# Facility Management Connection

## In This Issue

# Leadership Spotlight: Interview with Deputy Director Donald W. Murphy

The National Park Service is taking action to better manage the long-term cost of ownership of its facilities. These reforms include adopting the best practices of private industry. As an experienced administrator of various state and local park systems, including serving as the director of the California Department of Parks and Recreation, Deputy Director Donald W. Murphy has seen the benefits that effective asset management can bring to the National Park Service. *Facility Management Connection* recently interviewed Deputy Director Murphy to gain his personal perspective on the National Park Service's asset management strategy.

**Q: What are the primary challenges facing the National Park Service in protecting its built assets?**

**A:** The greatest challenge facing the National Park Service is determining the level of resources required to maintain our extensive assets. Although Congress allocates the funds, the burden is on the National Park Service to prove that we have a full understanding of the assets we care for, their condition, and what is needed to maintain them over time.



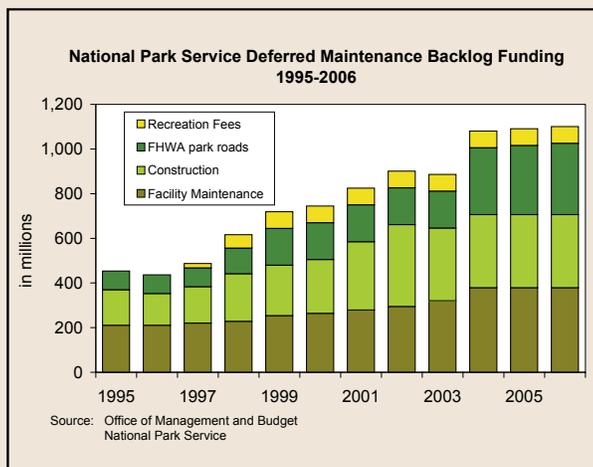**National Park Service Deputy Director, Donald W. Murphy.**

Another challenge is brought on by the sheer diversity and complexity of our assets. Independence Hall, one of the most important cultural icons in this country, is a good example of this. The historic nature of the facility, and National Park Service responsibility for its operation and maintenance, add complexity as we determine what is needed to protect this asset for future generations. Protecting resources in perpetuity is a challenge unique to the National Park Service.

**Q: How has your experience working as a director of the California Department of Parks and Recreation shaped your views of asset management?**

**A:** Through my involvement in the California Park System, I was able to see the direct benefits of using an automated maintenance management system to collect data on park facilities. We used a software system called

**National Park Service Deferred Maintenance Backlog Funding 1995-2006**

- Recreation Fees
- FHWA park roads
- Construction
- Facility Maintenance

Source: Office of Management and Budget National Park Service

The graphic above illustrates the funding provided by Congress and the Administration's commitment to addressing the deferred maintenance backlog.

# Accelerating Condition Assessments at the "Big Nine"

Director Fran Mainella made a commitment to the Administration and the American public to complete an ongoing cycle of annual condition assessments at all park units by the close of FY 2003, and an initial round of comprehensive condition assessments by FY 2006. Nine parks in the system, referred to as the "Big 9," have the greatest challenge in advancing their annual assessments and are on a different timetable.

National Park Service contractors are determining the square footage of the exterior enclosure as part of the life cycle condition assessment at Delaware Water Gap National Recreation Area.

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**Leadership Spotlight (continued from page 1)**

Maximo™ to help us manage our park and recreation program. Personnel in the field would collect information on assets and report this information back into the software system. Once this data was collected, we were able to develop a budget plan to maintain the asset. We also had supporting documentation for all our management decisions or budget requests. Without this system in place, we could not have effectively managed our parks.

**Q: What are some of the benefits of sound capital asset management?**

A: Good management practices directly benefit managers in the field and enhance planning to maintain park assets from a life cycle perspective. Armed with new management tools and better information, our frontline managers can now accurately determine, for the first time ever, what assets they care for, the condition and value of those assets, and the costs associated with maintaining those assets over their projected lifetime. For example, by combining the facility condition index (FCI) and the asset priority index (API) metrics, the National Park Service can apply funding to assets by evaluating both physical condition and overall importance to the mission. This information enables park superintendents to make important decisions on how to allocate resources, and to support our budget requests to Congress. Further, it ensures that the

> **The greatest challenge facing the National Park Service is determining the level of resources required to maintain our extensive assets.**

National Park Service can establish a baseline for measuring progress in improving the condition of high priority assets.

**Q: What steps can an employee take to be a good steward of National Park Service assets?**

**A:** As employees of the National Park Service, we have been entrusted with caring for our nation's treasures. We must continue to grow in our understanding of how to best maintain and protect these assets. We need to take personal responsibility for these assets. Educate yourself by taking a training course. Keep abreast of innovations in the profession of facility management. You are a critical part of protecting both constructed assets and natural systems for future generations to enjoy.

**Q: Are there any messages you would like to pass on to the National Park Service's maintenance employees?**

**A:** I would like to thank our maintenance employees for their commitment to making the goals of better protecting and managing National Park Service assets a reality. This phase of our collective effort to verify our inventory of assets and their current condition through the annual condition assessment process is nearing completion. I know that many of you have had to leave other things undone and work extra hours to meet these goals. These efforts are not without their rewards. Ultimately, the new systems put in place are for your benefit. The Facility Management Software System (FMSS) is a tool for you to use to make your job easier. Make the asset management process work for you.

*Deputy Director Donald W. Murphy served as the Director of the California Department of Parks and Recreation. In that position he managed a $200 million budget, 2,700 full time employees, 2,000 seasonal employees and approximately 14,000 volunteers. Mr. Murphy was also the Director of the Department of Parks and Recreation for the City of Sacramento. He successfully managed a $36 million budget, worked with the city council to prioritize park development programs, and managed the city's $54 million capital improvement program for parks, including acquisition and development.* ❏

# Introducing FMP's Program Management
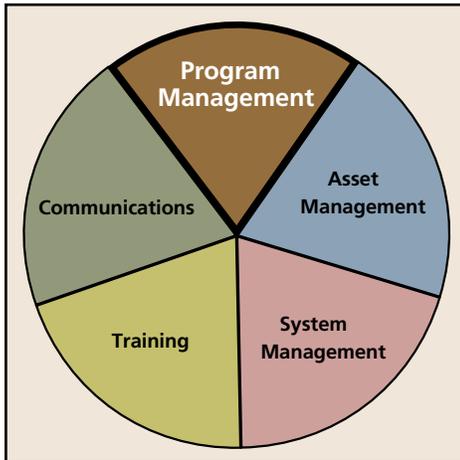


**Facility Management Program**

In each issue of the *Facility Management Connection*, we will highlight various components of the Facility Management Program (FMP). Here, we will take a closer look at FMP Program Management. This component plays an integral role in ensuring that the National Park Service meets its stewardship goals.

At the Washington Office level, FMP's Program Management component provides strategic direction for the full range of FMP activities in support of the stewardship of National Park Service assets. Program management obligations include fulfilling the President's commitments to the public to reduce the backlog of deferred maintenance and implementing management reform. This means that all Program Management activities must also be aligned with the President's Management Agenda, as well as the Department of the Interior and National Park Service strategic plans.

Specifically, FMP's Program Management staff:

- Partners directly with the Office of Management and Budget to create more informed budgeting decisions, support management reforms, identify programmatic strengths and gaps, and promote performance measurement and accountability;

The "Big 9" are the most asset-intensive parks. They do not necessarily have the largest land area or the highest visitation rates, but collectively they hold nearly 20 percent of the National Park Service total asset inventory.

In order to assist these parks, a methodology was developed to accelerate the assessment process by combining comprehensive conditions assessments with life cycle assessments using contractor assistance.

While many facility management employees are familiar with comprehensive condition assessments, the life cycle assessment methodology is new to the National Park Service. A life cycle assessment is an analytical process for determining subsystem replacement needs based on the expected design life of an asset and expert judgment. Generally, parks will conduct comprehensive condition assessments on critical park assets with high asset priority index scores, and life cycle condition assessments on less critical park assets with lower asset priority index values. Life cycle assessments are a highly reliable and industry accepted method for conducting assessments.

Rocky Mountain National Park was the first to pilot the new comprehensive assessment/life cycle condition assessment methodology. Grand Canyon, Yosemite, and Great Smoky Mountain National Park and Delaware Water Gap National Recreation Area are slated for completion by September 30, 2003. They are currently in the assessment stage. Three other parks, Yellowstone National Park, Appalachian National Scenic Trail, and Golden Gate National Recreation Area, are to be completed by September 30, 2004. The final park, Gateway National Recreational Area, is scheduled for completion in Spring, 2005. The life cycle assessment methodology will provide high quality data and allow for predictive planning for systems that have not yet exceeded their design life. ❏
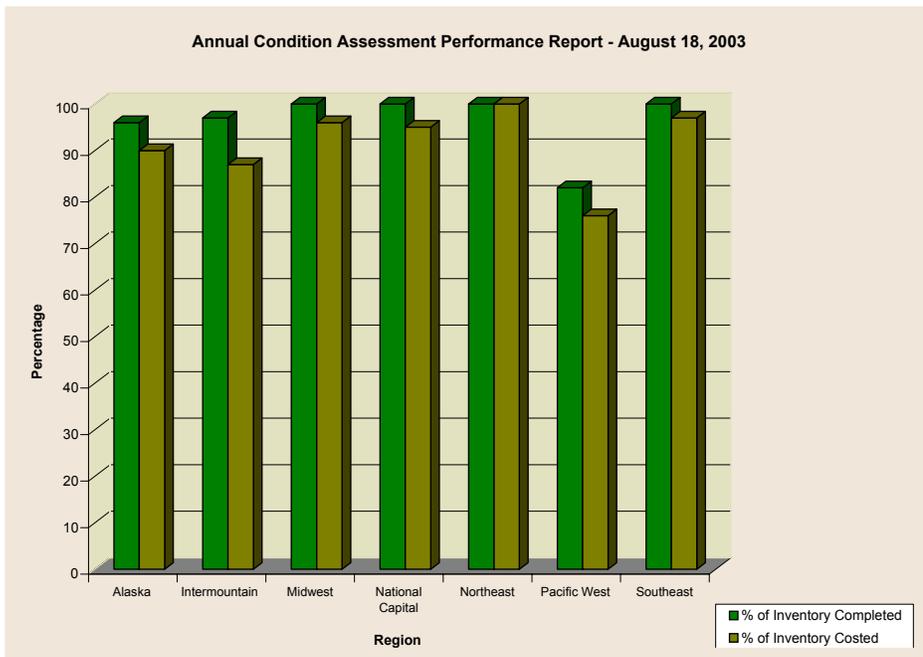


This graphic represents the industry standard assets designated for inventory and assessment in FY 2003. This report does not include the Big 9 Parks. For further explanation, refer to http://inside.nps.gov/programs/fmp.

**Understanding Program Management**
(continued from page 3)

- Partners with the parks to develop and implement a comprehensive asset management strategy that focuses on long term stewardship obligations;
- Develops annual and long term goals, implementation strategies, and performance measures to reduce the deferred maintenance backlog; and
- Manages the long term budget forecasts and annual budget requests.

FMP's Program Management component is currently leading the following initiatives:

- *Program Goals and Metrics:* Develop annual and long term goals and performance measures to reduce the deferred maintenance backlog.
- *Director's Order #80—Asset Management:*

Establish National Park Service policies, requirements, and standards for implementing Public Law 98-540 (October 24, 1985) and integrate the requirements of this law with other asset management policy and guidance.

- *Partnerships:* Work with many program areas; including Concessions, Cultural Resources, and Federal Highways, to advance long-term asset management and standard facility management business practices.
- *Independent Validation and Verification (IV&V):* Review the annual condition assessment process to ensure that the program produces intended results.
- *Modeled Facility Condition Index (FCI):* Develop a modeled baseline FCI by June

2003 and establish a baseline by the end of FY03 using actual data.

- *Big Nine Parks:* Conduct comprehensive evaluation of assets at five of the nine parks with the largest asset inventories.
- *Quality Assurance:* Monitor the comprehensive and life cycle condition assessment work being completed at the "Big 9" Parks.
- *Cost Estimating Reviews:* Assess National Park Service cost estimating needs in context of overall asset management program with diverse estimating requirements.

Look to future editions of the *Facility Management Connection* to learn about the other FMP components. ❑

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# Tales from the Trails:

### FMP E-Course Training Testimonial

"[We] recently completed the full Facility Management Software System/ Cost Estimating Software System (FMSS/CESS) training program and also attended the [Regional] FMSS conference in Nashville the week of May 6-8…"

"…FMSS/CESS is perceived as a 'maintenance thing' rather than a management tool. However, because of the direct tie in with Cyclic and Repair/Rehab funding, PMIS (Project Management Information System), and GPRA (Government Performance Results Act of 1993), it is essential that Superintendents understand the program if they are to compete successfully for future funding. Further, the analysis tools it will provide— the ability to see if park funds are going to the most important assets in the park, should be of obvious benefit to any manager…"

"…The recent introduction of the 'E-Course,' which may be taken online, provides the opportunity for all superintendents to become familiar with the program and its enormous ramifications for park operations and management."

"…We feel very strongly that every Superintendent should…complete at least the minimum 'Executive' level of the E-Course…The couple of hours invested will pay tremendous benefits down the road…"

— **Mike Tennent**, Superintendent,
Fort Frederica National Monument and
**Farrell Saunders**, Superintendent,
Cowpens National Battlefield

# FMP Launches New E-Learning Course

In May 2003, the WASO Facility Management Program (FMP) released the Asset Management Process/Facility Management Software System (AMP/FMSS) E-Course. The web-based E-Course provides a general overview of AMP and the FMSS program, details how to work within FMSS, and can be used for refresher training. Over 120 National Park Service employees have tried out the new E-Course to date.

The topics covered in the E-Course include:

- An overview of stewardship, accountability, and the legislative and policy basis for the National Park Service's adoption of AMP;
- Details on determining priority assets, completing an accurate inventory of assets within each park, and evaluating work processes to ensure the National Park Service is utilizing staff and resources efficiently; and
- Step-by-step instructions on how to use the FMSS program, including basic navigation and use of the main modules (e.g., work orders, assets, preventive maintenance, and labor modules). ❑

# Line Item Construction Requests: Planning for Success

Have you ever wondered how to improve your park's chances of receiving funding for line item construction projects? The key is developing a strong project proposal. This article will provide you with a basic introduction to the steps involved along with some tips from a success story at Redwood National and State Parks.

### Line Item Construction Projects

Each year, the National Park Service submits its budget to request funds from Congress. There is a section of the Department of the Interior's budget for construction and major maintenance in the national park system. In this section of the budget, the National Park Service lists the specific construction projects it wants to fund, known as "line items." In order for a specific project to be listed as a line item, it has to go through an approval process that is explained in more detail below.

### Developing and Submitting a Project Proposal

While many parks need funds to improve, alter, or even relocate their aging facilities, the National Park Service has to distribute its appropriated construction dollars selectively. There are multiple steps involved in requesting construction funds, reviewing those requests, and making a decision on which parks get funding for major construction projects.

First, a park identifies a need by determining the problem to be solved and weighing the construction versus the non-construction alternatives. This consideration of alternatives should include an assessment of the life cycle costs. If it's determined that construction is the best alternative, then the park develops a project proposal and does the following:

- Complete comprehensive condition assessments on the facilities that are in need of repair or replacement;

- Analyze and document the repair and life cycle costs of each facility based on Facility Management Software System (FMSS) data;
- Collect and review any other relevant information on the facilities in question;
- Determine scope of construction to be completed;
- Identify resources necessary to complete the work; and
- Analyze the long-term impact of the project on operations and natural and cultural resources.

The data collected is then submitted for evaluation and ranking through the Project Management Information System (PMIS). Major construction projects listed in PMIS compete first at the Regional level and then at a Servicewide level for line item construction funding, based on the attributes and advantages of each project. Projects are ranked numerically and get priority consideration for funding based upon the total score received.

### Reviewing Project Proposals

An evaluation team for line item projects, known as the Servicewide Project Assessment Team, is responsible for rating and ranking those project proposals that have the strongest advantages. The proposals describe how a park's operations will be affected if the project is completed versus not completed. A park must make a compelling case for the positive impact its proposed project would have on park operations and how funding



Redwood National and State Parks plan to demolish a complex of 32 failing maintenance facilities at Requa and replace them with three new energy efficient, sustainable facilities at a more suitable building site.

the project would benefit the National Park Service overall. The Assessment Team makes a determination on which parks present the strongest advantages in their proposals and rates the projects accordingly.

### The Requa Facility at Redwood National and State Parks

Redwood National and State Parks recently had success with a project proposal that scored highly in the Servicewide Project Assessment Team review process. The specific project involved replacing a failing maintenance facility situated next to the Pacific Ocean, known as Requa, with a new facility to be constructed in a more central location at Aubell.

To prove their case, Redwood's managers determined that relocation of the Requa facility would reduce life cycle costs by $5 million over 20 years, reduce annual energy costs by 40 percent or $11,200, and cut park staff travel time to suppliers from a 44-mile round trip to a six-mile round trip. Life cycle costs to operate and maintain the facilities at Requa were estimated at $15 million over the next 20 years. The life cycle costs of constructing, operating and maintaining the

For more information about FMP and other programs under the WASO Park Facility Management Division, visit InsideNPS at http://inside.nps.gov/programs/pfmd.

**Line Item Construction Requests: Planning for Success**

new facility at Aubell was less than $10 million over the same period.

According to Roger Brown, coordinator of the Assessment Team's rating process, "Redwood used FMSS data to improve Requa's rating in the rating process, known as 'Choosing By Advantages.' This was the first time anyone had used a specific life cycle cost comparison in describing a project's advantages. Redwood made it clear to us that this project would significantly benefit the National Park Service in the long run." Brown further explained that, "having very specific, quantified dollar or manpower savings," helped Redwood in scoring well.

Rich Schneider, WASO Facility Management Program, led the effort to prepare the Requa project proposal in FY 2001 while serving as Chief of Maintenance at Redwood. Schneider said, "A comprehensive condition assessment at Requa identified over $6 million in repair costs to bring the 32 facilities at our primary maintenance area to good or fair condition. The development of a project proposal for this complex, using the asset priority and facility condition indices in FMSS, showed that the return on investment was marginal. Application of life cycle costing showed that it would be cheaper to demolish the existing facilities and construct and operate three

energy efficient, sustainable facilities at a new site in conjunction with California State Parks as a partner."

Geological studies indicated the Requa maintenance facility was located in an area of landsliding, causing frequent water and sewer line breaks along with numerous structural failures in buildings and roads. Schneider's team found very high potential for additional landslides in the future. Redwood used the collected data to compose their project proposal. "We developed plans for the necessary pre-design, design and construction activities for the Requa project proposal," Schneider added. Based on the Assessment Team's ranking, the Requa project will likely be included in the National Park Service's line item construction request for 2007.

The experience at Redwood National and State Parks is one example of many parks that are coming out on top by developing a strong project proposal. The key to being successful in the line item construction request process is using the asset management tools and resources available, including FMSS, to identify full life cycle costs and to clearly demonstrate the advantages of a construction request. A strong project proposal backed by solid data provides park managers with the best opportunity to obtain the facility management funds they need. ❑

## WANTED: Your Best Shot

Do you have high resolution digital photos of your park facilities? FMP would like to use these images for a variety of communication purposes.

We need digital photos of visitors using park facilities, and of National Park Service staff performing routine maintenance, condition assessments, or repair/rehab on a variety of assets. *Please note that all photos should be at least 1280 pixels by 1024 pixels in resolution.*

For more information, please contact Meg Leffel at 202/513-7075.