

Appropriation: Construction and Major Maintenance
Activity: Special Programs
FY 2002 Enacted: \$36.660 million

| Program Component | 2002 Enacted To Date | 2003 Budget Request | Change From 2002 (+/-) |
|-------------------------------|----------------------------|---------------------------|------------------------------|
| Emergency, Unscheduled | 3,500 | 3,500 | 0 |
| Housing Replacement Program | 12,500 | 12,500 | 0 |
| Dam Safety Program | 2,700 | 2,700 | 0 |
| Equipment Replacement Program | 17,960 | 31,960 | +14,000 |
| Total Requirements | 36,660 | 50,660 | +14,000 |

Authorization

| | |
|---------------------------------|---|
| 16 U.S.C. 1 | The National Park Service Organic Act |
| Public Law 101-614 | The Earthquake Hazards Reduction Act of 1977 |
| Public Law 104-333, Section 814 | The National Park Service Housing Improvement |
| Public Law 104-303, Section 215 | The National Dam Safety Program Act of 1996 |

Overview

Activities provide for the performance of minor unscheduled and emergency construction projects, improvement of public use buildings to withstand seismic disturbances and damage, inspection, repair or deactivation of dams, repair park employee housing, ensure adequate inventories of automated and motorized equipment, upgrade radio communications equipment and the improvement of the information management capabilities.

Applicable National Park Service Mission Goals

- Ia** Natural and cultural resources and associated values are protected, restored and maintained in good condition and managed within their broader ecosystem and cultural context.
- Ib** The National Park Service contributes to knowledge about natural and cultural resources and associated values; management decisions about resources and visitors are based on adequate scholarly and scientific information.
- Ila** Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and appropriate recreational opportunities.
- Ilb** Park visitors and the general public understand and appreciate the preservation of parks and their resources for this and future generations.
- Iva** The National Park Service uses current management practices, systems, and technologies to accomplish its mission.

Performance Goals

Goal IVa5. Provide appropriate housing for park employees

| Target | Measure | FY 1997 Base | Goals | | Long-term FY 2005 | |
|------------------|---|-----------------|--------------------------|-----------|-------------------|-----------|
| | | | Annual FY 2003 Number | % of Base | Number | % of Base |
| Employee housing | Percent of housing units in poor or fair condition rehabilitated, replaced or removed | 2,100 | 840 | 40% | 1,260 | 60% |

Activity Description

To perform minor unscheduled and emergency construction projects to protect and preserve park resources, provide for safe and uninterrupted visitor use of facilities, accommodate unanticipated concessioner facility related needs, provide necessary infrastructure for approved concessioner expansion projects, and ensure continuity of support and service operations; improve the capability of public use buildings to withstand seismic disturbances and resulting damage; inspect and repair dams, or deactivate dams to protect lives and park resources; and, repair some of the more seriously deficient park employee housing units, or replace trailers; to ensure adequate inventories of automated and motorized equipment to support park operations and visitor services throughout the National Park System are purchased to replace existing inventories that have met use and age limitations; to ensure that adequate inventories of new equipment are purchased for units recently added to the National Park System so that park operations and resource protection can begin unimpeded; to upgrade radio communications equipment to ensure rapid response to emergency and life-threatening situations as they arise; and to improve the information management resource capabilities of the Service to ensure timely processing of data and intra-office telecommunications into the 21st century.

Emergency and Unscheduled: \$3.5 million

This program is composed of two major components as described below.

Emergency and Unscheduled Projects. [\$2.0 million] The FY 2003 proposal continues the \$2.0 million funding level to address emergency and unscheduled needs. The National Park System contains over 30,000 structures and thousands of individual utility systems. Through the course of normal operations, these structures and systems can unexpectedly be damaged or fail, and require immediate attention to avoid more costly reconstruction in the future. Such work may require more than one fiscal year for project completion, but generally will not involve extensive planning or formal contract bidding procedures, characteristic of line item construction.

Seismic Safety of National Park System Buildings. [\$1.5 million] The National Park Service Seismic Safety Program is mandated by Public Law 101-614, Earthquake Hazards Reduction Act of 1977, National Earthquake Hazards Reduction Program Reauthorization Act of 1990, Executive Order 12699, Executive Order 12941, and NPS Directive 93-1. These mandates, along with related technical guidelines produced by the Interagency Committee on Seismic Safety in Construction and the Federal Emergency Management Agency, requires the NPS to adopt minimum standards of seismic safety in existing Federally-owned/leased buildings and to apply appropriate seismic safety standards to new construction. Each agency has a seismic safety coordinator and works with the Department of the Interior Seismic Safety Program and the Department of the Interior Office of Managing Risk and Public Safety to evaluate, prioritize, and rehabilitate their inventory of extremely high risk (EHR) seismically deficient buildings.

The National Park Service continues to perform seismic studies, investigations, designs, and rehabilitation on public use buildings throughout the National Park System. Each bureau has developed a five-year plan to mitigate their inventory of EHR buildings. Because of the large number of EHR buildings in the NPS inventory (over 400), the NPS mitigation efforts will extend beyond the 5-year plan proposed by the other DOI bureaus. The Service is working with the Department and the NPS regions and parks to prioritize the list of EHR buildings for seismic rehabilitation.

For FY 2003, seismic safety evaluations, pre-design, design, and/or construction work will be performed on the following:

- Seismic retrofit construction continues on the Watchman Fire Tower at Crater Lake NP and on the William Penn Mott, Jr. Visitor Center, Presidio Building 102 at Golden Gate NRA.
- Eugene O'Neill National Historic Site – Design for the seismic rehabilitation of the Tao House, a national historic landmark has been completed and construction will be awarded.
- San Francisco Maritime National Historical Park - The park has one leased building that is being used for storage of archeological artifacts. A seismic retrofit design has been completed and construction will be awarded as soon as the required permits and approvals are received.

- A seismic retrofit design has been completed for the St Joseph Hall Building at Salem Maritime NHS. The seismic retrofit construction will be awarded along with the planned rehabilitation and upgrade of the building systems project. The building has a multipurpose function housing administrative offices, maintenance storage and operations, along with visitor interpretive center and educational programs.
- Seismic retrofit designs for the Horace Albright Training Center and Apartment Buildings at Grand Canyon NP are being developed and construction will be awarded upon completion.
- Olympic National Park - Four buildings were identified as needing additional seismic investigation after the February 28, 2001 Nisqually Earthquake. Detailed seismic evaluations have been performed and pre-design documents will be prepared for each of the buildings.
- Detailed seismic investigations will be conducted at the following high seismic zone parks - Cabrillo National Monument, Hawaii Volcanoes National Park, Channel Islands National Park, National Park of American Samoa, and Yosemite National Park.
- Detailed seismic studies and investigations will be conducted at the following moderate seismic zone parks, Fort Sumter National Monument, Salem Maritime National Historic Site, Lowell National Historical Park, Boston National Historical Park, and the Jefferson National Expansion Memorial.
- The NPS will expand the program to include National Park System areas that have been upgraded to high and moderate seismic hazard zones by the recently released USGS Seismic Hazard Maps. The program will start to collect building inventory information on low seismic zone parks located adjacent to high and moderate zone boundaries.

Housing Replacement Program: \$12.5 million

In FY 2002, the Park Service continued to address the requirements of section 814 of Public Law 104-333, National Park Service Housing Improvement. In December 1996, the Park Service began a comprehensive review of the NPS housing program. The Service completed a comprehensive Housing Needs Assessment by an independent contractor in 1998. The effort to evaluate existing the condition of housing stock will continue in FY 2003 as a part of the Service's larger efforts to improve asset management. Full life-cycle costs will become more apparent as the entire Service moves toward condition assessments of all facilities including the housing inventory.

The FY 2003 request for the rehabilitation of existing housing structures and trailer replacement is part of the Administration's plan to reduce the NPS infrastructure backlog needs. The rehabilitation and trailer replacement work is necessary while the Service explores alternatives to constructing Government-owned housing onsite, consistent with the 1996 Omnibus Parks Act authorities.

The NPS has obtained consultant services to explore the full range of feasible options, including the possibility of public/private partnerships at three parks: Grand Teton NP, Yosemite NP and Big Bend NP. Cost negotiations are proceeding at this time. Based on the outcome of these initial studies, we will determine if public/private partnerships are applicable at other park areas. Specifically, this consultant will work with the parks to identify alternate solutions to on-site construction where there is a need to provide more housing. Appropriate partnerships with local housing authorities will be identified and entered into. The consultant will also assist to identify alternate funding sources; review potential proposals from developers, local housing authorities and others; provide financial advice regarding funding commitments and funding optimization with developers, local housing authorities and others; and assist in developing several models for use at other park areas in the future. As a result of this effort, we anticipate implementing study results, as applicable, and will continue the evaluation process at other park areas in the future.

Determining the full costs of providing housing is a prerequisite for any cost comparison of feasible options. We will examine the "activity-based costs" of providing housing, and then compare those costs to funding available from rent receipts, construction appropriations, and park base funding.

Park housing is an essential management tool used to protect park resources, property, visitors, and to meet the mission of the park effectively and efficiently. Therefore, the housing program for the NPS involves a long-term commitment; this is not a program of "quick fixes." Condition assessments, trailer replacement, housing rehabilitation and removal of excess housing must continue. Funding criteria and guidelines will be used to prioritize all projects to ensure that the Service is directing available funding to the greatest need for repair,

rehabilitation, replacement or construction. Rehabilitation projects will focus on those units in less than good condition, with priority given to units in poor condition to improve their condition to maintainable standards. Condition assessments of existing units to determine repair and maintenance deficiencies and associated costs will continue. Park managers will use data received from these inspections to develop cost-benefit analyses to determine fiscally responsible housing decisions.

Where replacement housing is needed, the Service will determine the proper mix of housing and examine the possibility of larger projects being identified for line-item construction. For example, Yellowstone, National Park, Grand Canyon National Park and Grand Teton National Park all have housing needs beyond trailer replacement. These needs are credible and verifiable. The magnitude of need will require long-term planning efforts that are beyond the Housing Replacement Program.

In conformance with applicable benchmarks contained in the *National Performance Review*, the Service is also taking additional steps to ensure the cost-effectiveness of the replacement housing that will be built:

1. The Service will continue utilization of multi-unit dwellings and de-emphasize single-family units.
2. The use of standard designs and specifications will reduce overall design costs and meet modular home-builders' specifications, thereby allowing that sector of the housing industry to competitively bid on projects.
3. All housing construction projects will be consistent with funding guidelines and funding criteria and will undergo a value analysis, including functional analysis to help determine the most appropriate number, type and design.
4. Any exceptions to the above will be reviewed by the Servicewide Development Advisory Board initiated by the Director in response to recent media coverage and Congressional concerns about construction costs. All projects will be personally reviewed and approved by the Director.
5. All housing projects will be subject to the Cost Model as recommended by the National Academy of Public Administration (NAPA). Any project exceeding the cost predicted by the cost model will be reviewed and approved by the Director prior to construction or revised as necessary to meet the cost predicted by the cost model.
6. The Service will seek prior approval from the House and Senate Appropriations Committees before building any new housing capacity in national park units, of which none is currently proposed, including housing that may be provided as a result of public/private partnerships.

While this effort is a major step in improving NPS housing, work will need to continue in FY 2003 and beyond to complete the primary focus of this activity – to rehabilitate existing units and replace substandard trailers. The Service is committed to improving employee housing and making living conditions better for employees and their families, where it is necessary for the Government to provide housing.

In FY 2003, major rehabilitation work will be performed on approximately 109 existing units to bring these units in twenty-five park areas up to a good maintainable condition. Also, in line with efforts to replace unsafe and inadequate residential trailers and other obsolete housing throughout the System, the NPS proposes in FY 2003 to replace approximately 31 trailers in nine National Park System areas. These trailers will either be replaced with a combination of permanent apartments, dormitories, and multiplex units, or alternate means of housing will be secured such as off-site leasing. This effort will ensure acceptable living conditions for over 100 employees and their families. Formalized condition assessments of approximately 500 housing units will also be conducted by the parks and by contract.

Dam Safety Program: \$2.7 million

The National Park Service Safety of Dams Program is mandated by Public Law 104-303, Section 215, National Dam Safety Program Act of 1996; U.S. Department of the Interior Departmental Manual, Part 753, Dam Safety Program; and the NPS Management Policies. The program is coordinated through the assistance of the Bureau

of Reclamation (BOR). The primary reason for creating this program was to prevent another incident like the Rocky Mountain NP Lawn Lake Dam Failure of 1982 when three park visitors were killed and \$30 million in damages occurred. Because of BOR's expertise and oversight of the U.S. Department of the Interior Maintenance, Operation, and Safety Dams Program, the Service has regularly used their services and advice in managing NPS dams and monitoring non-NPS structures affecting the National Park System. The program is necessary because of increased activity and development around and downstream of these dams. The basic goal of the Service's Safety of Dams Program is to either adequately maintain or deactivate the dams. On the average, corrective action is initiated or completed for structures of all classifications at about four structures per year, mostly through minimal funding appropriated annually in the Operation of the National Park System account. For dam safety repairs/modifications, two to three dams classified as downstream high or significant hazard potential are completed annually. To date, it is estimated that 192 dams have had corrective action completed, and 166 structures are deactivated. Current assessment information on dams indicates that of the 483 operational dams in the National Park System, 95 are in good condition, 192 are in fair condition, 138 are in poor condition, and 58 do not have a condition assessment. Formal dam safety inspections, a type of condition assessment, are performed every three years by the BOR for the larger, more critical dams. Parks, however, are responsible for ensuring that annual informal inspections are completed for all dams and necessary routine maintenance is carried out.

| Dams Slated for Corrective Action, FY 2003 | | | |
|---|--------------|-------------|---------------------------|
| Park | State | Dam | Amount (\$million) |
| Yosemite National Park | California | Cascade Dam | 1.9 |
| Prince William Forest Park | Virginia | Camp 4 Dam | 0.8 |

Equipment Replacement Program: \$31.96 million

This program is comprised of three major components as described below.

Replacement of Park Operations Equipment. [\$28.333 million] The National Park System has grown by more than 30 new units since 1990. These new areas must be equipped adequately to carry out basic park operations including maintenance, resource protection, and law enforcement functions. Older areas with aging inventories must have sufficient funding to replace equipment to ensure safe and efficient park operations. Daily park operations are dependent on various types of vehicles, vessels and other support equipment. The park service fleet ranges from sedans and pick-ups to marine vessels, emergency response vehicles and heavy construction equipment. Replacement of high mileage vehicles and obsolete heavy construction equipment will improve the overall efficiency and safety of the National Park Service fleet and the stewardship of its facilities. Replacement of emergency vehicles and equipment will protect the government's infrastructure investment and improve visitor protection and safety. Because the Service's total vehicular, heavy mobile, and other operations equipment replacement backlog as documented in the Project Management Information System is currently estimated at almost \$120 million, \$14 million in additional equipment funding is being requested for FY 2003.

The Service's FY 2003 program also continues the program of improving structural fire protection measures through a four-year, \$7.8 million program for the acquisition of modern fire apparatus and related equipment.

Conversion to Narrowband Radio System. [\$1.646 million] In conformity with provisions contained in the Omnibus Budget Reconciliation Act of 1993, the National Telecommunications and Information Administration (NTIA), U.S. Department of Commerce, has directed conversion of all civilian Federal radio users to a new technology known as "narrowband" by January 1, 2005. The transition to narrowband equipment is intended to double the number of channels available to Federal users. Accordingly, those that are currently being denied access to wireless communications support (due to frequency congestion) will be accommodated when the transition is accomplished. To meet new national interoperability, privacy and security requirements for public safety communications, encrypted digital radio technology is required. The industry is still developing this new technology in accordance with emerging national telecommunications technical standards. The combination of requirements for Federal public safety organizations to utilize narrowband and digital technology requires complete replacement of all wireless equipment components; modification of existing components to meet the

new requirements is not possible. Application of the technology requires new or updated needs assessments and sensitivity to issues surrounding piloting the implementation.

All new radio equipment must be compatible with the technology mandated by the National Telecommunications and Information Administration for all Federal users and security directives. The new system will provide for:

1. improving the communications quality of public safety and law enforcement communications,
2. interoperability with other Federal agencies,
3. replacement of antiquated, failing communications equipment,
4. meeting emerging Federal telecommunications security standards,
5. providing better public safety services to park visitors,
6. opportunity for sharing frequency, fiscal and physical assets of other Federal agencies, and
7. improved quality of public safety communications.

The National Park Service will be developing a Capital Asset Plan for making a large-scale, servicewide investment in new narrow band radio equipment in a cost-effective manner that avoids redundancy, ensures interoperability with other systems, and prioritizes communication systems of the U.S. Park Police.

The existing Park Police radio communications systems are unable to meet current demand and will require the complete reassessment process and reconfiguration of physical assets. This reassessment process will develop an open architecture process that will permit the systems administrator to add technology upgrades and expand the systems of the U.S. Park Police to meet changing operational requirements. Further assessment of field conditions and implementation of the new technology will also reveal shortfalls in existing systems in the areas patrolled by the United States Park Police. The system as projected will also have the capability to provide access to other National Park Service activities in the Washington Metropolitan Operational Area. Implementation of this plan for the United State Park Police in Washington, D.C. metropolitan area and for implementation servicewide is subject to Department of the Interior and Office of Management and Budget approval of the Capital Asset Plan.

Modernization of Information Resources Equipment. [\$1.981 million] For FY 2003, the Service will continue efforts to improve management of information and business practices across the National Park System. Funds will be used to address information infrastructure requirements associated with new network design. Improvements to the Service's broadband capability will benefit all National Park System units regardless of their remoteness or complexity of operations. All park offices will be able to access and utilize the Park Management and Information System, parent, Operations Formulation System, and other information management systems with greater ease and speed once equipment and program upgrades have been completed.