



A Summary of the Environmental Management System Pilot Park Program



NPS Photos

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Document Purpose

This report is the summary and analysis of the National Park Service Environmental Management System (NPS EMS) pilot program conducted in 2003 and overseen by the NPS Washington Area Support Office and the NPS EMS Task Group. The purpose of the report is threefold: to present the rationale for conducting an extensive pilot program, to document both the process and the outcomes of the 10-month piloting effort, and to present some key examples of success and lessons-learned that now serve as the foundation for the NPS Servicewide EMS roll-out efforts underway in 2004 and 2005.

Executive Summary

The National Park Service (NPS) is committed to developing and implementing Environmental Management Systems (EMS) at all of its park units. EMS is a systematic approach that will help parks organize and coordinate their environmental interactions and operations in order to achieve the best environmental management with the greatest efficiency. The NPS is moving forward with developing and implementing EMS at all of its parks in order to improve environmental performance, save on costs relating to environmental compliance and associated liabilities, and to meet the requirement under Executive Order 13148 that all appropriate federal facilities have an EMS in place by the end of 2005. When fully implemented, an EMS will both protect valuable and irreplaceable NPS natural resources, as well as maximize management efficiencies at the nation's 388 national parks. A functional EMS system will assist parks in minimizing liabilities and will also strengthen the NPS image as environmental steward and leader.

To roll out the NPS EMS program, the Washington Area Support Office (WASO) Environmental Management Program began its efforts as early as 2002. WASO recruited select NPS staff from all seven regions to serve on an NPS EMS Task Group. The Task Group was charged with determining the best way to implement EMS at all NPS park units by the end of 2005. To do this the Task Group designed a custom-made Model EMS for the NPS, created NPS EMS training materials and tools, and oversaw the NPS EMS pilot program.

The Task Group developed a customized EMS to meet the specific needs of the NPS. This NPS Model EMS was based on existing and accepted EMS models: the International Organization for Standardization (ISO 14001), and the EPA Code of Environmental Management Principles (CEMP) for federal agencies. The Task Group opted not to adopt either of these models alone because they didn't meet the needs of the NPS. Specifically, it would be too expensive to provide support and expertise necessary for the ISO 14001 requirements, especially third party certification for the entire park service. Because the ISO 14001 standard was developed for industry, its requirements were thought to be more rigorous than necessary for the type of operations taking place at most parks. Also, the ISO 14001 standard is quite paperwork intensive, and would have involved time and resources that not all parks would have. The Task Group also rejected the CEMP model by itself because the principles outlined under CEMP were too broad to promote consistent environmental improvements throughout the NPS. Consistency was a critical factor in the design of the NPS EMS. The Task Group wanted to ensure that all parks had the same basic structure for their EMS so that all park audiences would understand the NPS EMS process regardless of where the park was located. Moreover, the Task Group sought to create an EMS Model that was practical for use at the park level and would cost the NPS less than existing methods. Ultimately, the Task Group designed a system consisting of eight elements incorporating the principles of both the ISO 14001 and CEMP methods, but that was more applicable to National Parks.

Park facilities that develop an EMS built upon the NPS eight elements will establish a management system consistent with national and international environmental principles and will fully comply with the federal mandate of Executive Order 13148. They will also improve their environmental performance and reduce the overall costs of environmental management.

The NPS EMS eight elements are as follows:

- A. Environmental Commitment Statement
- B. Facility Interactions and Environmental Impacts
- C. Goals, Objectives, and Targets
- D. Roles, Responsibilities, and Accountability
- E. Documentation, Recordkeeping, and Reporting
- F. Communication
- G. Training
- H. Monitoring, Measurement, Corrective Actions, and Management Review

Once the Task Group designed the Model EMS, they requested that there be a trial run before rolling the Model EMS out to the entire NPS. A ten month pilot program began in February 2003, and ended in December 2003. Seven parks were chosen to participate based on their size and complexity, mission, location, and surroundings. These seven parks were asked to develop and implement an EMS based on the NPS Model with a one two-day training session and some basic assistance tools.

The seven participating parks were:

- Big Cypress National Preserve
- Boston National Historic Park
- Cape Cod National Seashore
- Glacier Bay National Park and Preserve
- Padre Island National Seashore
- Perry's Victory and International Peace Memorial
- Prince William Forest Park

Considering time constraints and the novelty of a NPS EMS, the pilot parks did remarkably well at developing their park EMS. Development of an EMS is where a procedure or structure for EMS is written or put into place, but it hasn't yet been followed. Implementation of an EMS is where the EMS is being followed according to the procedures developed. Four of the seven pilot parks developed all eight elements of the NPS EMS at their park by the end of 2003. Two of the seven pilot parks developed seven of the eight elements, and only one park was unable to move past the first element. None of the parks fully implemented their EMS by the end of the pilot period. All believed more time was needed, and intend to continue with the implementation of their EMS in 2004 and beyond.

During and after the ten month trial period, the pilot parks shared their experiences and insights with the NPS EMS Task Group. Common themes ran throughout the pilot park process. Specifically, management support and buy-in were critical in all areas to the success of an EMS. Persistence and determination by park staff ensured the continuation of the EMS process. In some cases, outside support from other federal agencies, other parks, and regional support offices helped get the process going for the parks. All the pilot parks struggled with developing a list of facility interactions and environmental impacts. Small parks with less staff to devote to the EMS process had difficulty in establishing and maintaining momentum in developing an EMS.

Support and expertise at the park level were critical factors leading to EMS success. At least one of the pilot parks hired an environmental coordinator to assist with the EMS process. Another pilot park already had an environmental specialist on staff to lead the effort. Five of the parks had a Deputy Superintendent as a member of the park Environmental Management Team, the core group of people leading the EMS process at the park.

In addition to providing an understanding of the underlying themes and critical factors in developing an EMS, the pilot parks provided recommendations and suggestions to the NPS EMS Task Group for rolling out EMS to the entire NPS in 2004. The Task Group used these recommendations to strengthen training materials and assistance tools, and to develop an overall strategy for Servicewide rollout.

The EMS pilot park program demonstrated that an EMS could be beneficial to both the park and to staff at the park. Representatives of the pilot parks believed that their EMS helped improve their environmental performance by cutting down on redundancies in product purchasing, organizing environmental paperwork, improving understanding of how park operations impact the environment, and in reducing recurrence of environmental noncompliance findings.

As a result of the successful EMS pilot program, the NPS is now prepared to develop and implement a Servicewide EMS program by the 2005 deadline. Pilot parks will serve as mentors and as a source of practical advice for parks just beginning their EMS. As a result, parks just beginning to develop their EMS will be better situated to start the process. Overall, the pilot parks demonstrated that EMS is not only feasible within the NPS, but will become a reality with commitment and additional support.



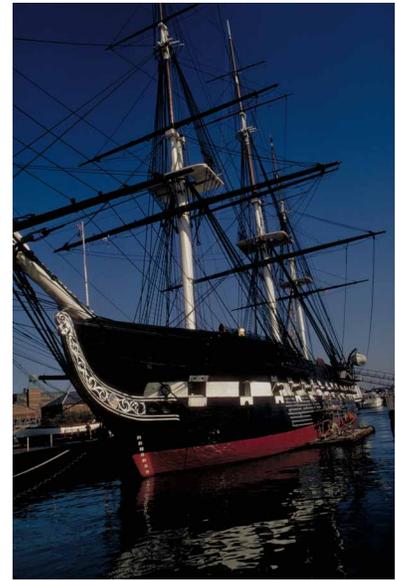
**Big Cypress National Preserve,
Florida**

Background of the NPS EMS

Rationale for EMS

An Environmental Management System (EMS) is a process for coordinating and organizing environmental activities and interactions at park facilities in order to maximize efficiency and ensure the best environmental management possible. It is an innovative approach that helps set goals and manage activities to respect a park's unique resources. The National Park Service (NPS) has embraced this management approach as a means to support the NPS mission to preserve and protect the park's resources for the enjoyment of future generations, to reduce costs of environmental noncompliance and environmental liabilities, and to improve overall management efficiency. A strong EMS at park facilities will help national parks become better environmental stewards, and will allow the NPS to improve its public image as an environmental leader.

The NPS is committed to incorporating EMS into its park facilities in order to fulfill a federal mandate. Executive Order 13148 *Greening the Government through Leadership in Environmental Management* requires that all appropriate federal facilities implement an Environmental Management System by December 31, 2005. The Department of the Interior Departmental Manual (515 DM 4) affirms this requirement, specifying the basic requirements for what must be contained in a Department EMS. Additionally, the Director of the NPS is reviewing Director's Order #13A, *Environmental Management Systems*, which outlines the requirements for an NPS EMS, and clarifies that an "appropriate" facility for the NPS is each park unit.



**Boston National Historic Park,
Massachusetts**

The NPS EMS Task Group and the NPS EMS

In order to meet requirements described in Executive Order 13148, the NPS Washington Support Office (WASO) led the effort to design an EMS that was specifically tailored to the needs of park facilities. To do this WASO recruited regional and headquarters representatives to serve as members of an EMS Task Group for the purpose of designing an NPS EMS. The Task Group met periodically throughout 2002 and 2003 to discuss how to combine the realities and needs of park facilities with developing and implementing an EMS. WASO and the Task Group designed an EMS that was specifically tailored to the NPS, commenced a pilot program with seven parks to see if and how the NPS EMS would work, and established strategies for developing and implementing EMS at park facilities in 2004 and 2005.

"At first I wasn't looking forward to developing and implementing EMS throughout the National Park Service due to our current workload. But once I saw that EMS tackled recurring environmental management problems by getting at their root cause, I began to think differently. I've come to see that EMS increases management efficiency, reduces recurring noncompliance findings, and reduces environmental management costs."

Carl Wang, Environmental Management Program Leader, WASO

From its inception, the Task Group recognized that the NPS could adopt one of many EMS standards or guidelines that already existed. The 17-element ISO 14001 standard was commonly used around the world and rigorous application of its guidelines, coupled with third party auditing, could lead to formal certification and recognition. Alternatively was the Federal Code of Environmental Management Principles (CEMP), designed by the EPA and established as a voluntary program to encourage federal agencies to enhance their environmental performance. CEMP had 5 broad principles that served as guidelines. The Task Group decided that each of these existing EMS standards or guidelines by themselves were not suitable for the NPS. They decided ISO 14001 would not work well for NPS because it would be too costly for each individual park to obtain the support necessary to undergo the ISO 14001 certification process. Moreover, the rigorous guidelines under ISO 14001 were not reflective of typical park operations, and the paperwork requirements would have been too burdensome. At the same time the CEMP principles were too broad and wouldn't ensure that any actual changes would take place at the park, or ensure that changes were consistent from park to park. Ultimately, after careful review and discussion, the Task Group decided to incorporate elements and ideas from both the ISO 14001 and CEMP models for the NPS Model EMS.

In creating an NPS-specific EMS Model the Task Group sought to design an approach that would facilitate direct implementation at the park level while promoting a degree of nationwide consistency. Consistency was a critical component of the program, since NPS employees frequently transfer from park to park. Having one EMS methodology Servicewide would make staff transitions smoother. At the same time, however, the Task Group wanted there to be sufficient flexibility and choice for each individual park as to how to best manage its environmental activities.

Developing an EMS is the process of creating a structure or framework for the EMS at the park which includes putting together written procedures. Implementation is where the park is actually following the structure and the procedures it has developed. Each park is required to adopt the NPS Model EMS as a guide for developing and implementing its own EMS. The NPS Model EMS is the standard to which all park level EMS will be held. In order to develop and implement the NPS Model, park staff must first understand the Model's eight elements. Even though these eight elements are the same for every facility throughout the NPS, park staff will have flexibility in how they go about developing and implementing each of these elements.

The Eight NPS EMS elements

- Element A: Environmental Commitment Statement
- Element B: Facility Interactions and Environmental Impacts
- Element C: Goals, Objectives, and Targets
- Element D: Roles, Responsibilities, and Accountability
- Element E: Document Control, Recordkeeping, and Reporting
- Element F: Communication
- Element G: Training
- Element H: Monitoring, Measurement, Corrective Action, and Management Review

The NPS EMS Pilot Program

Pilot Program Purpose

In order to improve environmental performance at all parks and to successfully fulfill the mandate of Executive Order 13148, the Task Group believed that all parks should have an EMS in place. The Executive Order requires that "all appropriate facilities" have an EMS in place by the end of 2005. The NPS determined that appropriate facilities will mean all park units. This was decided because every park unit could benefit from having an EMS. NPS Director's Order #13A specifies that each park (in some cases multiple parks with one Superintendent), all regional offices, headquarters, and concessioners must have an EMS. As there are over 380 National Parks, implementation of EMS at each park unit may prove to be quite a challenge.

Considering the diversity of priorities, resources, geographical differences, sizes and complexities among the different national parks around the nation, developing and implementing an EMS at all facilities will be quite a monumental task. Due to the challenge posed by this endeavor, the NPS EMS Task Group sought an approach to EMS that would work for the entire NPS, and not just some of the parks. They wanted a consistent and easy to understand approach that would reach all NPS audiences.

As the NPS Model was a new standard, members of the Task Group felt that it was absolutely critical to have a pilot program to determine if it would be successful. Specifically, the Task Group wanted to learn directly from the parks about how an EMS could be developed and implemented at the park level, and what would be necessary to get such an initiative off the ground Servicewide. The Task Group believed that the pilot program would be an opportunity to learn enough to develop custom materials and assistance based on real life experiences to be used for EMS implementation in 2004.

The Task Group recognized early on that the NPS would benefit from a well planned pilot program. The pilot park experiences would be powerful for educating other parks about the EMS process. Their insight would be an excellent means of determining how information and training materials could help parks, what types of assistance would be needed to assist with the process, and whether an EMS was really feasible at the parks. Ultimately, the Task Group felt that the success of the NPS EMS rested first on a successful pilot program.

Table 1: Pilot Park Fact and Figures

Park	Size (Acreage)	Number of Staff	Mission	Region	Concessioner(s)
Big Cypress National Preserve	Large	97	Natural Resources/ Recreation	Southeast	N
Boston National Historical Park	Small	131	History/ Cultural	Northeast	Y
Cape Cod National Seashore	Medium	95	Natural Resources/ Recreation/ History	Northeast	Y
Glacier Bay National Park and Preserve	Large	63	Natural Resources/ Recreation	Alaska	Y
Padre Island National Seashore	Large	48	Natural Resources/ Recreation	Inter-mountain	Y
Perry's Victory and International Peace Memorial	Small	14	History/ Cultural	Midwest	N
Prince William Forest Park	Medium	41	Natural Resources/ Recreation/	National Capital	Y

Program Methods

The pilot program began in February 2003 and ended December 31, 2003. Seven parks were chosen for the pilot program based on their region, size and complexity, whether they were urban or rural, their mission or purpose, and if they had concessioners. (See Table 1). In February of 2003, representatives from each of these parks were provided with materials and a two day training course to initiate EMS at their parks. The seven parks chosen included Big Cypress National Park and Preserve, Boston National Historic Park, Cape Cod National Seashore, Glacier Bay National Park and Preserve, Padre Island National Seashore, Perry's Victory and International Peace Memorial, and Prince William Forest Park.

The pilot parks were charged with developing an EMS at their park within 10 months. They were provided with only one training session, the EMS Toolkit and some additional educational materials and resources. Specifically, they were asked to gain an understanding of the NPS approach to EMS, become familiar with EMS materials, develop an EMS at their parks, report their successes or lessons learned to the Task Group, help with improving EMS training materials, and mentor other parks during the 2004-2005 roll-out of the NPS EMS program. They were then expected to improve their individual park EMS, through ongoing implementation and evaluation efforts.



Photo of Cape Cod National Seashore, Massachusetts

To develop their EMS, the pilot parks were tasked with designing a system based on the eight elements of the NPS EMS. Throughout 2003 the pilot parks reported their progress in developing their EMS to the Task Group. WASO and the Task Group used this information to improve training and educational materials, and to determine how to better assist parks for the 2004-2005 roll-out. The pilot parks were the first to rely heavily on their own expertise to develop and implement their EMS. In doing so, they became leaders in the NPS EMS effort.

Getting Started: Creating an Environmental Management Team

In order to accomplish developing an EMS based on the eight elements of the NPS Model, each park first needed to identify a team that would facilitate the effort. The EMT was a core group of staff committed to implementing an EMS at the park. Generally, their role was to oversee and manage the EMS process. More specifically, they collaborated with senior management, drafted procedures, promoted effective communication among staff, and incorporated park specific information into each of the NPS elements so that the EMS made sense for the park.

The pilot parks were universally successful in creating their EMTs. The number of participants in the pilot park EMTs varied from four to ten, and included senior management, administration, law enforcement, fire management, interpretation, facility management, safety, visitor protection, and resource management. Each of the pilot parks devised their own mechanisms for making decisions and for determining how often to meet. Support from management either through direct involvement on the EMT, or oversight was prevalent for all the pilot parks. One of the pilot parks combined EMT meetings with another ongoing initiative at the park, through an already existing health and safety council.

- The EMT at Big Cypress National, Park and Preserve included wide representation from park staff including the Deputy Superintendent. They met every two weeks through both the busy and slow seasons. Minutes were recorded at their meetings to keep a record of what took place at each meeting.
- At Boston National Historic Park, the EMT met every six to eight weeks, and included the Deputy Superintendent and five other staff. The group met even if not everyone was present, in order to keep the momentum going. Sometimes meetings would go on if only two to three people could be there. Any major decisions would be brought to the larger group for a vote, but smaller meetings kept the process alive.
- At Cape Cod National Seashore, staff who had critical job duties relating to EMS were selected to be part of the EMT. Eight people were on the EMT including the Deputy Superintendent and an Environmental Specialist hired to coordinate the EMT meetings and the EMS process. To begin the process, the EMT met for two half day planning sessions, but as time constraints became too much, the EMT decided to meet for shorter time periods on a monthly or bi-monthly basis. Minutes were recorded at each meeting.
- The Superintendent at Glacier Bay National Park and Preserve assigned staff to be members of the park EMT. At the start, the EMT laid ground rules for the meetings. For example, three members needed to be present in order for any changes to be accepted that would impact the EMS, and all decisions would be made by consensus. The group met more frequently during the “low” season when things were slower, and less frequently during the “busy” season. One member was from the neighboring United States Geological Survey (USGS), because the park and the USGS had an agreement concerning waste disposal.
- Staff at Padre Island National Seashore, were concurrently working toward obtaining OSHA Voluntary Prevention Program status, and combined some of the efforts from that process into the EMS process. Their EMT included the Deputy Superintendent and six other park staff. The EMT assigned two EMT “co-leaders” to share the responsibility of running the meetings and moving the EMS process forward.
- Perry’s Victory and International Peace Memorial had the smallest EMT consisting of only four members. Members of the EMT were all maintenance staff. Support was provided by the Superintendent, although the Superintendent did not attend meetings. Only one EMT meeting took place at Perry’s Victory and IPM.

- At Prince William Forest Park, EMT efforts were combined with an ongoing health and safety council that was already established. The concept of EMS was first raised as an “agenda” item for the health and safety council. The group had 10 members representing a wide range of staff including mostly program managers and division chiefs from all park divisions. Included in the group was the Deputy Superintendent. The group met monthly and more often when needed.

Lessons Learned

Pilot parks representatives emphasized the importance of management support in having a successful EMT. Involvement from senior management either in the form of direct participation at EMT meetings, or assigning staff to become EMT members helped lend more credibility and purpose to the process. Where Deputy Superintendents were directly involved, the EMT was likely to meet regularly, report on progress, and keep up the momentum. EMTs were also more likely to incorporate management priorities into the EMS, and likewise incorporate EMS principles into management priorities when a Deputy Superintendent participated.

Staff commitment was another factor essential for a successful EMT. Despite the fact that time and availability were always tight for all the parks, committed staff were able to keep the process moving forward. Most of the pilots went ahead with scheduled meetings even if only two or three people could show up to keep the process going forward. Others held meetings more frequently during the slow season to make up for time missed when the park was really busy.

In general, EMT members at the pilot parks thought that it was critical to have people on the EMT who were by nature “doers,” meaning that they would follow through with what was asked of them as an EMT member. They expressed that it was important to include both “big picture” personality types as well as “detail” oriented people. The EMS process would draw on the strengths of both tendencies.

A few logistical mechanisms worked well for the EMT’s. Determining up front how decisions were going to be made at EMT meetings kept consistency at the meetings, as did setting meetings on a regular schedule, and setting an agenda for upcoming meetings. Some EMT’s recorded their meeting decisions and minutes and posted them onto the park intranet. This was a good way to communicate the EMS process to all interested staff. Combining EMT meetings with other ongoing initiatives at the park also seemed to help move the process along.

EMS at the Park Level: Pilot Park Implementation of the Eight Elements

The NPS EMS contains eight elements designed to promote consistency throughout the NPS. They are the building blocks of the NPS EMS, and are to be implemented by all parks. Although each park will use the same eight elements in their EMS, individual parks are encouraged to tailor each of the elements to their park’s specific needs.

The Eight Elements

The eight elements begin with a commitment to environmental management, and conclude with a review and measurement of success in developing and implementing the EMS. They are intended to be cyclical in nature, and together they provide a structure for a complete system. After all the elements of the EMS are developed and implemented, the cycle begins anew with a renewed commitment to stronger and better environmental management. The NPS EMS is meant to be a long term and sustainable process as activities and circumstances are continually changing at park facilities. The eight elements provide a framework and structure for a continuous system to improve environmental performance.

The Pilot Park’s Development of EMS

The pilot parks each reached different levels of EMS development. Some were only able to get to the first element, while others completed all eight with a renewed enthusiasm to continue on with EMS in years to come. Table 2 is a summary of how far each of the pilot parks were able to move through the process by December 31, 2003. Most of the pilot parks have continued to move forward with their EMS into 2004.

Table 2: NPS EMS Elements Implementation Summary

	Element A: Commitment Statement	Element B: Facility Interactions & Impacts	Element C: Goals, Objectives & Targets	Element D: Roles Responsibilities, & Accountability	Element E: Documentation & Recordkeeping	Element F: Communication	Element G: Training	Element H: Monitoring, Measurement, Corrective Action & Management Review
Big Cypress National Preserve								
Boston National Historical Park								
Cape Cod National Seashore								
Glacier Bay National Park and Preserve								
Padre Island National Seashore								
Perry's Victory and International Peace Memorial								
Prince William Forest Park								

Implementation	Full	Partial	Not Yet Implemented

Element A: The Environmental Commitment Statement

Director's Order #13A:

- Each facility will develop and document a commitment statement affirming the facility's intent to strive for exemplary environmental management.
- The environmental commitment statement should be site-specific to the facility that is undertaking an EMS as well as incorporate appropriate broader Regional and Servicewide goals and objectives, as may be available and appropriate.

The pilot parks all began their EMS process by first completing an Environmental Commitment Statement (ECS). The ECS served as the cornerstone and vision for the pilot park's environmental management activities. It provided the overall direction and tone for the EMS process at the park. Its purpose was to affirm a commitment to environmental protection and management from park managers, staff, and partners. It was created by the EMT or by park management, and signed by the park Superintendent. In most of the pilot parks, the statement included both broad and specific attributes and served as guidance for the park's environmental activities. It was meant to be a "living" statement, and could be changed continually to reflect changes with the EMS process.

Certain factors were included in the pilot park's ECS. It committed the parks to compliance with all applicable federal, state, and local laws, regulations and policies addressing the environment, health, and safety. In some cases, the ECS promoted environmental leadership by incorporating the concepts of pollution prevention, waste reduction, best management practices, and environmentally preferable purchasing in all park management activities.

All of the pilot park's drafted an ECS. Some chose to create their park EMS from scratch, while most pilot parks used existing language. Existing language included park enabling legislation or mission statements, the park general management plan, Executive Orders and Directors Orders, information from the Environmental Protection Agency website about EMS, and the NPS EMS training materials and Toolkit. Each park's ECS was unique because each park had its own mission and management priorities, all of which were reflected in the statements. All but one pilot park had the ECS signed by the Superintendent by the end of December 2003.

Some of the pilot parks posted their ECS at work areas as well as in the visitor's center to inform both staff and the public of the park's commitment to environmental management. This was an effective way to affirm the park's commitment to the environment.

- At Big Cypress National Preserve, the EMT used language primarily from the park's enabling legislation to draft the ECS. The ECS committed the park to safeguarding and enhancing the ecological processes and the natural, scenic, recreational, and educational values of the Big Cypress Watershed through exemplary environmental leadership and management. Big Cypress National Park and Preserve planned to post the ECS on the park intranet site as well as on employee bulletin boards and at key locations throughout the park. The EMT intended to review the ECS annually.
- Boston National Historic Park's EMT created their ECS by looking to the park's mission statement, enabling legislation and ECSs created by other pilot parks. Because the mission of the park is primarily one of history and culture, the ECS differed quite a bit from other more natural resource based parks. Boston National Historic Park pledged commitment to being "a leader in environmental stewardship of cultural resources in an urban setting."
- At Cape Cod National Seashore, the EMT had already put together an ECS before attending NPS EMS training. The statement committed the park to preservation of natural and cultural features of Outer Cape Cod, including beaches, marshes, ponds, inlets, dunes, bays, heathlands, and historic landscapes through environmental leadership. The EMT at Cape Cod National Seashore used language from the EPA EMS website, and the park's overall mission for drafting their statement. After it was signed, the ECS was posted at all employee work sites, but not at visitor facilities. Cape Cod National Seashore wanted to complete a full EMS cycle before publicly declaring the EMS program and its intent to visitors.

- The ECS at Glacier Bay National Park and Preserve, incorporated the concept that the EMS is a continual process. The park referred to the EMS mission as a “moving target” and one which will “require continual effort and commitment of energy and resources.”
- Padre Island National Seashore’s ECS focused on shoreline protection. The ECS committed the park to environmental leadership as well as working cooperatively with other government, partners, and organizations to promote environmental management within the surrounding communities of the park. The park planned to post the ECS on the park intranet site as well as on employee bulletin boards and at key locations throughout the park. The EMT and Superintendent planned to annually review the statement.
- The EMT at Prince William Forest Park focused on the park’s role as a leader in environmental protection and management. The park’s priority of environmental leadership was evident in its ECS. The statements specified that every employee take “ownership and responsibility” in the park’s Environmental Management System. The EMT planned to annually review the ECS, and make changes to reflect any new priorities.

Lessons Learned

For most of the EMTs, drafting the ECS was not a difficult process. Resources and language were already available. Using existing language as a starting point was an effective and efficient means for the pilot parks to complete this element quickly. All of the pilot parks were able to partially complete this first step of their EMS.

Teamwork was important for the successful completion of this element, and it set the stage for relationships within the EMT for the rest of the EMS process. Support and commitment from individual EMT members kept the process moving through this first step, especially when members attended EMT meetings and did what was asked of them.

All of the pilot parks agreed that management support during this initial step of the process was critical. It allowed the EMT to move on to the next element of the EMS, and encouraged the EMT to work toward developing and implementing their park specific EMS. A signature by the Superintendent was important not only for completing this element, but for ensuring further success with EMS down the road. Without management support, this first step and later steps could not be completed.

Park Profile: Perry’s Victory & International Peace Memorial

Perry’s Victory and International Peace Memorial, a small park in Ohio, held an EMT meeting, discussed the EMS process, and drafted their park ECS. They took information from the EPA EMS program to create their ECS, while incorporating language from NPS Directors Orders. Unfortunately, the ECS was not signed by the Superintendent because the Superintendent moved to another park in the spring of 2003. As Perry’s Victory and IPM was the smallest of all the pilot parks, with only 14 staff, it struggled to keep the momentum going for the EMS process when other situations (like flood damage to the park visitor’s center) took precedence. Although unable to fully develop even the first element of the NPS EMS, Perry’s Victory and IPM illustrated to the Task Group that not all parks will be able to develop an EMS from a two day EMS training, within 10 months. Some additional time and follow up assistance may be necessary for some of the parks.

Element B: Facility Interactions and Environmental Impacts

Directors Order #13A:

- Each facility will establish, implement, and document, procedures that identify how its activities interact with and impact on the environment.
- Selected interactions and their significant environmental impacts will establish the basis for setting specific environmental goals, objectives, and targets. The EMS approach is intended to move the NPS beyond compliance and to encourage environmental leadership in all aspects of a facility's environmental interactions. Compliance should be considered a central component of an EMS, but it should not form the exclusive goals, objectives, or targets.

The second element of the NPS Model, development of a list of activities and environmental impacts, was one of the most challenging elements in the EMS process for the pilot parks. Pilot parks were encouraged to think beyond their everyday operations, and to instead examine the influence that park activities had on the surrounding environment. This was difficult for some of the pilot parks because it involved both looking at broad concepts and narrowing down those concepts into specific priorities.

Six of the pilot parks completed their facility interaction and impacts assessment in two steps. First, the EMT reviewed the park's activities and interactions with the environment, and then determined how those activities and interactions impacted the environment. Second, the park prioritized the negative impacts and determined which were the most significant. The assessment was done primarily by the EMT, but often included a wider representation of staff involved in the park's operations. In some cases, existing information from compliance audits and program operations were used to guide the process.

The methods used by the pilot parks to determine the park's significant impacts varied from park to park. It was essential for parks to prioritize impacts based on a specific set of criteria. In order to allow for "ownership" of the process, it was important that staff understand how and why certain impacts became priorities at the park. Some of the pilot parks documented the procedure used for prioritization so that staff would understand how the EMT decisions were made through this assessment.

To avoid being overwhelmed by the many activities, interactions and environmental impacts at each park, some of the pilot parks chose to focus on only a few environmental interactions or impacts to start their EMS. Some of the EMTs completed a comprehensive list of park activities and interactions, focusing on only a few impacts to start their EMS process. Other EMTs chose to focus instead on a short list of activities and interactions to start their EMS, and work with the resulting impacts derived from those interactions. In both cases, new interactions or impacts were to be revisited after the EMS was operating and functional as a system. Choosing only a few activities or impacts at a time helped the pilot parks jumpstart their EMS process, and allowed them to modify the EMS to work for their specific park needs. Two parks shortened the list of park activities, and three shortened the list of environmental impacts for their first EMS cycle. Two of the pilot parks used outstanding environmental audit program findings as a guiding factor. Four of the parks simply followed the steps outlined in the NPS EMS Toolkit.

The pilot parks were unclear as to how activities and impacts should be grouped together for the assessment. Some of the pilot parks decided the best way to group the activities was by division, department, or park location. Other parks organized the activities based on the type of activity, for example fuel storage or waste management.

- Big Cypress National Preserve quickly became bogged down in details upon starting its analysis of facility activities and interactions. The EMT had a comprehensive and detailed list of activities and impacts for the park, but could not agree on how to prioritize them. The regional office stepped in to assist the EMT and helped them make decisions rather than focus too much on the details of all the park's operations. Ultimately the EMT agreed to focus on two activities for the first cycle of the park's EMS. These activities crossed through all park program divisions, and were also environmental audit findings relating to solid and hazardous waste generation, storage, and disposal activities. EMT members thought it was a good idea to create a registry of "positive" impacts in addition to the "negative" impacts during the assessment, so that staff would be reminded of the positive things the park had already done.

- Boston National Historic Park got off to a slow start with this element, and visited nearby Cape Cod National Seashore for assistance. After seeing how Cape Cod National Seashore completed their facility interaction and impacts assessment, the EMT at Boston National Historic Park was able to develop a comprehensive list of park activities, and interactions, and followed the NPS EMS Toolkit to narrow down their list of impacts. Ultimately, for the first cycle of the EMS process, Boston National Historic Park prioritized its impacts based on existing initiatives and programs, and what would be easiest to get started at the park.
- Cape Cod National Seashore looked to the nearby Coast Guard station for advice because the Coast Guard was already working on its own EMS. Although the Coast Guard EMS was slightly different from the NPS Model EMS, the Coast Guard provided Cape Cod National Seashore with useful tips and assistance. Ultimately, Cape Cod National Seashore decided to follow the NPS EMS Toolkit in order to promote consistency for the NPS. The EMT found the grouping of its facility activities and interactions to be a challenge. They weren't sure if they should group activities by type (e.g. fuel storage or recycling) or by location (e.g. vehicle maintenance shop or headquarters). Ultimately Cape Cod National Seashore ended up grouping activities by both type and location based on what they thought would work best for the park. Once the activities were grouped, the EMT determined what the resulting impacts were and prioritized them into a manageable list.
- Glacier Bay National Park and Preserve kept its analysis simple by focusing on only two regulatory based facility activities for the first iteration of their EMS process. The EMT intended to expand the list of activities as the EMS process became more solidified. A number of impacts were associated with each of the two park activities that the EMT chose to start with. By shortening the list of facility activities up front to two, Glacier Bay National Park and Preserve's EMT was able to make the facility interactions and impacts assessment manageable for the park.
- Representatives from Padre Island National Seashore also followed the NPS EMS Toolkit to conduct the facility interactions and impacts assessment. Because Padre Island was integrating their EMS process with their efforts to obtain OSHA VPP status, the EMT recognized a critical need for better documentation. Documentation and planning was included as a key component of the facility interactions and impacts assessment.

Lessons Learned

Getting started was a challenge for most of the pilot parks. This element forced EMT members to look at abstract concepts and narrow them down into specific impacts. Categorizing activities and prioritizing them is an involved process, which took a lot of discussion and group compromise. The process was one that took a long time to complete, often over the course of many months.

Persistence helped the pilot parks generate a list of park interactions and environmental impacts. Because the pilot park EMT members felt that it was more important to do something rather than nothing, they were able to develop this part of their EMS. They all felt that it was important to keep the process moving and the momentum going despite any setbacks or struggles. Looking back, most of the parks thought that going through this process was valuable for the park and its understanding of the EMS.

"Doing the facility interaction assessment is by far the hardest thing about the whole process...We eventually decided that maybe this was normal and our ratings/priorities would change over time as we made progress addressing problematic facility activities."

Mike Murray, Deputy Superintendent, Cape Cod National Seashore

Focusing on only a few issues at a time and keeping the process simple was a key component to success for the pilot parks. Preventing parks from feeling overwhelmed, and helping to steer parks in a direction where they could actually make progress was also critical. Pilot park representatives stressed that it was important not to get too bogged down in the details, but to focus on the larger vision of what the park wanted to achieve in improving environmental management.

EMT members at the pilot parks thought that it was important to focus on the “big picture” when tackling this element. It was important to draw on the strengths of those on the EMT who were able to see the overall vision and purpose of the EMS, rather than getting stuck on small details. For this element, pilot parks found that EMT members having tendencies to support broader concepts and ideals helped move this part of the EMS process along. Those who focused too much on details ended up slowing this phase down.

At least two of the parks, Cape Cod National Seashore, and Boston National Historic Park found that working with a partner outside of the park was essential to jumpstarting their process. Experience, insight, and assistance from others was invaluable to their momentum. Other pilot parks expressed interest in more hands-on support or site visits to help jumpstart the EMS process for other parks. Most of the pilot parks thought that the NPS EMS Toolkit was helpful with this element despite the element’s difficulty, and followed it closely.

Park Profile: Prince William Forest Park

Prince William Forest Park charged its already existing employee safety council with developing and implementing the park EMS. This council was already familiar with many issues that would be part of the park EMS, enabling the combination of both environmental protection and safety issues into one oversight committee. After completing its ECS, the council assessed environmental activities and their environmental interactions taking place at the park by involving all park staff. All program areas at the park were responsible for identifying facility activities and any environmental impacts. Twenty two environmental activities were identified and forty nine environmental impacts. Impacts were ultimately narrowed down into four priority areas, which were based on the park’s existing management priorities. The four areas identified were:

- Hazardous materials and waste management
- Resource damage protection
- Energy conservation
- Green procurement and sustainable practices.

To prioritize environmental impacts, the park followed the examples provided in the NPS EMS Toolkit. Ultimately, each of the management priorities coincided with initiatives already taking place by the park’s green team.

Element C: Goals, Objectives, and Targets

Director’s Order #13A:

- Procedures to identify specific goals, objectives, and targets based on and relating to significant environmental impacts will be developed, documented, and then implemented.
- Identified goals, objectives, and targets will be quantified, and a timeframe proposed for their achievement.
- Assessment of the timely achievement of goals, objectives, and targets will be used by NPS leadership in a review of the EMS.
- Continual improvement includes a requirement for periodic reviews of the relevance and achievement of documented goals, objectives, and targets. After these reviews, additional goals, objectives, and targets will be chosen and documented as applicable.
- New goals, objectives, and targets can be added at any time. New goals, objectives, and targets will always be set when previous goals, objectives, and targets have been accomplished or are otherwise determined to no longer be relevant.

To develop the third element, the pilot parks determined how they would achieve a reduction in the significant impacts identified in element B. Here measurable objectives and targets, were developed as well as a plan calling for specific action steps to ensure that negative impacts were reduced within a given time frame. This is where the larger concepts discussed in element B were put into motion, into the form of an action plan.

Setting park level objectives and targets allowed the pilot parks to qualify and quantify actions to be taken to reduce or prevent significant impacts established in element B. These action steps reflected language in the park's ECS and also related to the park's management priorities. Defining objectives and targets was an important step in the EMS process, because it specified what parks actually needed to do to improve their environmental management. Objectives and targets promoted continual improvement, environmental compliance, pollution prevention, and were specific to an individual park's needs. Most pilot parks set realistic objectives and targets so that they could be accomplished. The pilot parks did not want to set themselves up for failure.

After setting objectives and targets, parks formed an Environmental Management Plan (EMP). The EMP was designed for each of the park's targets. It described specific actions that were required to accomplish a specific target. For example it included information as to how the target was to be achieved, who was responsible for achieving it, and what resources were available. Once the target was achieved, the EMP would "go away" as it would have served its purpose and was no longer necessary. In essence the EMP was meant to be a temporary tool to help the park reach its objectives and targets.

The parks were successful in developing this element of their EMS. Despite the fact that many of the parks were confused over the terminology of "goal," "objective," "target," and "environmental management plan," six of the seven pilot parks created achievable action items to reduce their significant impacts. Three of the pilot parks developed a list of objectives and targets, and a separate matrix for their EMP. Three of the pilot parks combined the objectives and targets matrix with the EMP matrix.

- The EMT at Big Cypress National Preserve developed three objectives with a specific target to reduce solid waste by 10% by 2005 using 2002 as the base year. The EMT listed four implementation activities associated with these objectives and targets. Overall, Big Cypress National Preserve's staff intended to achieve chosen objectives and targets within the calendar year (for those that could be completed within the calendar year).
- At Boston National Historic Park the EMT combined its objectives and targets together with an EMP. They created one matrix that included the goals and targets, along with responsible parties, and when completion of a project or an inspection was due. One of Boston National Historic Park's targets was to reduce electrical usage by 5%. Specific implementation activities included using energy efficient lamps and bulbs, and developing partnerships with lamp companies for installing new energy efficient lamps in areas under the park's control.
- The EMT at Cape Cod National Seashore also combined its objectives and targets with its EMP. Their EMP is based on a 16-18 month time frame that would extend beyond the 10 month pilot program period so that the EMS would be synchronized with the park's annual performance planning cycle. One of Cape Cod National Seashore's targets was to reduce the volume of hazardous waste by 5% using 2003 as a baseline. Specific action items include confirming the 2003 baseline, identifying ways to reduce hazardous waste, and reducing waste by establishing product purchasing guidelines.
- Padre Island National Seashore's EMT established more than ten objectives and targets. The EMT combined objectives and targets with a summary of activities to be undertaken for each target, along with a completion date. Two of the targets included organizing chemicals at the park and developing a use friendly chemical inventory. Action items to reach these targets included purchasing appropriate storage lockers, creating information placards and making them visible to staff, building a computer inventory of chemicals, utilizing the inventory to reduce over buying and buying multiples of the same type of product (for example multiple brands/types of antifreeze or bug spray).
- At Prince William Forest Park, the EMT developed sixteen objectives, and eighteen targets. The EMT created two tables for objectives and targets, and the park's EMP. One of the park's targets included reducing energy consumption at the park by 2% by the year 2005, using the average of 1990-2000 as a baseline. The park Superintendent and Environmental Manager were responsible for approving the

goals, objectives, and targets set by the EMT. The EMT incorporated a mechanism in the park's EMS for tracking accomplishments and progress made toward achieving targets.

Lessons Learned

The pilot parks involved wide representation from the different program areas at the park during this stage of the EMS process. Because the changes required to reach the park's targets were to be completed by staff in specific program areas with specific expertise, it was important for the EMT to understand the realities in achieving certain targets. Where staff with program expertise assisted the EMT in this process, realistic, measurable, and achievable goals were set.

The pilot parks emphasized the importance of keeping the targets measurable and achievable. It was important not to overwhelm staff and management. It was not a good idea to set the park up for failure. Some EMTs found the best way to avoid overwhelming staff or setting the park up for failure was to focus on activities that were already beginning to take place, or to focus on activities that would be easier to get started. The pilot park EMTs thought it was good to have detail oriented people on the EMT put the pieces together in forming the objectives and targets, and the components of the EMP.

Park Profile: Glacier Bay National Park & Preserve

In order to keep the scope of their EMS manageable for the first cycle, the EMT at Glacier Bay National Park and Preserve focused on two facility activities and impacts with the intention of expanding their list later. After prioritizing the resulting environmental impacts, Glacier Bay National Park and Preserve followed the NPS EMS Toolkit and developed two goals: to better handle hazardous and solid waste. The EMT then discussed and determined the best way to reach these goals by developing specific objectives. Their objectives were to reduce the volume and types of waste handled. In turn their targets were to reduce types of hazardous waste by 20%, and to reduce the volume of solid waste by 3%. Next, Glacier Bay National Park and Preserve created an environmental management "action" plan for each target. The plan included who would be responsible for reaching the target, what actions would be taken to reach the target, how much time would be involved, how much money or budget was available, and when the target should be completed.

Goal	Objective	Target	Completion date
Better Handle Hazardous Waste	Reduce the volume and types of hazardous waste	Reduces types of hazardous waste by 20%	Interim report due 9/30/03 and project completion due 12/30/03
Better Handle Solid Waste	Reduce the volume and types of solid waste	Reduce volume of solid waste by 3%	Interim report due 9/30/03 and project completion due 12/30/03

Element D: Roles, Responsibilities, and Accountability

Director's Order #13A:

- Each facility will assign roles and responsibilities that allow for the goals, objectives, and targets to be achieved. Examples of responsibility include the oversight of procurement or management of the facility's solid waste program. Identified responsible parties must be responsible for the environmental performance of the identified activity.
- Personnel, budget, and organizational considerations, among others, will be included in assigning roles and responsibilities in order for the EMS to function effectively.
- Each facility should engage appropriate stakeholders, including concessioners, in identifying goals, objectives and targets. Concession Management will ensure that contract documents and evaluation criteria and standards identify and incorporate the appropriate park EMS goals, targets, and objectives.
- Personnel with responsibilities identified above will have performance evaluation elements added to their position descriptions and/or annual performance plans and will have their performance in carrying out such responsibilities assessed as part of the annual review of their job performance.

The pilot park EMTs believed that identifying program responsibilities was critical to developing a functional EMS. Each staff member needed to know what was required of him or her in order to perform tasks associated with the EMS. EMT's therefore assigned specific roles and responsibilities to staff in order to make staff accountable for their actions, and to help implement the EMS.

Six of the pilot park EMTs created a table or chart consisting of EMT members along with his or her role on the EMT, and his or her contact information by phone or e-mail. A separate table describing roles and responsibilities of staff affected by the EMS including the staff person's name, position, and a general description of their environmental responsibilities was also developed. The tables included park-specific positions, expected roles and responsibilities regarding day to day environmental management, as well as EMS specific responsibilities (such as updating the EMS plans and procedures). Ultimately this ensured that employees at the park were aware of what was expected of them, and provided staff with a general understanding of what was going on relating to environmental management. It also served as a clearinghouse of contact information so that all park staff would know who to contact about specific park operations impacting the environment.

The pilot park EMTs followed the NPS EMS Toolkit in developing this part of their EMS. The EMT developed a list of EMS staff roles and responsibilities, while the Superintendent approved them. The pilot parks acknowledged that EMS implementation is "everyone's job" at the park. Representatives from the pilot parks thought that it was important to designate staff with specific responsibilities to ensure accountability. Some of these roles and responsibilities were included in employee job descriptions or employee performance reviews.

- At Big Cypress National Preserve, the EMT reviews position descriptions and job responsibilities for all personnel to ensure that critical environmental responsibilities are identified and incorporated into position descriptions. The park EMT thought it was important for employees to be informed of their EMS responsibilities when they started their jobs. The EMT and management agreed that failure by employees to complete their EMS responsibilities could result in disciplinary action. The overall sentiment was that EMS is everyone's responsibility, and that it is important to make sure that all staff understand their role in the EMS process. The Deputy Superintendent at Big Cypress National Preserve thought that rewarding employees for their hard work toward developing and implementing EMS was a good way to create incentives for participation.
- The EMT at Boston National Historic Park wanted all employees to take responsibility for implementing the EMS. In their roles and responsibilities matrix, they included a specific task description for "all employees" to know the components, goals, and objectives of the park's EMS. Boston National Historic Park's matrix contains both roles and responsibilities for the day to day environmental management at the park as well as the roles and responsibilities in developing and implementing the park EMS.

- Glacier Bay National Park and Preserve’s EMT developed a matrix of roles and responsibilities containing specific staff, program areas and EMS responsibilities. Included were the Superintendent and Deputy Superintendent, as well as all employees at the park. Staff in certain program areas were given specific responsibilities relating to the EMS. For example, the roads and trails staff person was responsible for ensuring that the EMS was integrated into roads and trails activities.
- At Padre Island National Seashore, the EMT considered sound environmental and safety practices to be everyone’s job. This responsibility was incorporated into all position descriptions as a general performance element. A table of responsibilities was created and included names and positions of staff to implement the EMS.
- At Prince William Forest Park, the EMT reviewed current responsibilities of each program area within the park as well as specific job responsibilities. Any duties assigned by the EMT were approved by the Environmental Manager and the Superintendent. All employees were responsible for fully implementing the EMS into their daily work operations. EMS responsibilities were incorporated into position descriptions as a general performance element for environmental management. An EMS statement was included in the employee performance plan and results report for FY2004.

Lessons Learned

Management buy-in was a critical component of completing this element. To ensure accountability for the roles and responsibilities defined, management had to support the delineation of environmental roles and responsibilities that the EMT designated. This was especially true for those parks that included changes in job descriptions or employee performance criteria to reflect the EMS. Management also created incentive programs to reward employees for working extra hard toward implementing EMS.

Representatives from the pilot parks also thought it was important to include broad representation from the park in order to assess the reality of including specific responsibilities into job descriptions and employee performance criteria. Wide representation from park staff raised the likelihood that more staff would talk about and understand their roles and responsibilities concerning implementation of the EMS, and be more inclined to pay attention.

Park Profile: Cape Cod National Seashore

Staff at Cape Cod National Seashore followed the NPS EMS Toolkit closely in tracking roles and responsibilities. They developed a chart detailing all of the roles associated with implementing the park EMS. Specifically, the chart included a position title, a person’s name, and a general description of that person’s role in the EMS process. Roles tended to correspond to facility activities and interactions, or program areas that staff were involved and familiar with. The EMT felt strongly that all park staff had a role in the EMS process, so the table included a category for “all employees” followed by a general description of required actions. In addition to a roles and responsibilities chart, the EMT also designated persons with specific tasks corresponding to achieving targets in the park’s EMP. Making responsibilities known to all staff was a means of increasing employee awareness and involvement with EMS. The EMT thought that incorporating new values into routine activities would make the process less daunting, and appear more useful. Cape Cod National Seashore’s EMT integrated EMS responsibilities into their employee performance plans to ensure that staff would understand the importance of EMS.

Element E: Documentation, Recordkeeping and Reporting

Director's Order #13A:

- Documents and records are used to demonstrate a facility's compliance with applicable laws, standard operating procedures, and a facility's adoption of applicable best management practices in operational and management activities. Documents and records will serve the same purpose within an EMS.
- A facility will develop procedures that, when implemented, will demonstrate that the organization has carried out all the elements necessary for implementation of the chosen form of the EMS.

All of the pilot parks had a variety of paperwork relating to environmental management. Development of a document and recordkeeping control system provided a way for the pilot parks to track and monitor all of their paperwork. It ensured that documents and records were kept up to date and were maintained in the proper locations. It ensured that everyone on staff would have access to the most current and correct information.

Most of the pilot parks followed the NPS EMS Toolkit (with modifications to fit specific needs at individual parks), in order to develop a document and records control system. The pilot park's document and recordkeeping systems referenced the park's documents and records in their EMS manual through a table of documents and records. Four of the parks created two separate tables for their system, one for documentation and one for locating park records, while two of the pilot parks combined the two. Information included where the document was located, who was responsible for its upkeep, and the document or record title. Where possible, the pilot parks had both paper and electronic copies of documents. This enabled the EMTs to quickly and easily track down documents and records, as well as have a better understanding of the operations taking place at the park.

- At Big Cypress National Preserve, documents and records were referenced in two separate tables. Documents included the entire EMS process and internal assessments, while records included NEPA paperwork, cultural resource documents, environmental records, Notices of Violation, and more. An EMT member was designated to review the documents and records system each year.
- Boston National Historic Park's EMT developed two separate tables for documents and records, based primarily on the guidance provided in the NPS EMS Toolkit. Included in the documents table were the location of the document, and who was responsible for updating the document. Some of these documents included the steps taken as part of the EMS process. The records table included the location of the record, a column for the specific version of the record, and to whom the record must be submitted.
- At Cape Cod National Seashore, the EMT combined into one table a documents and records list. Included were documents relating to the EMS process, as well as permits, air emissions statements, and training logs. The table listed where the document or record could be found in hard copy and electronic format. Although not all documents had been located or assigned a number, the park developed a system to assign numbers for those documents once they were found. Each document had a person assigned to it who was responsible for any updates. The EMT struggled with updating documents at outlying areas of the park beyond headquarters. It was difficult to ensure that staff were placing the paperwork in the appropriate binders in a timely manner. Eventually, the park designated its Environmental Protection Specialist to keep the EMS documentation system up to date throughout the park.
- Glacier Bay National Park and Preserve developed two separate matrices for its documents and records. Documents were assigned a unique number, and a specific party was designated to update them. They were listed by a hyperlink or title so that staff could find them in the park computer system. Records were listed and specified by version and responsible party. Location was designated by office and if applicable internet or intranet website.
- Prince William Forest Park combined their documents and records into one table. Their table included the document name, location, person responsible for update, and when a review of the document was required. The EMT opted to not start the EMS with a document numbering system, because they

didn't think it was helpful to park staff.

Lessons Learned

The pilot park EMTs immediately saw benefits from being able to track down their documents and records. Some of the pilot park representatives thought that this section was easy enough to develop, but tough to maintain. Diligence and persistence as well as a mechanism for periodically reviewing the documents and records system made the sustainability of the system more effective.

At least one of the parks had difficulty in ensuring that people outside the EMT understood the importance of keeping documents and records where they needed to be. To overcome this, the park tried different mechanisms to see what would work best. Ultimately, the park's flexibility on how to ensure that documents would be where they needed to be, allowed them to move forward with the creation of their own unique documents and records system.

"This element was easy to implement but hard to maintain...It's not the Toolkit that is difficult to understand, it's staying on top of it after it's done."

Dave Brouillette, Deputy Superintendent, Boston National Historic Park.

Park Profile: Padre Island National Seashore

Padre Island National Seashore jumped right into the EMS process with the intention of tackling documentation issues first. As the park was seeking OSHA VPP status at the same time they were starting their EMS process, documentation became a key focal point. In following the NPS EMS Toolkit for a documentation and record control system, Padre Island staff developed a system to have all the necessary information in one place, and so that paperwork could be easily updated. Their formal file management system kept all documents at Headquarters, and assigned the EMT leader responsibility for maintaining and updating the documents and records. Both hard copies and electronic copies of documents and records were made available, and all were labeled with a unique number. A master table of key documents included in the park's EMS manual described where documents were located in the park. The system was designed to assist with compliance with all reporting requirements. Staff were better able to understand what the legal and regulatory reporting requirements were upon putting together their documentation system. Staff noticed a positive difference in organization since the document control system has been in place.

Element F: Communication

Director's Order #13A:

- Internal Communication – The NPS will work to make sure employees and supervisors stay involved with environmental management, understand the environmental commitment statement, and provide a consistent message about the facility's commitment to environmental performance and leadership.
 - Each facility will develop and document a system to provide for communication of all information necessary to implement the EMS to employees.
 - The communication system will consider facility activities and their environmental impacts that are the current focus of the EMS.
 - The communication system will recognize parks' unique relationship to partners, including concessioners, by both seeking their input to, and informing them of, EMS issues and developments.
- External Communication – The NPS will work with communities, external stakeholders, and the public to develop, and share outstanding environmental accomplishments through appropriate media such as wayside exhibits, brochures, and educational materials.
 - Beyond merely informing those who can contribute to a successful EMS, additional public participation and involvement guidance can be found in DO 75A: Public Participation and Involvement.

A communication strategy was vital to the pilot parks for introducing, educating, facilitating, and promoting environmental management to park staff and the outside community. Quality of communication was going to be an integral part of implementing the EMS, as it would aid with the understanding of both the purpose and process of the EMS. This was an easy element to overlook, but it was important for the pilot parks not to dismiss it.

Six of the pilot parks were successful with developing this element and used the NPS EMS Toolkit as a guide to creating a chart of communications strategies for personnel, partners and community groups, regulatory agencies, and the general public. The communication plan or strategy for the parks included components addressing communication with staff and the public; both internally and externally. Internal communications provided park staff with key information about the EMS process. Methods included trainings, staff meetings, fact sheets, formal and informal talks, e-mails and memos, bulletin board postings, telephone conversations, use of the park intranet website, and park newsletters. External communications were to be conducted through NPS public announcements, and the NPS website in conformance with NPS and regional protocols. External communication was also done through press releases, community meetings, external memoranda, public bulletin postings, public service announcements and park interpretive programs.

At almost all the pilot parks, the EMT was charged with maintaining the EMS communications strategy, while the Superintendent was to review any external communications. All six of the pilot parks completing this element required that external documentation follow NPS and regional protocols.

- While the rest of the pilot parks created a general communication strategy for their EMS, Big Cypress National Preserve focused its communications strategies on specific targets and objectives that the park created in element C, as well as a general strategy for day to day activities. Methods of communication at Big Cypress National Preserve included trainings, staff meetings, safety and environmental meetings once a month, fact sheets, formal and informal talks, internal e-mails and memos, and bulletin board postings. A matrix included the audience, mechanism for communication, content of communication, and who the responsibility fell upon for a particular communication.
- At Cape Cod National, Seashore, the EMT developed a communication strategy table specifying the audience to communicate to, the mechanism for communication, the content of the communication and who was responsible for ensuring that the communication took place. In most cases the Deputy Superintendent, Division Chief, Environmental Protection Specialist, or Front Line Supervisor were responsible for ensuring that all staff were provided with the correct information. Mechanisms for communication to staff included informal personal contacts, squad notes, written policies and proce-

dures, staff memos and e-mails, training sessions and tailgate sessions, and all hands meetings. Mechanisms for communicating with the outside public, partners, and regulatory agencies were also outlined in the strategy.

- Glacier Bay National Park and Preserve's EMT designated its Superintendent responsible for all communications to park personnel, partners and the general public, as well as regulatory agencies. Different mechanisms for communication were found in the park's communication strategy matrix, and included e-mails, informal talks, staff meetings, training, annual reports, evaluations, newsletters, bulletin boards, news releases, community e-mail, formal meetings and presentations, the park website, brochures and schedules, and phone conversations.
- Padre Island National Seashore's internal communication methods included training classes, daily park newsletter, division and all staff meetings, internal memos, e-mails, and bulletin board postings. External communication varied but was required to conform to NPS Servicewide and regional protocols. The EMT was responsible for communication about the EMS to all staff as well as to volunteers at the park. Content of this communication included general updates and involvement in the EMS process, as well as what staff could do specific to their job to be involved in EMS.
- For its communication strategy, Prince William Forest Park designated in a matrix different audiences, mechanisms for communication, contents of each communication, and responsibilities of who must communicate. Park audiences included park staff, park visitors and neighbors, regional and Washington offices, as well as other agencies. The Superintendent and Environmental Manager were responsible for approving the park's communication strategy. Program Managers were responsible for passing along information provided by the EMT. The EMT ensured that staff were fully informed about all aspects of the EMS.

Lessons Learned

Pilot parks benefited from including techniques already in use at their park as part of their communications strategy. This was helpful as it allowed for staff to do what they already were doing, albeit more systematically to incorporate principles of the park EMS. This helped keep staff from feeling overwhelmed.

Parks who were able to think beyond their normal day to day tasks and incorporate creativity into this element were able to come up with good ideas and mechanisms for both promoting the EMS at the park as well as sound environmental management for day to day operations. Delineating responsibilities in the communications strategy ensured that staff understood what part they played in communication. Management support was critical in approving and moving the park's communication strategy forward.

Park Profile: Boston National Historical Park

The EMT at Boston National Historic Park followed the basic guidelines outlined in the NPS EMS Toolkit to put together its communications strategy. They decided to start by looking at how they were already communicating at the park. After a brief assessment, the EMT recognized that the park already used a newsletter, internal documents, meetings, conversations, and workshops and conferences to communicate. They decided to use these same mechanisms for their EMS. For internal communications, the park relied on employee meetings or tailgate meetings, standard operating procedures, and memos to communicate with staff. Responsibility for communication fell upon the Superintendent or Deputy Superintendent. To communicate with park partners or the general public, the park planned to use its park newsletter, website, memos, special initiatives (like award programs), and partner meetings. The responsibility for communication included top management like the Superintendent, but also the park newspaper editor and the web design staff. In addition, Boston National Historic Park had a separate communication plan for communicating with regulatory agencies. This included meetings, conferences, and memos. The Superintendent, Deputy Superintendent, and Division Chiefs or Supervisors were responsible for this type of communication. Overall, staff at Boston National Historic Park thought that this element was relatively easy to implement. They thought that once the basic framework of the EMS comes together after the first few elements, the rest just "makes more sense."

Element G: Training

Director's Order #13A:

- Training on environmental leadership issues will acknowledge the critical role established for the Servicewide EMS process, including the model EMS.
- Documented procedures will be developed and implemented to ensure that all individuals that have a role or responsibility within the EMS have the understanding and capability to carry out that role or responsibility. All environmentally-related training requirements must be identified and documented.

This element established the facilitation of learning through training initiatives at the pilot parks. Successful implementation of the EMS depended on staff understanding what their job descriptions entailed. Training would provide staff with the knowledge and skills necessary to perform job duties associated with environmental management.

The pilot park EMTs recognized that staff could be trained in many ways. One on one instruction through supervision (such as apprenticeship) was one way that staff could learn their responsibilities. Tailgate meetings and Servicewide workshops were also methods of training staff. It was important for parks to document and record their staff trainings, both the requirements that staff needed to fulfill, as well as the trainings that staff have already had.

The pilot parks sought to find and pool resources for providing staff with appropriate training. Exploring partnerships with third parties within the park such as contractors and concessioners was a good method of doing this.

Five of the pilot parks completely finished developing this element, and one park partially developed this element. As the time period for the pilot park program began to run down by the end of 2003, parks began to run out of time in completing all eight of the NPS EMS elements. Most of the parks were able to begin putting a training strategy together. Five of the parks created a training matrix that specified the type of training, the trainer, the trainees, and the frequency of training necessary.

- Boston National Historic Park developed two separate tables: one to track the training that will be needed by staff, and another to track the training that has already taken place. The training document listed the name of the training, the type of the training, who the trainer was going to be, who the trainees would be, and how often the training was needed. The training record included a list of trainings that were provided by the park, and had space for identifying the trainer, the hours of the training, and the date of the training.
- Although Cape Cod National Seashore did not fully complete this element by the end of 2003, Cape Cod National Seashore developed a worksheet document to track training that would be necessary for staff. The worksheet included the position title, and a list of all the different types of trainings that any park personnel at Cape Cod National Seashore might need that related to the environment, health, and safety. The training document includes a space to check off a specific type of training for the designated position. These worksheets are kept with personnel files. At this time a training record has not yet been developed.
- Glacier Bay National Park and Preserve designed two separate tables for documenting the training needed at the park, and the training that has already taken place. The documentation of training that was needed included a comprehensive list of different subjects of training, the mechanism for training, who the trainer would be, who needed to be trained, and how often the training needed to take place. To track trainings that have already occurred, Glacier Bay National Park and Preserve listed the subject of the training, and left space to fill in the name of the trainer and the date that the next training would be required.
- Padre Island National Seashore's EMT included a detailed matrix of trainings mandated for NPS employees in their EMS manual. This matrix included the applicable legal authority for mandatory training, how many hours are required for each of these trainings, and additional comments that were

appropriate to the type of training or to Padre Island. Management at Padre Island National Seashore discussed what trainings were needed by specific employees and worked with other departments to ensure that the trainings would take place. Records of training were to be kept in employee personnel files. The EMT required that the park partner with third parties to reduce costs associated with training, for example concessioners or contractors.

- At Prince William Forest Park, the Administrative Technician was responsible for maintaining the park's official training record, and collected records from each employee to include in the official park record. Prince William Forest Park's training matrix included the specific training, its type, the trainer, which employees needed the training, and how frequently the training must occur.

Lessons Learned

The pilot park EMTs thought it was useful to create a comprehensive list of trainings necessary for park employees before they determined who needed it and how often. Some of the parks looked to their audit findings to learn more about mandatory trainings, and others found information on the NPS website.

Some of the parks already had mechanisms in place for collecting training records in employee personnel files. It was useful for parks to determine if the park had a system in place for collecting these records, and if so incorporating environmental and EMS related training records into that system.

Park Profile: Big Cypress National Preserve

To ensure that all personnel were provided with the information they needed to carry out their environmental responsibilities under the park EMS, the Big Cypress National Preserve EMT created a detailed strategy for staff training. Individual division and department managers were charged with determining training requirements and needs for the positions they supervised. They then reported this information at least once a year to the EMT, who would work with management to schedule training for particular employees. Training could be by different methods and by different trainers, but must comply with NPS and Regional protocols. Efforts were made to partner with third parties (i.e., concessioners and contractors) to both pool resources and foster a greater understanding of the park EMS to persons working and operating in the park. Overall coordination for training rested with the EMT, although management played a critical role in assessing training needs and ensuring that it occurred. The Big Cypress National Preserve EMT created a training matrix describing key training needs at the park: where it was to be located (in house or off site), who the trainer would be, which employees needed to have that particular training, and the frequency of training needed. Once training occurred, records would be kept in employee personnel files.

Element H: Monitoring, Measurement, Corrective Action, and Management Review

Director's Order #13A:

- Procedures will be implemented to determine whether or not the EMS is achieving its stated goals, objectives, and targets. As referenced in VI B [Environmental Commitment Statement], compliance with applicable laws is required. A facility should consider the results of recent environmental audits as one set of data that provides for monitoring and measurement.
- Procedures will be developed and implemented to provide for corrective action to remedy those elements of the EMS that are found to have failed achievement of established goals, objectives, and targets.
- Management review requires the documented periodic review of the direction and intent of an EMS, to determine whether it is achieving the intent of the environmental commitment statement. Procedures will be developed that, when implemented, provide for corrective actions to be taken in the event that a determination is made that the intent of the environmental commitment statement is not being achieved.

The last element of the NPS Model EMS required the pilot parks to set a system in place to evaluate the success and progress made toward goals, objectives and targets. It also served as a mechanism to correct deficiencies found at the park and to create opportunities for preventing them in the future. It ensured that the EMS process continued on past the development of the EMS manual, and that the pilot park would review their EMS periodically. A renewed commitment to the EMS process was made at this time through monitoring and measurement of the EMS, corrective actions, and review by management.

The pilot park EMTs established different types of inspections and assessments including individual environmental program inspections, internal compliance audits, and an EMS specific assessment to review progress of their EMS. This encompassed a broader evaluation of environmental performance, based on objectives and targets the park has set, and the environmental commitment the park has made through its ECS, than a regular environmental compliance audit. Monitoring and measurement of the EMS process was a key to the prevention of environmental impacts. Pilot parks sought to create procedures that would avoid serious impacts in the future, as well as begin corrective actions to fix current environmental impacts. In creating these procedures, parks considered activities at all levels and frequencies, including checks on environmental compliance, and reaching targets as designated in the EMS.

Parks engaged in self assessment and self correction by identifying deficiencies, analyzing root causes of deficiencies, deciding on appropriate actions to take to correct the deficiencies, creating an appropriate list of tasks and setting a timeline for completing them, reviewing the results of completing tasks, and revisiting the issue to see if the deficiencies were resolved and if corrective actions worked. Corrective actions were used by the pilot parks to start resolving deficiencies in their daily procedures and in their EMS. Standardized procedures were put into place so that opportunities for improvement in system performance materialized. Corrective actions were in some cases documented and shared with affected staff.

Periodic reviews by management were necessary to evaluate the suitability and effectiveness of the EMS, and to redirect resources as needed. Management involvement ensured that the EMS process was continual, and that resources were available as appropriate to keep the EMS momentum going. Reviews included: results from environmental audits, results from EMS assessments, progress of stated goals, objectives, and targets, revisiting the ECS, and/or a review of all eight EMS elements.

Five of the pilot parks developed this element by the end of December 31, 2003. The other pilot parks ran out of time, as the 10 month pilot park time period ended. Most of the parks followed the NPS EMS Toolkit closely in developing this part of their EMS. Three separate procedural mechanisms for monitoring and measurement, corrective actions, and management review were created. Some of the parks were more descriptive about the role of management and the role of the EMT in each of its categories. Three of the parks created tables or matrices to track their monitoring efforts describing the type of review, who was responsible and involved with the review, and when the review should take place. The five pilot parks developing this part of their EMS used a corrective

action form to track their deficiencies and to implement corrective procedures. One park created a specific annual management review form to be signed by its park Environmental Manager and Superintendent and to be filed with each annual review.

- Big Cypress National Preserve planned to conduct a review each year to determine how well the park has achieved its goals, objectives, and targets. Results would be kept with the Superintendent. Supplemental monitoring by the EMT would take place throughout the year. This would allow for a “mid-course” EMP correction to be effected if it looked like targets would not be achieved. In addition to the annual and periodic performance reviews by the EMT, the park also planned to receive a follow up environmental compliance audit from the region every 3-5 years. To correct any deficiencies, the EMT would implement new operating procedures encouraging personnel at the park to achieve the EMS targets. Corrective action forms would be filled out to document this activity. The EMT planned to report to the Superintendent every six months on the status of the park EMS, and each review would be documented. Documents were to be kept in accordance with the established EMS document and record system.
- Boston National Historic Park’s EMT planned to conduct a monthly check on its EMS in order to monitor the progress of achieving targets set forth within the EMS. The team also planned to have an annual review to ensure that targets and objectives are being met, and to determine whether or not new ones need to be added. A corrective action form was included in the park’s EMS manual to ensure that corrective actions took place to “fix” any deficiencies, and to determine the root cause of any deficiencies.
- Glacier Bay National Park and Preserve included three mechanisms in its EMS manual for monitoring and measuring. First, program staff would conduct annual inspections based on their program areas. Second, the EMT would conduct an internal compliance audit once a year to determine if the park met its goals, objectives, and targets. Third, the EMT would conduct an annual audit to ensure that the EMS conforms with the NPS Model. The park’s internal audit team would complete a corrective action form for each target, goal, or objective that was not met, and would designate a responsible party to fix the deficiency. Within 90 days, that responsible party would provide the EMT a plan of action to address and correct the deficiency. Audit reports would be presented to the park Superintendent annually for review.
- The EMT at Padre Island National Seashore was responsible for reviewing the park’s environmental management once a year to determine if park EMS goals, objectives, and targets were reached. Results of this review would be kept in the EMS manual and would also be filed in the Superintendent’s office. The EMT would analyze the reasons why goals, objectives, and targets were not met and then would implement procedures for taking corrective action. Supplemental monitoring would be conducted by the EMT throughout the year. At intervals stipulated by the Superintendent, the EMT would report on the status of the EMS.
- Prince William Forest Park’s EMT designated park program managers with documenting and reporting progress under EMS targets to the EMT. The EMT planned to conduct monthly reviews of the EMS as well as conduct annual internal compliance audits. The EMT also planned to document park progress, prepare an annual “accomplishment” report, and notify the Environmental Manager right away when a deficiency was spotted. Upon notification to the Environmental Manager of a deficiency, a corrective action form would be initiated and a review of findings would be conducted by the EMT. Corrective actions were required to be made in a “timely” manner, and mechanisms would be established to prevent their recurrence. The Superintendent and Environmental Manager would be responsible for reviewing accomplishment reports, responding to any deficiencies within the program, and approving



**Glacier Bay National Park and Preserve,
Alaska**

annual updates to the EMS. Along with an annual accomplishment report, and a copy of a management review form, the EMT would submit any proposed new objectives and targets to be added to the EMS to the Superintendent and Environmental Manager for approval.

Lessons Learned

This element made the pilot parks EMS a continuous and cyclical process. Parks were required to step back and objectively look at their EMS to figure out a way to evaluate its progress. Many of the Pilot parks had difficulty in the development of this last phase of the EMS because it required a lot of time and effort to determine how to best structure a system for continual evaluation of the EMS. Most of the parks thought that separating the element into three separate components was helpful.

Management support for development of this element was critical. Those parks that had strong management support were able to design a structure for this element that would work for the Superintendent's needs as well as those of the rest of the park. Support was needed for approving an evaluation mechanism by the EMT, ensuring the implementation of corrective actions, and creating procedures to prevent the recurrence of noncompliance findings. Management review of the entire EMS process reinforced the EMS, and encouraged staff to continue forward with its momentum.



Padre Island National Seashore, Texas

Finding Partners and Additional Support

Most of the pilot parks felt at one time or another during the EMS process that they could have used additional support and resources to “jumpstart” the development of their EMS. Additional hands on or site specific support in the development of the park specific EMS would have saved the parks time and resources, and would have reassured them that they were going about the process in the “right” way. Difficulties first appeared during the second EMS element (Element B), where parks had to create a list of facility activities and interactions, and assess and prioritize resulting environmental impacts. A few of the pilot parks found necessary support from sources outside their park to help with this process.

The EMT at Big Cypress National Preserve was a bit overwhelmed when they started their EMS, and asked their regional office for assistance. The regional office provided enough support to help the park get started. Specifically, the regional office suggested that the EMT focus on only one or two facility activities to start the EMS process. The EMT followed this advice, and were able to move forward because they had originally tried to do everything all at once. As a result the EMT was able to put in enough time on each of the elements, and successfully develop their EMS, even if only for a few park activities. The park is committed to expanding its EMS at a later time so that it is more comprehensive.

Boston National historic Park's EMT started off slowly on their EMS, mostly because the EMT didn't have any staff focusing on environmental issues. This is largely due to the fact that the mission of Boston National Historic Park is that of a historical park and isn't as focused on natural resources as other parks. Even though representatives of the EMT had been to EMS training, staff felt a bit “lonely and confused” and overwhelmed by the EMS process. They weren't sure how to get the EMS process started at their park. To get started, they decided to learn by example from nearby Cape Cod National Seashore. When Boston National Historic Park saw how Cape Cod National Seashore put their EMS together in a “real world” situation, it made more sense to Boston National Historic Park staff. EMT members returned back to Boston National Historic Park with a renewed enthusiasm and were able to complete the development of their EMS by the end of 2003.

Cape Cod National Seashore looked to the neighboring Coast Guard station for assistance in beginning their EMS process. The Coast Guard was already in the process of implementing its own EMS using another EMS framework. They had already developed procedures and templates for their EMS. Cape Cod National Seashore learned a lot from meeting with and working with the Coast Guard. Ultimately Cape Cod National Seashore

decided to use the NPS EMS Toolkit to remain consistent with the rest of the NPS, but they did mention that the Coast Guard had some good ideas and insights. Cape Cod National Seashore expressed that they were grateful for the help that the Coast Guard gave them, and thought that other parks might benefit from working with outside partners.

In addition to pilot parks gaining help and support from others, these same parks are in a position to involve and help other federal agencies and members of the community with EMS. At Glacier Bay National Park and Preserve, the EMT included a member from the USGS. This is because the park and USGS had an agreement relating to waste disposal Hazard Communication training. It made sense to include the USGS because of the special agreement and relationship between the two entities. Parks involving their neighbors and developing their EMS to include the community is a great idea, one which will promote the NPS as a leader in environmental management.



Perry's Victory and International Peace Memorial, Ohio

Pilot Park Analysis and Recommendations

What was learned from the pilot park program

The pilot parks demonstrated to the rest of the NPS that parks can develop an EMS with only a few days training and some basic tools to guide them. Considering the short time frame that the pilot parks had to develop their EMS, it is impressive that they were able to get as far as they did. They serve as an example of how successful the NPS may be at meeting the mandate of EO 13148 by the end of 2005.

Overall, some key themes appeared from the pilot park study. Specifically, all the parks had difficulty in developing a list of facility interactions, activities, and environmental impacts. Prioritizing environmental impacts was an additional challenge. All the pilots had similar challenges with this part of the EMS process; mainly that it was easy to get caught up in the details, and feel overwhelmed. Generally the pilot parks were able to resolve feelings of inertia and confusion by seeking outside and internal support, by shortening the process to make it simpler, and by carefully reviewing the EMS NPS Toolkit.

"It's kind of like a phone book. You can't memorize the whole thing but at least now you know where to look to find the information."

Arch Thompson, EMT Leader, Glacier Bay National Park and Preserve

All the pilot parks agreed that it was demanding to develop an EMS in only 10 months and that with more time, other parks should be able to develop their EMS. Generally the pilot parks thought that the EMS NPS Toolkit and templates were helpful guides assisting them in the development of their EMS. Most of them could see a benefit right away. Everything was more organized and staff had a better understanding of what they were required to do.

With the exception of Perry's Victory and International Peace Memorial, the pilot parks had over 40 people on staff. Perry's Victory and International Peace Memorial had only 14 staff, and as a result had a difficult time of sustaining their EMT and their EMS process. Even though Perry's Victory and International Peace Memorial originally started with strong management support and commitment from staff, the park had extenuating circumstances with both the Superintendent leaving and extensive flood damage to their visitor's center. The lesson learned from Perry's Victory and International Peace Memorial is that the EMS process may be challenging for small parks with less resources. In these cases resource sharing or mentoring from other parks may be necessary in order to assist smaller parks with EMS.

All the pilot parks stressed the importance of having an EMT with wide representation from the park. Because the EMS crossed through park divisions and program areas, it was important to include representatives from as many divisions and program areas as possible. This helped promote overall commitment and buy-in from the staff and prevented any long term communication problems from developing.

Management support was emphasized by the pilot parks as a key factor in developing a successful EMS. All of the pilot parks had management support with the exception of Perry's Victory and International Peace Memorial to keep the EMS process moving along. All of the successful pilot parks also had EMT members who were dedicated to making the EMS process work at their park.

Few if any of the pilot parks incorporated the activities of concessioners in their EMS. This may be because

"Management buy in was critical for our EMS. Our Regional Director supported EMS, and our Superintendents listened. This helped us a lot"

Alex Romero, Deputy Superintendent, Prince William Forest Park

considering only the park interactions and activities proved itself to be a monumental task, often overwhelming EMT members. Many EMT members at different pilot parks have considered including concessioner issues at a later time when their park EMS is more established and functioning as a system.

Most of the parks felt that they could have used more hands on assistance at certain stages of the EMS process. Although most of the parks were able to find assistance on their own, either through their regional office, other parks, or from outside partners like the Coast Guard, they all felt that some additional assistance and oversight may have helped with developing their EMS, and with providing them with feedback on how they were doing. Generally they agreed that extensive support was not necessary for each park, but some additional oversight would have guided them through the trickier parts of the EMS process. Some parks suggested finding some base funding for part time environmental positions to help the parks develop and implement EMS.

Pilot Park Recommendations

Based on their first hand experience, many of the pilot parks had suggestions and recommendations directed toward other parks just beginning their EMS, as well as to the NPS Regional Office and WASO about how to help parks develop their EMS. Many suggestions from the pilot parks have already been incorporated into improved training materials and tools to be used for the 2004 -2005 NPS EMS roll out. In addition, the following suggestions came directly from the pilot parks and the pilot park experience.

Pilot Park Recommendations to other Parks just starting their EMS:

- Just do it and rely on continuous improvement as the process goes forward.
- Try to get help from partners where you can. Partners can be other parks, other agencies, community groups, and the regional office, or WASO.
- Start off small and keep the process simple. Don't get too caught up in details and don't think too much about the process.
- Utilize the pilot parks for their first hand experience.
- Establish and follow milestones for your EMT.
- Involve representatives from all divisions of your park.
- Where appropriate, integrate the EMS with already existing programs that can combine efforts already taking place, for example a safety committee.
- Meet regularly with your EMT.

Pilot Park Recommendations to Park Management:

- Support the EMS process. Show your staff that this program is a priority and allow them to do what they need to develop and implement an EMS for the park.
- Clarify how to measure success with this program at your park. Help set up a continual review process to ensure the EMS is doing what it is supposed to.
- Reward staff for their efforts.

Pilot Park Recommendations to Regional Offices and WASO:

- Provide more one on one feedback and reassurance to individual parks developing their EMS. Provide additional assistance to parks in developing and implementing EMS wherever possible.
- Work with management from the top down to ensure that there will be management buy-in at the park level.
- Increase communication throughout NPS so that everyone is aware of the EMS program.
- Report progress on the WASO NPS Environmental Management Program EMS website.

Conclusion

The NPS EMS pilot park program has been beneficial to the development and implementation of the nationwide NPS EMS. Pilot parks demonstrated that parks can develop and implement an EMS program at the park level, with only a few days training and limited support. Their experience illustrates where the parks are likely to be challenged in the EMS process, and how and when parks might benefit from additional support.

Experiences from the pilot parks helped shape the training materials and tools to be used for training all the parks during the spring of 2004. Materials were modified based on recommendations from the pilot parks and included specific examples of how the pilot parks were able to develop each stage of their EMS. Training materials are now better suited to address specific needs at the park level.

Pilot parks will serve as mentors to the remaining parks nationwide. As parks begin their EMS process, and find areas of challenge, pilot parks will be available to provide support for those parks faced with questions. Pilot parks have all had similar experiences and struggles with the EMS process, and will be able to provide insight and help to parks just starting their EMS process.



Prince William Forest Park, Virginia



**A Summary of the Environmental Management
System Pilot Park Program**

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Washington, DC