST

APPENDIX II

APPENDIX II
a health hazard.

Toilet use would have to be reduced to prevent human waste from becoming a health hazard.

Sanitary facilities need to be improved.

State drinking water standards.

The drinking water system up to EPA, PHS, and Washington state officials estimate that it would cost about $50,000 to bring turbid and contaminated water systems into compliance. These Forest Service officials were using the campground because the drinking water was turbid and contaminated with excessive bacteria. The campground was located near the system at various times when campers were using the system at various times. The turbid water was being filtered out, but not treated. The Parkwood Ranger District, Recreation Area, and Recreation Area Ranger Office, Reed's Agency, have been working to improve the drinking water system.

The Forest Service has added additional compounds to the drinking water systems serving the campground. The Forest Service has added the compounds to the systems, but not the other systems. However, the compounds do not appear to be a problem. The Forest Service is working to reduce the number of compounds used to treat the drinking water system.

Drinking water systems do not meet standards.

The Forest Service has developed drinking water systems and guidelines that do not meet federal or state requirements. The federal government has developed drinking water guidelines that do not meet federal or state requirements. Some of the problems are due to the fact that the campground is located near a road that is used by the campground.

Gifford Pinchot National Forest

Appendix II
Precautions and awareness of the bridges' hazardous conditions.

The recently inspected bridges, the forest service has 80 permanent

Adams Fork Campground

The 42-unit campground sits on the shore of Takhmak Lake.
The management unit’s wooden lodge containing a score and have heavily damaged a
 decades. These trees have destroyed a duplex cabin and a garage, have the hazards and have had major fires within the last 2
 1791 they accommodated 27,000 visitors. All these resorts
basin-weeks Bay, Camp Richardson, and Zephyr Cove. During
The Forest Service owns three resorts in the Lake Tahoe

Forest Service-owned resorts do not
meet the drinking water standards
because the Forest Service has failed to meet the drinking water standards. The water systems, the two primitive drinking water
The Forest Service and the concession operate four

Drinking water systems do not meet standards

standards at unit complex buildings and fire codes.

The buildings at the three Forest Service-owned resorts do not meet EPA, PHS, and California State drinking water standards-
yards. The water systems serving two Forest Service camp-
16,000 visitors staying at the four Forest Service-owned, concession-operated
condition at least 4 million visitors and other annual event.

Lake Tahoe Basin Management Unit

Appendix II
the

The

administration said in May 1980 that since our field visit
determining what is needed to make the resorts safe. The
administration said that his staff would be
not have costs estimated for upgrading these lodges and
at the time of our field visit, the forest service did

and in automatic sprinkler system.

Zephyr Cove Lodge needed better second-story fire escapes.

Zephyr Cove and Camp Richardson also have two-story,
duplex cabins at Zephyr Cove.

and single-wall chimney flues. In 1979 a fire started a
fire hazards, such as accumulated electrical wiring, gas leaks,
did not have smoke detection systems and adequate fire detection and
hazardous for the public to continue to occupy. The cabins
closed and torn down some cabins because they were too
the recreation staff officer said that the buildings which burned

fire suppression systems. No one was injured in the fires.

Zephyr Cove Lodge has been remodeled. (See

before the resort's reopening.

Most critical deficiencies at Camp Richardson have

Meeks Bay Resort cabins are being improved.

87
Five drinking water systems in the Mount Baker-Snoqualmie National Forests do not meet EPA, PHS, and Washington State drinking water standards. The Forest Service needs $66,000 to upgrade the five systems. The five systems are located in the Snoqualmie National Forests. The forest's recreation and sanitary facilities need $66,000 to upgrade the five systems.

During the last 3 years, the forest's recreation officials have closed 5 of the 14 forest campgrounds. The systems were not producing safe drinking water for the campgrounds.

Because the drinking water did not meet EPA, PHS, and Washington State drinking water standards, the Forest Service closed the drinking water system serving the forest's recreation staff. The water was drawn from a stream, chlorinated, and stored at the recreation staff's camp. The water was then distributed to the recreation staff. The water storage and distribution system was falling apart. The Forest Service needed to replace the system to ensure that they continue to produce safe drinking water.

The forest's recreation facilities are needed to be improved. The forest's recreation facilities need $75,000 to replace six vault toilets with new facilities. The vault toilets were leaking, and the buildings were hazardous.
was upgraded. In October 1979, shortly after our visit, suppression devices were activated. There were automatic fire systems in each instance, the broiler's automatic fire system curbed because of the broiler's inadequate ventilation in the kitchen. During the 1979 ski season three fires oc-

The Skykomish District Ranger said that the day lodge also needs a better ventilation system, especially

squeezes and (2) lacks automatic fire alarm and sprinkler

escapes and (2) lacks automatic fire alarm and sprinkler systems. The Skykomish District Ranger said that the day

the two-story, wood-frame structure was built during the

Association Standards or Uniform Building and Fire Codes. The Forest Service-owned skiers day lodge at Stevens

a ski lodge does not meet fire safety standards

APPENDIX II

APPENDIX II
Standards.

The lodge does not meet EPA and PHS drinking water standards. The drinking water system is still using the original 1979 system, which is not chlorinated by chlorine, to meet EPA standards. The lodge water is drawn from Lost Lake, and stored in a large redwood tank. The water is not chlorinated, and stored in a large redwood tank. The water is chlorinated before it is drawn from Lost Lake.

Lost Lake Campground.

Lost Lake Campground.

Lodge vegetation.

The lodge vegetation is a four-story, wood and stone lodge located high on Mount Hood. The drinking water system is still using the original 1979 system, which is not chlorinated by chlorine, to meet EPA standards. The lodge water is drawn from Lost Lake, and stored in a large redwood tank. The water is not chlorinated, and stored in a large redwood tank. The water is chlorinated before it is drawn from Lost Lake.

and PHS standards.

Upgraded the 25 detector drinking water systems to meet EPA and PHS drinking water standards. New detector systems include those supplying water to the Forest Service's properties. The lodge water is drawn from Lost Lake, and stored in a large redwood tank. The water is not chlorinated, and stored in a large redwood tank. The water is chlorinated before it is drawn from Lost Lake.

20-Five feet of the 66 Forest Service-operated drinking water systems do not meet federal standards.

Twenty-Five feet of the 66 Forest Service-operated drinking water systems do not meet federal standards. Many of Mount Hood National Forest's drinking water systems do not meet federal standards.

Mount Hood National Forest.

Appendix II
use of the area if the plant’s capacity is exceeded.

County health officials are concerned about the plant’s capacity.

The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does not have any plans to treat streams. This violates EPA standards. The Forest Service does
new well to assure an adequate water supply.

regarded 510,500 to add a distribution system and drill a
not meet drinking water standards. Forest personnel have
diverse the water provided the violations and therefore does
the drinking water system serving this area does not

The drinking water system serving early forestry.

to practice and teach early forestry.

cover and the display of old buildings and equipment used
during 1979 near 1,480,000 violations cited the trees' violation
biography of forestry and forest education in America.

In 1968 the Congress established the cradle of forestry

Cradle of Forestry in America

systems to meet EPA and HFS drinking water standards.

service upgraded two of the four distribution drinking water

that they may continue to produce safe drinking water. In

or to drinking water systems, and another 362,446

Forest Service needs 43,000 to make these systems comply

Service has not crossed the drinking water systems. The

not meet minimum safe drinking water standards, but the Forest

areas. During the last 2 years the water produced has

America's Forest Center do not meet EPA and HFS drinking

ground, a picnic area, and the Cradle of Forestry in

The four drinking water systems serving these camps

meet Federal standards.

not meet Federal standards.

forresets' drinking water systems and sanitary facilities. The

service and protected campgrounds and picnic areas. The

administrates within the states and house most of the Forest

90,000 out of the 1.1 million acres the Forest Service

of the national forests, the Pisgah and Nantahala, compose

service administrates these four forests as a single unit. Two

hosted more than 15 million violations who came to camp, hike,

During 1979 the four national forests in North Carolina

NANTAHALA AND PISGAH NATIONAL FORESTS

APPENDIX II

APPENDIX II
Pollution control standards:

Systems, discharge control to comply with EPA’s water
are needed at the sanitation systems to assure that the
transport of some of the fecal coliforms not reach the
containment. The case in the future because of the deterioration caused.

However, the forest service is concerned that this may not
sanitary facilities are causing any health hazards.
Concerns, sanitary facilities need to continue treating human
waste to minimize the health hazards. The sanitary
facilities range from 50 pl and 40 vault toilets to 45

The national forests in North Carolina need $734,722 to

Be improved:

Sanitary facilities need

Chlorination system:

The drinking water produced has had a history of

As a result, the drinking water produced has had a history of

unacceptable “surface water source. Also, the drinking

This water for this camp area, is not suitable for drinking

From as early as July 1978, forest recreation staff have

North Mills River Campground

APPENDIX II

APPENDIX II
The Forest Service estimates that to upgrade the remaining drinking water systems, which make up 22 percent of the forest's campground capacity, it will cost an estimated $188,700 (1). If the Forest Service wanted to convert the remaining pit toilets to vault toilets, it would cost an estimated $37,000 to $40,000, which is only an estimated 10 percent of the cost to upgrade the drinking water systems. He said that the Forest Service is considering the conversion of the remaining pit toilets to vault toilets. The Forest Service estimates that the conversion of the remaining pit toilets to vault toilets could be a health hazard because human waste could be leaching from the pit toilets into nearby streams and lakes and creating a health hazard.
The closest the system's Camphorwood contained high bacteria levels and, therefore, drinking water systems serving the 45-unit Preacher Meadow during July 1979 the Forest Service found that the Preacher Meadow Campground

will cost an estimated $2 million. To upgrade these 17 systems and the other systems standards to new EPA, PH, and California State drinking water's turbidity levels. The systems need liters integrated into the current treatment systems to replace the drinking water and sanitation systems. Responsible for the drinking water and sanitation systems, we not closed have the potential for getting California, we have not closed have the potential for getting California, moreover, an additional 17 drinking water systems which do not meet state and federal standards.

The Forest Service has upgraded plans to upgrade 15 water systems. The Forest Service is monitoring the water systems' operations. Sanitarian facilities do not meet state and federal standards. The Forest Service needs to upgrade the forest, 32 of the forests' 44 drinking water systems because the drinking water systems do not meet state and federal standards. The Forest Service needs to upgrade 17 drinking water systems which EPA, PH, or California State drinking water levels. We need to upgrade all of these systems. The forest...
96

From the other well, contaminants high levels of iron bacteria. One well's water was contaminated with fecal coliform, which had infected from a vault collector located within from it; water systems and structures use areas from being contaminated. A detailed evaluation of water found on-site, service immediately, removed the pump handles to make forest service. The EPA, PH's and California state drinking water standards, the contaminating high levels of harmful bacteria which exceeded water, serving the 16-unit compound, were supplying drinking water. In May 1979, the forest service found that two hand pumps

Cooper Gulch Compound

water systems and structures use areas from being contaminated. Systems operating safety, thus providing healthy drinking standards, the forest service needs $1 million to keep the system meet EPA's pollution control and solid waste disposal standards and primary waste treatment plants. Although these systems and structures take into account, 'ramping' from sample vault collectors to specific location. All the forest's compounds have some type of sanitation systems, need to be improved.

Forests' sanitation systems are expensive. The federal government funded in 1978 but has not received them. Requested these funds in 1978 but has not received them. The forest service needs $1 million to upgrade the system would cost $44,500. The forest service is responsible for drinking water and sanitary systems said responsible for drinking water and sanitary systems said a good filter, and a better distribution. The forest needs a deeper well, for raining, specifically, the system needs a deeper well, system and currently it is serviceable. It still has the potential to treat. Although forest personnel cleaned the drinking water.

These conditions produced more bacteria than the system could.

- The redwood tank was a breeding ground for bacteria.
- The metal filter was covered with white worms, and
- The shallows spring produced water containing high levels of silica.
- The drinking water system consisted of a shallow spring

APPENDIX II

APPENDIX II
does not supply drinking water to this campground. These funds were not available so the Forest Service installed a small campground and another $5,000 to replace the leaking sanitary systems estimated that the Forest Service would need

The Forest Service responsible for drinking water and
During the last 3 years, the Forest Service closed 24 of its 57 drinking water systems because the drinking water produced had fecal coliform counts which exceeded EPA and PHS drinking water standards. After disinfecting and repairing the systems, the Forest Service has reopened all the systems. However, the Forest Service estimates that to upgrade all the drinking water systems more than once per year, the forest recreation staff officer estimates that the Forest Service needs $54,500 in materials to (1) replace or provide major maintenance to 320 pit toilets within the Boundary Waters Canoe Area Wilderness and (2) add 18 vault toilets. In addition, he said, wilderness-type campgrounds need 200 pit toilets.

Forest sanitary facilities need to be improved.
Pollution control standards.

Sanitary facilties need to be improved.

Remaining systems need to be upgraded.

Drinking water systems allowing them to reopen. The three drinking water systems installed by July 1980 on forest campgrounds.

In addition, the Forest Service Recreation Stalls offered will be upgraded to meet drinking water standards. Many of these 34 drinking water systems to continue to provide safe drinking water. Many of these 34 drinking water systems to continue to provide safe drinking water.

(1) improve the other 34 drinking water systems to continue to provide safe drinking water.

(2) Reopen the other 34 drinking water systems to continue to provide safe drinking water.

(3) Reopen the other 34 drinking water systems to continue to provide safe drinking water.

Seven of the forest's 59 drinking water systems were not meet state standards.

Drinking water systems do not meet state standards.

Standards.

Upgrade the forest's bridges to meet federal and state standards and sanitary facilities and in unskilled amount to drinking water systems. Sanitary facilities need to be upgraded.

Serve to protect those visitors, sanitary facilities, and bridges. Sanitary facilities, drinking water systems, and bridges need to be upgraded.

During 1979, 4,692,000 people visited the Wenatchee National Forest to fish, camp, boat, hunt, and hike. The forest served 22,700 people. The forest needs to be improved.
forest engineers inspected the 99 other bridges and found

Further, most of the bridge's structural supports and foundations were damaged because the bridges' structural supports and foundations are made from wood. The Wooden Shoe National Forest has 54 major and 48 minor bridges. FMA personnel have inspected all the major bridges

The Wooden Shoe National Forest has 54 major and 48 minor bridges, and found that 12 of them should have their load limits lowered. Fourteen of the remaining 99 bridges have been found to be structurally fit for their current loads, and 8 of these bridges are structurally fit for a load 50% lower than their current load limits.

The Wooden Shoe National Forest has 54 major and 48 minor bridges, and found that 12 of them should have their load limits lowered. Fourteen of the remaining 99 bridges have been found to be structurally fit for their current loads, and 8 of these bridges are structurally fit for a load 50% lower than their current load limits.

The biggest threat to the wooden shoe treatment system, which serves a 14-unit campground, needs $49,000 of work to be properly treated. In turn, the treatment system pumps sewage into the water, which exposes the user to health risks.

The estimated cost of the wooden shoe treatment system is $70,000 to allow them to treat human waste properly. The Wooden Shoe National Forest has 54 major and 48 minor bridges, and found that 12 of them should have their load limits lowered. Fourteen of the remaining 99 bridges have been found to be structurally fit for their current loads, and 8 of these bridges are structurally fit for a load 50% lower than their current load limits.
The official staff officer advised that the bridge was improved.

After our fieldwork was completed, the forest's engineers have posted warning signs recommending that drivers cross the bridges slowly—no faster than 15 miles an hour—but did not post the bridge for a reduced load limit. The forest engineer said that the bridge's supports on one side are still a threat, and twice has caused a trailer to bounce off a bridge and twice has caused one of its pylons to fall, killing a number of drivers. The forest's engineers have inspected the bridge and have improved it. However, heavily used recreation areas need to be closed, and the bridge is one lane wide and not of the most heavily used recreation areas. The forest's second largest campground and one of its most heavily used recreation areas need to be closed. The bridge that provides access to the campground presented below.

The kind of bridge which needs its load limits reduced is until funds are available to replace them. An example of that 4 of the 14 bridges should be closed because their structural supports that 4 should be replaced because their structural supports.
We took a random sample of 123 projects with a total
estimated cost of $75 million from the estimated total of
6,079 projects with estimated costs of $2.9 billion. The table on
page 103 shows the number and
estimated cost of proposed health and safety projects and
other types of projects as a percent of the sample.

We estimated the number and estimated cost of proposed health and safety projects and
other types of projects. The table on page 103 shows the number and
estimated cost of proposed health and safety projects and

not generally considered to be health and safety projects.
and associated improvement or construction new facilities were
projects, develop park or resource management plans, provide
historic structures and natural resources, reconstruct
existing need, projects designed to preserve or restore
as well as those to construct new restrooms to meet an
bridge, hospital, or other public safety system's needs, roads,
were deemed these projects so those could be deferred or reallocated.
were prioritized to correct health and safety deficiencies.

Despite the problems discussed above, we sampled the

Project.

The parking lot could be considered a health and safety
automobile accidents and injuries. Thus, the expansion of
parking around and from a parking lot is not a health and safety
taken to drive around and find a parking spot on a busy
the existing parking lot is not a health and safety
can be interpreted as either health and safety or for some
related to health and safety. Finally, some project elements
not possible to determine what portion of each component is driver not estimated separately. It is
be health and safety related, others are not. The cost
some of these proposals contain several components. Also, some
intended to correct health and safety deficiencies. As a
proposed projects does not indicate which projects are

The Park Service's computer produced this list of all
proposed projects for the National Park Service.

The following section describes how
developed this figure. The following section describes how
headed the Forest Service has recently
does not include the cost of

THE NATIONAL PARK SERVICE

HEALTH AND SAFETY PROJECTIONS PROPOSED BY

METHOD USED TO ESTIMATE THE COST OF UNFUNDED

APPENDIX III
The entire construction budget is devoted to these projects.

The purpose was to show that the figure was large, and it will take the Park Service many years at its present funding levels to fund all health and safety projects, even if it is not to obtain an exact figure. The purpose of developing an estimate of unrequested health and safety projects was not to obtain an exact figure. However, the determination of a health and safety project, if necessary in judging whether a project falls within our proposals in the sample, and (3) the inherent subjectivity of the variability of the estimated costs of the project, may be considered due to the relatively small sample size used.

We realize that this estimate has a broad confidence level due to the relatively small sample size. It was proposed by the National Park Service for all projects. The results of the above sample we estimated that

<table>
<thead>
<tr>
<th></th>
<th>100</th>
<th>100</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other types of projects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health &amp; safety projects</td>
<td>43</td>
<td>72</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>57</td>
<td>57</td>
<td>57</td>
</tr>
</tbody>
</table>

Using the results of the above sample we estimated that

| Service Project Proposals | Number of Projects as a percent | Estimated cost as a percent of sample of a sample of National Park | Appendix III | Appendix III |
condonacion are described on page 3.

[GAO COMMENT: The types of facilities we reviewed]

... to determine if they were in a healthy and safe condition are described in the final report.

... of facilities for your consideration when preparing the final report.

Thank you for allowing us to review the GAO draft report.

Dear Mr. Exchange:

Washington, D.C. 20434
All C.G. 506, N.M.
U.S. General Accounting Office
Mr. Henry Exchange

JUL 28 1980

APPENDIX IV

APPENDIX IV
sanitary engineers.

We agree with this statement and have added an explanation of the $1.09 million

Figure. [ ]

sanitary engineers.

cost estimates may change when the surveys are completed by
not have completed sanitary surveillance on all systems and the
necessary to meet minimum health and safety standards. We do
effect of condition. It may include some work in addition to that
necessary to provide the district averages, best estimates of funds
Figure represents the district averages of existing systems. The
be made clear that this figure represents only that amount

4. The report quotes a figure of $1.09 million needed for

sanitary problems.

we do not doubt that nearly 100 percent of projects
be health and safety projects in our analysis of
purposes was health and safety and safety were considered to
only projects whose predominant

consideration.

problems. We have attached a corrected Table III for your
the past 3 years are directly related to health and safety
29 percent of the rebated recession applied to health and safety
and safety problems. In fact, we estimate these approximately
recessions over the past 3 years relate to some amount of projects
other than health and safety. Nearly 100 percent of our projects
recessions for the past 3 years were for projects
The report states that 69 percent of Forest Service

the scope of this report.

utility. Although such information could be very
and safety deficiencies and illnesses and accidents.
and the relationship between each type of health
standards, the effects of rerouting streams or
the cost effectiveness of health and safety
we did not attempt to evaluate

be a result of an unsafe bridge.

Appendix IV

Appendix IV
We recommend that the Forest Service request a higher rate of funding for health and safety projects because our analysis showed that only about 31 percent of the funds requested for health and safety programs has not been used for health and safety projects. We agree that construction funding has not been adequate to meet the demands set by the Congress for construction of health and safety facilities. The recommendation from the Forest Service was to do so in the future. Therefore, we do not agree with the Forest Service's report of several years and continuing problems caused by concentrated use areas where facilities are in need of repair or correction. The majority of forest service recreation facilities have already been damaged by concentrated use areas, and many new program efforts are required to address these problems.

The report has not covered the total job and taking all priorities into account, we feel the present rate of concentrated funding is not adequate. The report covered only existing recreation facilities. We agree that the lack of facilities in concentrated use areas can also cause health and safety problems.

In evaluation of the operation and maintenance of recreation facilities was beyond the scope of this review.
6. We do not favor requesting special appropriations to correct health and safety hazards. Health and safety is present to some degree in almost every maintenance and rehabilitation job. It would be extremely difficult to separate these out from the administrative procedures and less flexibility to make decisions at field levels.

7. Public Law 96-87 did not prohibit charging recreation use fees at National Park campgrounds as stated in the report. Therefore, the second recommendation on page IV should be changed to say, both the Forest Service and Parks Service have authority to increase camping fees.

8. The report should utilize the visitor use data reported to the Congress in the 1979 Federal Recreation Fee Report, page 29, (copy enclosed). This page of the report portrays the relative recreation use data much more accurately than the data in the present GAO draft.

[GAO COMMENT: The 1979 visitor use data was not available when the report was written and has now been included in the report.]

9. Several times the report infers that all pit toilets are polluters and should be eliminated. It should be made clear in the report that all pit toilets do not necessarily have to be eliminated. This depends on the soil conditions on a site-by-site basis. In some instances, a pit toilet may in fact be the preferred alternative.

[GAO COMMENT: We did not state or mean to infer that all pit toilets are polluters and should be eliminated.]
Storage capacity is needed.

In response to the need for additional storage, a new well was needed. Also, additional
facilities were needed. This is a problem with sand mining into coastal
Areas. The fact is, the production system needs standards.
Provided values, and therefore, do not disturb the water.
A new water system does not disturb the water.
However, a quick check reveals some possible mistakes.
In the report, the authors listed many federal offices and steps to
address the conclusions reached. In Appendix II, we do not
operate the information reported in Appendix II. While we do not
agree with the authors' assessment of the federal offices and steps to
address the conclusions reached. In Appendix II, the conclusions listed may not be
agreed with the authors.

GAO COMMENT: We believe this recommendation
is sufficient as is.

Applicable health and safety standards.

In response to the need for additional storage, a new well was needed. Also, additional
facilities were needed. This is a problem with sand mining into coastal
Areas. The fact is, the production system needs standards.
Provided values, and therefore, do not disturb the water.
A new water system does not disturb the water.
However, a quick check reveals some possible mistakes.
In the report, the authors listed many federal offices and steps to
address the conclusions reached. In Appendix II, we do not
operate the information reported in Appendix II. While we do not
agree with the authors' assessment of the federal offices and steps to
address the conclusions reached. In Appendix II, the conclusions listed may not be
agreed with the authors.

GAO COMMENT: We believe this recommendation
is sufficient as is.

In the small number of cones, the number of cones were not necessarily correct.
In the report, the authors listed many federal offices and steps to
address the conclusions reached. In Appendix II, the conclusions listed may not be
agreed with the authors.

GAO COMMENT: We believe this recommendation
is sufficient as is.

It is essential that the federal government ensure that the
federal government is responsible for improvements necessary to meet
the performance of the federal government. In these instances,
the国务院, the Department of Commerce, and the Federal
Agency for Federal Lands are concerned with
the federal government's performance. The国务院, the Department of Commerce,
that the federal government's performance is necessary for the
federal government to achieve its performance.

If a facility is not fully in operation and does not meet acceptable
standards, it is essential that monitoring is done. The only method of determining
be made clear that monitoring is done. The only method of determining
the water supply source was. "General use of water systems." It should
"could reach into the lake for the water system was "poor" or
"A few of the examples are tentatively stated, as in some
appendix IV
APPENDIX IV

GAO COMMENT: Our statement that the Cradle of Forestry water system does not meet state standards was based on a July 6, 1979, letter from the chief of engineering of the national forests of North Carolina to the forest supervisor of those forests. The letter stated: 

"The Cradle's water system is plagued with sand infiltration. There is no possible permanent solution is to drill a well, in addition, to meet state standards of the system requires installation of a chlorinator."

The sanitary engineer in North Carolina informed us on August 14, 1980, that a chlorinator had not yet been installed and therefore the water system did not meet state standards.

Another example is the Centerville National Forest. On page 11 of the draft, where the remarks in regards to the 198 pit toilets are not clear. It is obvious however that the quoted $52,000 necessary to replace 198 pit toilets with vault toilets would be greatly inadequate under current day costs.

GAO COMMENT: The report was clarified to state that the $52,000 was just for materials. This cost estimate was provided by the forest recreation staff officer in April 1980.

13. In respect to bridges, the report needs to be clarified. Load limit capacity is not necessarily a measure of safety. For example, a bridge designed for a 35 ton capacity but inspected, rated, and posted for a 15 ton limit, due to an accidental condition, is satisfactory and safe for recreation travel.
We appreciate the opportunity to review this draft report and offer the above constructive comments and suggestions.

Sincerely,

[Signature]

Enclosure
Enclosure

Policy, Budget, and Administration
Assistant Secretary


Discussed in detail in the enclosed statement, user and entrance fees, these and proposed corrective actions are

needed and warrant increases in terms of services provided. The Service has concerns about recommendations relating to increases in

their use and plan corrective actions.

To develop adequate facility condition inventories, train park staff in

most critical problems, the Service is undertaking its efforts to

perform a figure on the cost of implementing actions required. The

Service has taken steps to apply available funds to correct many of the

facilities which are identified as a result of NPS sponsored

inspection and evaluation programs. In the absence of specific estimates

of NPS, much of the information is available as a result of NPS sponsored

facilities. In general, the Service agrees with the findings of the report.

Dear Mr. Escowenge:

Washington, D.C. 20548

441 G Street, N.W.

U.S. General Accounting Office

Community and Economic Development Division

Mr. Henry Escowenge, Director

Aug 7, 1980

WASHINGTON, D.C. 20540

OFFICE OF THE SECRETARY

United States Department of the Interior

APPENDIX A
As can be expected, the Service finds the report to be quite alarming. The National Park Service, by the National Park Service on July 2, 1980, conducted an intensive review of the draft report and its associated documents.

This statement is in response to the draft proposed draft GAO report received in August 6, 1980.
Results.

Management, responsible for the development of the project, should have professional knowledge of the project. This knowledge will ensure that the project is completed efficiently and effectively. The service is also responsible for providing additional funding for both construction and maintenance needs.

The Service agrees that the estimates of the safety and security needs are accurate, how health and safety needs are met, the cost is justified, and the cost of the project is justified.

In FY 01 the Service will increase efforts by assessing the needs and[GAO COMMENT: We acknowledge that the estimate was so low, the service would not be able to accommodate all the needs.]

The Service has realized that the strategy of the service, the visitor, and the volunteer services must be addressed in all programs and has used it as an important tool.

The Service has realized that the strategy of the service, the visitor, and the volunteer services must be addressed in all programs and has used it as an important tool.

Several hazards developed and utilized to assure maintenance and safety for the most effective and efficient means may be used. The service is also responsible for providing additional funding for both construction and maintenance needs.

In FY 01 the Service will increase efforts by assessing the needs and[GAO COMMENT: We acknowledge that the estimate was so low, the service would not be able to accommodate all the needs.]

The Service has realized that the strategy of the service, the visitor, and the volunteer services must be addressed in all programs and has used it as an important tool.

The Service has realized that the strategy of the service, the visitor, and the volunteer services must be addressed in all programs and has used it as an important tool.

Recommendations and Responses

Instruct and evaluate studies for identifying maintenance priorities.

Instruct and evaluate studies for identifying maintenance priorities.
have been corrected. Of the more than 1,000 water systems, most detections of deficiencies and water treatment failures under contract with EPA the service has identified many water system users and officials of PHIS offices and personnel as a result of investigations conducted by PHIS officials and personal.

As a result of investigations conducted by PHIS officials and personal.

need to exceed at least $100 million for bridge rehabilitation and

FHMA Reports. Upon review of available information, we can calculate the

$17 million less than appropriated to construct bridges. Two-thirds of the

will be available to the service by January. To date, more

an and correct deficiencies, A comprehensive analysis of all

and bridges exceed the inspection records which are being used by

by the FHWA. This is an

based upon a 175% agreement. FHMA has inspected each of the

structures.

The need for additional planning to assure sensitive handling of historic

action is known, costs are often prohibitive, and corrections are

when the required corrective

[GAO COMMENT: Based on our discussions with

Supplemental findings on closure of facilities.

So determine how they can be improved to give better guidance to

risk of spending. Analysis of evidence will be used to provide guidance to

must make management decisions based on progress of assessments of the

planned and constructed. More than a century ago, the

provisions, how to apply these to other criteria. Consistency in

database that are being used. Ignore, inspection reports, and to obtain an accurate

difficulty lies in applying the findings and determining the extent of

Prevented the need for closure.

Investigations, and many corrective actions have been closed in

years. In the past 5 years, 28 facilities have been closed, a number at

Menasco Park in Lakewood Village that has been closed for a number of

years. The standards, facilities have been closed of operation, and other.

years, when inspection results fell below the required limits.

years, when inspection results fell below the required limits.

The NPS response is that in most instances, this is being done. In recent

The GAO recommends that the Secretary take immediate action to correct

Corrective actions, and in instructing preliminary maintenance practices.

additional and modified training programs are being planned to assist existing

Appendix A
The service agrees and has done so in many cases. It must be understood, however, that this approach will not cure all outstanding problems. Some corrective actions are needed to make corrections to facilities they own or operate to bring them up to current health and safety codes. The GAO report recommends that the Secretary negotiate with concessionaires to make such corrections.

Concessionaires to Make Own Corrections

As the above recommendations to expedite the completion of health and safety code work at the four national parks, we recommend that the Secretary require the concessionaires to make corrections to their facilities. Although these recommendations apply to all four concessions, we are focusing on the one concessionaire that has been identified in a January 1990 report as needing corrections. These

Section of Health and Safety Administrations

...
APPENDIX V

to make necessary improvements. The Service must consider the individual economics of each situation, and consider such alternatives as modified use.

The majority of facilities which fail the life safety codes were built before establishment of the codes and associated obligations and legal or moral issues. Many facilities have been considered the lowest of the two or three options. A large number of facilities were built at the same period and have the same problems. The costs involved in transforming the public and private facilities, incorporating them into the interior of other structures, installing fire detection and suppression systems, can be extremely high. Before consideration is given to the complete rehabilitation of any existing facility, we should analyze all the alternatives available. Perhaps even reducing the facility to a day use area or constructing a new facility containing all the required life safety materials and equipment, or maintaining their historical integrity, can be as expensive.

GAO COMMENT: We agree that these alternatives should be considered and found suitable in those parks where used.

Some time ago, the Service began a program of completing investigations of the Limited Fire Facilities (LFF). Each facility has been determined as being either of high, medium, or low risk. Consequently, the Service has been required to maintain the facility if warranted. The Service plans to establish criteria for allocating maintenance resources and provide for the technical, financial, and economic solutions to correct major deficiencies, address the importance of the facility, its potential use, overall cost, and scope of needed corrections. The GAO report recommends that the Congress direct NPS and the Forest Service to use funds resulting from increases in entrance fees and camping fees for health and safety projects in parks and forests where they are required. Use of increased camping fees.

As noted by GAO, legislation has been enacted which prohibits the Service from imposing new entrance fees. The Service has, and will continue to, increase user fees as situations warrant.
but may warrant consideration.

determinations were not discussed in the report,

funding the correction of health and safety

[CGA COMMENT: These alternative methods of

As providing only a portion of the needed funds,

An additional concern is that either of these fund sources be recognized

solutions to the problem.

issue up to ten times their annual receipts, thus providing much earlier

If turned over to a quasi-government corporation, could support a bond

consideration should also be given to the possibility that

such other potential methods as the use of parallel franchising is possible.

franchises fees for health and safety purposes should be balanced against

fees, they should go into a special revenue fund to be used according to

the needs of the franchisee, not necessarily at the point where the special

revenues are generated. Should the franchisee elect to earmark franchise

millions per year, and may be expected to increase with inflation generated

increases in prices, and with the apparent continuation upward trend in many

fee collections for this purpose. Franchise fees now produce about 3.5

An alternative which has often been discussed is the use of franchise

APPENDIX A

APPENDIX A
Readers who commissioned your office to prepare this report may and certainly would confuse or mislead the reader.

For example, the following referenced passages of the report document towards emphasizing fire hazards, real fires and fires are directly or assume that the writer was informed. I would further presume that the writer was informed in working with National Fire Protection Association. I would speculate that the writer of the attachment is not aware.

The National Park Service has been directed to correct fire safety hazards which the Superintendent of this park has consulted to advise me on acceptable procedures. Mr. Allen, the subject of this letter, and I am very complex.

Whether the attachment to your letter of July 1, 1980, my feeling is the word which best describes my feeling private sector. Mr. Allen’s discussion appears.

Fire Lodge, Grand Canyon, Arizona.

Mr. Topy Allen, Manager, Grand Canyon National Park Lodge.

This letter is in reply to your letter of July 1, 1980 to Mr. Henry Escamez.

WASHINGTON, D.C. 20540
UNITED STATES GENERAL ACCOUNTING OFFICE
Division of Community & Economic Development
Director

Henry Escamez

OFFICE OF THE PRESIDENT

APENDIX VI
[GAO COMMENT: All fire and safety deficiencies discussed were taken from inspection reports prepared by the National Park Service. In no instance were deficiencies mentioned based on any other source of information.]

PAGE 50

The El Tovar Hotel is operated by my company, Grand Canyon National Park Lodges, on the South Rim. The other structures referred to are on the North Rim operated by another concessioner. I strongly object to the generalities of alleged deficiencies which do not apply to my property.

[GAO COMMENT: The El Tovar Hotel, the Victor Hall and Annex, and Shirley Hall and employee residences are all on the South Rim and are all owned and operated by the concessionaire, Fred Harvey. There are also existing in the Pioneer, Frontier, and Western Cabins and eight employee residences which are located on the North Rim, owned by the National Park Service and operated by a different concessioner.]
Register of National Historic Buildings. The El Torreon Hotel is on the
National Register of Historic Places, which is more than 100 years old and
recognized for its architectural and historical significance. However, the hotel
meets the requirements for listing on the National Register of Historic Places.

Inspection Report. The report for the El Torreon Hotel was completed by the
National Park Service in April 1977. The report was submitted to the
National Park Service and approved for publication. The report includes
photographs of the hotel and a detailed description of its condition.

2.00

APPENDIX VI

PAGE 51

This paragraph has been omitted from
1980 Inspection Report. Reference to the Park Service

GAO COMMENT: Reference to the Park Service
The opening lines of this paragraph are:

"In 1979 or 1980, we deduced..."
The above references all refer to Sherry Hall which has not been removed from this paper and are incorporated.

rezent use several control measures in this condition.

Your writer would lead a reader to conclude that we have in

place approved by the Hayden Park Superintendant. However,

use a corridor or for any other purpose without major remodelling.

been used since September 1979 and never will be used again.

In the future, the would not allow it to be used as a dormitory

management place for occupants and the park service.

precautions were taken during 1979. A park service fire

precautions described by the concessioneur.

dormitory in 1978 and through September 1979.

concessioneur continued to use Sherry Hall as a

concessioneur should be used as a dormitory. The

coordinated and razed within 3 months and in no

in December 1977 theSherry Hall was designated in Sherry

[GAO COMMENT: Park Service inspectors concluded

only, the building has been vacant since September 1979.

that this building be removed into offices on the first floor

regard for human life, I have proposed to the park service

writer states this event is unsatisfactory. This with no

that selected a fire watch, all of which were done, however, your

also of Sherry Hall for 60 days provided we had only the first

In 1979 the Hayden Park Superintendant allowed the temporary

APPENDIX VI
During the past year I estimate that at least 25 "fire safety inspectors" have gone through our building on at least three separate occasions. I know of, yet not one single report of these inspections has been directed to my company via the National Park Superintendent, who by law, and by contract, supervises my company as a National Park Concessioner. Unless the reports are brought directly to the concessioner via the National Park Superintendent on a specific item by item proposal basis, the public and taxpayers are the losers.

Sincerely,

Mr. Henry Enchenge
July 4, 1990

Richard A. Naille, Jr.

Certified Copy
Toby Allen/General Manager
Dick Marks/Superintendent
William Fitzgerald/Director of Maintenance/Fred Harvey
Ron Barr/Executive Vice President/Anfac

Attachment
<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repairs (Other Electrical/Safety)</td>
<td>10,000</td>
</tr>
<tr>
<td>Emergency Lighting/All Gases</td>
<td>38,000</td>
</tr>
<tr>
<td>Repairs</td>
<td>12,000</td>
</tr>
<tr>
<td>Fire Engine/Fire Truck Replacement</td>
<td>7,000</td>
</tr>
<tr>
<td>Furniture/El Tower Fire Sprinkler Repl.</td>
<td>20,000</td>
</tr>
<tr>
<td>Hazard Move / Relocated Uniform Center/Fire</td>
<td>2,500</td>
</tr>
<tr>
<td>Replaced/Fire Hazard / Bucky O Heli Cabin Chimney</td>
<td>13,900</td>
</tr>
<tr>
<td>Collar Hall/Fire 6 Safety</td>
<td>3,000</td>
</tr>
<tr>
<td>Shirley Hall Annex Removed Electrical Service From</td>
<td>4,000</td>
</tr>
<tr>
<td>Dorm/Fire 2 Safety</td>
<td>14,900</td>
</tr>
<tr>
<td>Bucky/Powell/Fire 6 Safety</td>
<td>5,200</td>
</tr>
<tr>
<td><strong>Total 1978-1979</strong></td>
<td>97,800</td>
</tr>
</tbody>
</table>

**SUMMARY**

| TOTAL DOLLARS SPENT | 97,800 |

1978-1979 COMPLETED
CAPITAL INVESTMENTS
<table>
<thead>
<tr>
<th>PROJECTS SPENT</th>
<th>DOLLARS SPENT</th>
<th>PROJECTS COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981 CAPITAL INVESTMENTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,199,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10,700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>79,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,200</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The public comments (CD-80-102, July 31, 1980) have been considered in our report. However, the comments are applicable to the portions of the report. Our comments are applicable to the portions of the draft report that relate to the matters discussed in the prior draft report. Please refer to our comments in your letter dated June 5, 1980.

Your letter referred to us on discussion of the draft report. These comments are applicable to the portions of the draft report that relate to the matters discussed in your letter. However, our comments are applicable to the portions of the draft report that relate to the matters discussed in our letter. Please refer to our comments in your letter dated June 5, 1980.

We refer to your letter dated June 5, 1980, to your request for our comments on certain portions of a draft report prepared for your request for comments on certain portions of the draft report prepared by the General Accounting Office. We refer to your letter dated June 5, 1980, to your request for our comments on certain portions of a draft report prepared by the General Accounting Office.

Dear Mr. Escowage:

Washington, DC 20548

Mr. Henry Escowage

Director

June 11, 1980
Respectfully,

Thank you for this opportunity to respond before publication.

Completed in 1980, the project was undertaken and executed as necessary as a result of the program
implementation. We have included our responses, as they will document
all deficiencies.

The project was approved in June 1979, and has been completed. In addition to the actions already taken,
we will note that the project includes the development of the deficiencies found in your report.

Enclosed herewith are our responses to the criticisms and allegations, you
found.

Dear Sir:

Glacier National Park, Montana

May 10, 1980

Glacier National Park, Inc.

Respectfully,

Don Hummel
President & General Manager
Appendix VI
Warning system at front desk.

Room corridors are equipped with smoke detectors and centrally controlled.

Front desk. Emergency lighting has been installed.

All cabin rooms have smoke detectors centrally controlled at the

call box operated.

Door safety arms have been installed with fire resisting doors magnetically

secured.

Escape - lobby - log building - highly combustible.

Take caution:

Fire detection with central control and alarm scheduled for next

season.

Install safety sprinklers and heat detectors for next.

Response: Chime not heard. Alarm not set.

Chime should be replaced.

Emergency lights and exits have been installed.

All corridors have been sheeted locked to one hour rating. Additional

the upper floor.

Response: There are no fire escapes constructed on lower floor - one on

porticoes and stairs need repair.

Fire fighting.

There are portable fire extinguishers and stand pipe and hose for

upper floor has thermal detection alarm.

Response: Smoke detectors in every room. Lower floor sprinklered.

Fire detection is poor.

Portable system, wet sprinkling, etc.

Response: See above. Stairways sheeted locked to one hour sprinkler.

Use of hallways and stairways.

Two exits are very narrow. Crew loaded in the hotel.

With automatic alarm, hall alarm bells. Also have a night patrol and a

Response: See above. Smoke detectors in each room. sprinkler system

-- overnight guests may not be warned early enough to escape.

Page 2
health and safety deficiencies.

Wants have been made or were adequate to correct.

August 1987 to verify whether these recent improvements in fire and safety inspections would be made. In later maintenance said in August 1987, the park chair of the many deficiencies have been corrected and others

[AO COMMENT: The concessioner's comments indicate]

construction. Equipped with self-closing devices. A second fire escape is under response: All rooms equipped with smoke detector alarms. All doors, windows,从 balcony and early warning system required.

Note:

Page 2
As soon as the alarm was sounded, a contamination on the water supply occurred. The water in the system was reported to be contaminated with a toxic substance. Further investigation into the source of the contamination revealed that the water supply had been compromised due to a fault in the filtration system. The water had been mixed with a hazardous chemical, which was causing the contamination.

Structures were immediately evacuated as an extra safety precaution. The water system was shut down, and all water usage was banned until further notice. The contamination was reported to be contained, but the full extent of the damage was not yet known.

The report further states that the building may collapse if not stabilized immediately. The recommendation is to close the building temporarily and to perform a thorough inspection and assessment.

Director's Note:

Dear Mr. Escanuge:

This report is to inform you that the building is not safe for occupancy. The water supply has been contaminated, and there is a risk of structure failure. Immediate evacuation is recommended.

Sincerely,

[Director's Signature]

United States Customs, Accounting Office

July 15, 1980

Appendix VI
The connoisseur has chosen not to comment.

August 1980.

Several improvements are planned for

one of the six proposed correctional actions.

Standard conditions and have taken only

service has eliminated, any of the sub-

Neither the connoisseur nor the park

that.

Improvements discussed in this letter indicate

[GAO COMMENT: Comparing the standards for this

Kettle Falls Hotel, Inc.

President

Ronald L. Rillamas

Sincerely,

MALLET.

I want to thank you for letting me give my comments on this

letter's inspection.

It's true that I was able to go to the Falls Hotel resident's

finals are over and accommodations in a June 15, 1982, inspection.

In closing, I would like to state that the park is a great

park and should be continued.

I hope you will correct this error, as the final's inspection

result is due to the Falls Hotel's national rank.

The Falls Hotel is a most popular and well-loved because of its

structure. It is also

several problems for these employees. But the Falls Hotel

Kettle Falls Hotel, Inc.

INTERNATIONAL FALLS, MINNESOTA 56649

APPENDIX VI
I wanted to notify you of the above in a spirit of full cooperation.

Because the matter with me involved in the entire procurement, possibly someone should have discovered the description of the 1797 file is interesting. Since I was in charge of the collection, you sent me controlling many inaccuracies. It is my belief that the subject matter requires accurate documentation and a review of conclusions.

The material you sent me contains many inaccuracies. It is my belief that it will not be considered.

The last letter was received on July 14, July 24, July 28, and September 14.

This is the second occasion I have been invited to comment on your work in McKinley Park. Both times the material has been received without a date.

Dear Mr. [Name]:

Washington, D.C., 1954

Henry [Name], Director

July 15, 1960

Appendix VI

Outdoor World, Inc.
In the Letter to us, [insert text]

and the facts that the information was summarized

surfaces were not included because of their length.

Improvements made after our visit. Theondo-

discussed in this Letter. The report refers to

have been or will be corrected by the improvements

security deficiencies discussed in our report.

at the Zeppy! Cove Resort said that all the health

officials responsible for recreation facilities

COMMENT: In August 1980 the Forest Service

Dr. [Signature]

Enclosures

CDB

Zeppy! Cove Report

General Manager

Chief of Resource

Secretary

Please feel free to contact me.

I hope that this information is adequate to communicate the intentions and

Page 4

July 16, 1980

ACCOUNTING OFFICE

UNITED STATES CUSTOMS

[Signature]

APENDIX VI

APENDIX VI
based on Mr. Phelan's information to reflect the current number of rooms in use.

We revised the number of rooms in our report as the number of rooms we state are in the new A third inaccuracy, according to Mr. Phelan's descriptions not found in the other hotel.

Because each hotel had several unique fire safety features, each of the two hotels "had much the same deafness statements. We deleted the statement part of the existing hotel. We deleted the statement of the west wing which survived the 1972 fire and is now a hotel, are structurally similar, with the exception we do not state or mean to imply that the old and
present hotel has no basement, hotel was a commerce structure where the present hotel consists of separate units. In addition, the old hotel had a basement where the existing Mount McKinley Hotel. The old hotel was a commerce structure where the present hotel domino to the existing Mount McKinley Hotel. The old hotel consists of separate units. In addition, the old hotel had a basement where the existing Mount McKinley Hotel.

Mr. Phelanitty said, "Another inaccuracy was your description of the situation. We detected the phase "because the alarm system..."

smoke began rising from the floor. 3 hours later when the alarm sounded again and the occurred, the hotel was not evacuated until too seriously when it first went off the day the fire occurred. As a result, no one took the alarm seriously. Case alarms occurred in the two months before going off for no reason at all. I think about a city's worst situation in that the alarm was always..." This statement is not correct. The fire alarm system was not working. The hotel's alarm system was not detected until 7:00 p.m., because the fire started early in the afternoon but the investigator's report stated that included the statement: "The inaccuracies I referred to in my letter..." formed us: be referred to in his letter. Mr. Phelanitty in- asked him to elaborate on the "many inaccuracies..." we called Mr. Phelanitty on July 30, 1980, and
[GAO COMMENT: We reviewed the statement to read]

Safety improvements have been performed in recent years:

1. Changed to wipe glass all exit doors and windows in sprinklers.
2. Installation of smoke detectors added to local alarm bell system.
3. Painting of building.
4. Insulation of building.
5. Enclosed fire escape from fourth floor to the second floor at

It is important to note that in recent years the hotel has been significantly improved with the addition of sprinklers, smoke detectors, and marked emergency exits outside (not shown). An extensive overhaul and remodel of the hotel was performed three years ago and due to the very nature of the structural components and building materials, this is a stone, concrete and wood building and constructed over 50 years ago. In the draft report, we would like to see specific details about the structures mentioned.

The Ahwahnee Hotel

In the draft report, we would like to see specific details about the structures mentioned.

July 25, 1980
Accounting Office
United States General
structures such as are involved here. Some suggested improvements
such as are mentioned here. Some were even done before the C&O investigations
were made. Many of the deficiencies mentioned in the C&O report have been
and by the MPA and OSHA inspectors.

importance to us, and to the Amtrak and N&W are obviously of prime
of the facilities. The safety of our engines is obviously of prime
consideration with the historic nature of such a high level of safety. From
have performed a number of safety improvements on the facilities in order
to assure the highest standards of safety, and to be performed below.

be even more stringent safety standards with which buildings public
standards applied today -- the technology, materials, and equipment
Fifty and one hundred years ago, no buildings were not built to the safety
in order to remain their character as "grand hotels.

part seven years in order to retain their character as "grand hotels"

unity to respond to some decrit.

errors. Insufficiencies of the director report, we are taking this oppor-
tunities, and because we were disapproved by the

because of this company's serious conern with the safety of our
the National Park Service mere federal and state safety standards.

We appreciate the opportunity you have given us to comment on this

Dear Mr. Echeverria,

Acct.: Mr. Henry Echeverria, Director

Washington, D.C. 20548

Accounting Office

July 28, 1980

Yosemite

Appendix VI
not to lose age. A 70 or 100 year old building is just as safe, or more

Gahan director to describe the hotel.


[Comment: "In order of the term used in

There are three significant factual inaccuracies in the discussion of

WAMONA HOTEL.

by our officer. The

We feel we are moving rapidly in that area.

Our goal is to make the hotel as safe as possible for a structure

on a part with which we are familiar.

on a part with which we are familiar.

WAMONA HOTEL does not describe some of the defects we have encountered and are local with.

on a part with which we are familiar.

Two other hotels in California are very similar to the Wamona.

---

cost

use of electrical energy that has been generated at some environmental

ventilation system must be closed off and replaced by a new system which

the role of passive solar design, it is important to have the natural

generation system in this area of concern with energy and the location.

latter are not in the eastern or southwestern part of the comfort. The

Wamona Hotel, The Ahwahnee Hotel, designed by Robert Butterswood,

one reason in this manner relates to the high insulation that we choose

Page 4
July 28, 1980
Accounting Office
United States General

APPENDIX VI

APPENDIX VI
The OIG Report states that a fire safety program of the magnitude described would cost $2.4 million. At that cost, it is not economically feasible.

The NPS will proceed to implement the plan throughout the park.

Currently, we have nearly completed the "Fire" program described in the NPS' strategic plan. However, the implementation of the NPS' strategic plan has encountered some delays and has resulted in a series of budgetary cuts and revisions of position by the NPS.

Once we have completed the plan, we will provide a copy of an internal memorandum dated 12/17/99

Other suggestions contained in the OIG report can be implemented.

Ahwahnee Hotel: Since our visit in September 1998, the park has made many fire and safety improvements to the hotel. In August 1998, the concierge's desk was moved to a fire-resistant area. The hotel has installed smoke detectors in all guest rooms, and fire extinguishers are now readily available in the public areas. The hotel has also implemented a comprehensive fire safety program that includes regular fire drills and training for all employees. The hotel management has been proactive in addressing fire safety issues, and the staff is well trained in fire safety procedures.
Wamona Hotel since our visit in September 1979.

[GAO COMMENT: The park safety officer informed us in August 1980 that the consciousness had com-

11. Fitted metal smoke detectors in garbage areas; the proceeded with 5/8 inch

10. Replaced soda-acid fire extinguisher with water/pressure type.

9. Organized fire and evacuation team using hotel employees.

8. Night watchman on duty from 10 p.m. to 6 a.m. seven days a week.

7. Installed fire rated doors in Washington Cottage.

6. Cleaned our closets and storage areas; the proceeded with 5/8 inch

5. Installed manual fire alarm system with signed to National Park

4. Installed new fire hose at standpipe locations.

3. Installed smoke alarms in all sleeping rooms.

2. Repaired and installed new electrical panels in kitchen.

1. Installed automatic hood system in kitchen.

[GAO COMMENT: We have revised the report to

Vacant when it burned.]

make it clear that the employee dormitory was

[GAO COMMENT: We have revised the report to

vacant when it burned.

Note: The fire destroyed the structure burned at a time when the Wamona area had al-

stead.

The third error in the report is the indication that the dormitory was

APPENDIX VI
which were completed after our visit in September. The fire suppression and detection equipment, which have also added these references to the fire and safety improvements listed in this letter, all of which were completed after our visit in September. The fire suppression and detection equipment, which have also added these references to the fire and safety improvements listed in this letter, have been designed and installed.

[GAO COMMENT: We detected "have been designed" to read "have been endangered" by the periods of use. Extinguishers and smoke detectors plus 24 hour security personnel are seconded to the statement that "gares endangers" were the case with the居委会's, a sample walk through the buildings cause the facility "boards the suppression and detection equipment.

[PREVIOUSITY: This statement was addressed."

[GAO COMMENT: We feel that is a "cheap shot." An unmitigated attempt to inject emotivism into a serious issue.

Toward information:

Serious fire safety engineer provided the role.

Paragraphs are incorrect. The National Park Service engineers are incorrect. All the statements in the above directly related to the moisture content of the air, not less age. The fire suppression for construction and interior are dry air, subjected to the same atmospheric conditions, thus, wood is readable as a new wood building constructed in the same manner.

Page 5
July 28, 1980
Appendix VI
United States General Accounting Office
Enclosure

ECM/CFA

Edward, C. Hardy

Chief Operating Officer

Sincerely,

Thank you for considering these comments. We request that you include...

In connection with our ongoing rehabilitation and upgrading of the

1. The buildings are not unsafe.

2. The buildings do not violate any law or Federal regulations.

3. The buildings do contain many modern safety features.

4. There has never been a fire-related injury in any of the buildings.

We believe that an objective study would have determined the following:

Page 7
July 25, 1980
Accounting Office
United States General

no found any violations of the law.

OSHA, who, except for minor matters that are quickly corrected, have

or applicable building codes. The hotels are frequently inspected by

"deals" for architects to utilize. They are not in any sense the law

of buildings of modern construction. Such standards are models of

stricter criteria. In reality, they simply fail to meet

inference contained in the draft.) Rather, they simply fail to meet

Finally, the draft report completely ignores the fact that to our know-

APPENDIX VI
[40 COMMENT: This statement was addressed
 aproach, using meaningfulness, but attention getting terms such as "cramer"
 further, it is unimportant that the report chooses to take an emotional
 improvements have been made since our visit.

 [40 COMMENT: we added a statement that the report mentions.

 &dquo;The fact that many of the deficiencies are beyond our control.
 0f non the research would never be seem&dquo; not does it at all.
 00 of the specific suggestions in the report have already been con-
 costly efforts we have made to improve the level of safety (in fact,
 it is also discouraging that the draft report does not deal with the
 degree of safety."

 After the aforementioned and other safety upgrades provide a responsible
 jack some of the safety features found in a new structure, but whereas,
 is obvious to anyone that an historic structure, by necessity, will
 way of including those out than making a year-long government study.
 the &dquo;smart&dquo; safety mechanisms, we suggest that there would be an
 &dquo;smart&dquo; test buildings constructed 50 or 100 years ago not have comply
 we are disappointed by many aspects of the report.

 We appreciate the opportunity to comment on the draft GAO report re-
 CONCLUSION

 when constructed.

 safer, due to the improvements that we have made, than they were
 possible, given their age and construction, they are certainly
 once again, we believe the buildings are as safe as is practica-
 Since the responsibility of the owner of the building, the NPS,
 The remaining suggestions in the draft GAO report are of a major

 Page 6
 July 28, 1990
 Accounting Office
 United States General
 APPENDIX VI
PS: The approach and that we may then be allowed to complete the project.

As the hopes that the NSP will not attempt to implement the approach and that the program at the end of the year, we are now proceeding on this basis (with an anticipated completion of the field program as the end of the smoke detector installation in the live room, together with the automated transmission of the signal to the firehouse as a "fire in progress" instantiating light clock of the instrument). It was the NSP recommendation on October 22 that we see up the

Unfortunately, the local (Rossmere Park) NSP personal questioned the approach being utilized. Superintendent BRITTONS

...the Regional Office.

In charge of all NSP parks in the Rossmere Unit, Mr. Chapman (who is

Based upon the advice we received from Mr. Chapman, as well as

1979 letter we should send infrared beams to him, as well as

The Regional Director drafted our architecture, water conference, and that we should proceed.

By letter dated September 11, 1979, Howard Chapman, Western

ARMS

APPENDIX VI

APPENDIX VI
more...

and to supplement the fire safety program in accordance with WSHO's memo of June 13, 1979. This description...

The next step, however, was that the NPS furnished us with a.

The drawings were in fact completed by June 13, 1979.

and direction. We then received a letter dated May 29, 1979. For me, the NPS dated March 14, 1979 and again by.

the transitive.

much greater level of overall fire safety than we were looking for.

At that time, the approach would provide a

safety program. On January 26, 1979 we wrote to the

The purpose of this memo is to recap where we are in connection

APPENDIX VI
The present condition of the building is awaiting the safety officer's report on the
that was in progress. The Superintendent is
-concessionaire's letter and additional work
many of the improvements described in the
Superintendent said that he had observed.
Superintendent and the old In during the prior week.
accompanied the Park Service regional safety
formed us on August 12, 1980, that he had

COMMENT: The Parkway Superintendent in-

APENDIX VI

APENDIX VI
COPY: Mr. Chuck Hoke

THOMAS J. O'CONNELL

Piscataway

Sincerely,

If you would like any additional information, please feel free to call on me.

In effect, when we have an employee overstay from the cottage,

and the extraneous cases have been installed.

The second story beyond the rear, the rear bathroom, the entrance to the old kitchen, and the entrance to the back of the cottage, was removed and the plumbing was removed to meet state and local

In the spring we spent a considerable amount of money on the

I am in receipt of your letter referring to employee residences

Dear Mr. Eschwege:

Washington, D.C., 20480

Community Services Administration Office

Mr. Henry Eschwege, Director

July 10, 1980

THOMAS J. O'CONNELL

APENDIX VI

APENDIX VI
APPENDIX VI

3. Ventilation System: The ventilation system in the kitchen was replaced in 1979 after the addition of broiler equipment that, when in use, tripped the automatic fire suppression devices in the system. At no time were there any fires caused by accumulated grease.

[GAO COMMENT: The report was revised to state that three fires occurred because of the broiler's inadequate ventilation system and that the ventilation system was upgraded in October 1979, shortly after our visit.]
July 7, 1980

United States General Accounting Office
44 C Street, N.W., Washington, D.C. 20544

Attention: J. Kirk, Forest Service-Owens Valley Ranger District

Dear Mr. Kirk:

I received your letter of July 1, 1980, relative to the report for the Stevens Pass wilderness fire. Your draft report accompanying your letter of July 1, 1980, contains several inaccuracies that should be corrected.

1. Electrical Wiring. The building's electrical wiring has been remodeled several times within its lifetime. Another problem is that the building service circuitry is not sufficient to accommodate any additional facilities.

[GAO COMMENT: While the re-wirings may have met code requirements when the work was done, the wiring does not meet present code requirements.]

2. Fire System. The building does have automatic fire detection devices and an alarm system. Both of these have been in service since 1970.

[GAO COMMENT: The building does have an automatic fire detection system and a manual fire alarm system, but does not have an automatic fire alarm system or a sprinkler system. The report has been revised to reflect these facts.]
The text on the page appears to be a technical or project-related report. It includes sections on system improvements, electrical work, and project completion. The text is dense and technical, typical of a project update or status report. There are references to dates, costs, and project phases. The report seems to be addressing issues related to electrical work and system improvements, with a focus on project completion by a specific date.
This letter is in response to the evaluation report on the health and safety standards of forest service owned resorts, specifically that part referring to Zephyr Cove Resort, Nevada.

Zephyr Cove Resort is operated under a special use permit from the Lake Tahoe Basin Management Unit. The facilities at Zephyr Cove are designed to provide a safe and healthy environment for guests. We asked for a detailed report on the health and safety standards at Zephyr Cove and your firm's report has been received.

The report indicates that improvements have been made at Zephyr Cove to address health and safety concerns. However, certain areas still require attention. We request that your firm provide a detailed plan for the remaining improvements.

Please arrange a meeting to discuss the findings and the plan for improvement. Your cooperation is greatly appreciated.

Sincerely,

[Signature]
In the letter to us, it was noted that one of these items was not included because of its length, but improvements were made after our visit. The report refers to improvements discussed in this letter. The report refers to changes that will be corrected by the improvements at the Cypress Cove Resort. The health official responds for Recreation Facilities.

[Comment: In August 1980, the Forest Service]

cc: Ann Abraham
Endorsements
cc: [Signature]

I hope that this information is adequate to demonstrate the improvements and any further information or documentation is needed.

[Signature]

Page 4

ACCOMMODATION OFFICE
UNITED STATES GENERAL
NR: Dave Ruben

(Appendix VI)