



An Environmental Management System Review of the National Park Service:

Based on the Code of Environmental
Management Principles



EXECUTIVE SUMMARY

In early 1998, the U. S. Environmental Protection Agency (EPA) and the Department of the Interior (DOI) agreed to work jointly to enhance regulatory compliance assistance across DOI Bureaus and facilities with the overall goal of raising the level of regulatory awareness and compliance with environmental regulation at all DOI facilities. While EPA's federal facilities program had previously conducted limited compliance assistance initiatives with specific environmental programs in other federal agencies, this was the first time that EPA committed to provide compliance assistance across an entire federal agency. One of the most innovative and far-reaching efforts that resulted from the EPA/DOI compliance initiative was an analysis of environmental management systems (EMS) within the National Park Service (NPS). This analysis was conducted by comparing existing management systems within the NPS against the Code of Environmental Management Principles (CEMP) for federal agencies.

The CEMP was developed by EPA in coordination with other federal agencies in response to requirements of Executive Order 12856, "Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements." The Executive Order required the federal community to agree to a set of principles that reflect state of the art environmental management programs. The CEMP is a collection of five broad management principles and underlying performance objectives that provide a basis for federal agencies to achieve and maintain effective and responsible environmental management.¹ The five principles are:

- È Management commitment;
- È Compliance assurance and pollution prevention;
- È Enabling systems;
- È Performance and accountability; and
- È Measurement and improvement.

The analysis of the NPS environmental management system was a broad-based review that examined current and planned environmental management practices against an accepted systematic framework of principles. While the body of this document provides substantial information regarding the findings and recommendations of this review, highlights of those findings and recommendations are presented below.

The analysis and recommendations contained in this document are meant to support and enhance the current NPS environmental management system. EPA and NPS worked jointly to conduct this review in the hope that it will provide a basis for continued discussion within NPS regarding the future direction of the NPS environmental program. This effort has also stimulated dialogue between NPS and EPA field personnel and has lead to a better understanding of the respective roles of each entity in achieving and maintaining environmental leadership. Finally, results of CEMP analysis conducted for NPS will assist other federal agencies in recognizing the benefit of such an assessment across the federal community. EPA would like to express its appreciation to the NPS for participating in this review.

HIGHLIGHTS

Management Commitment

The NPS CEMP review found that bureau-wide, the NPS mission actively supports environmental stewardship and sustainability as a founding philosophy of the NPS. The review did reveal, however, that there is not currently a stand-alone statement that explicitly defined an NPS environmental policy. In addition, existing environmental guidelines do not emphasize compliance with environmental regulatory requirements. Development and wide distribution of a distinct environmental policy statement, along with the clear, high-level management commitment that would necessarily accompany such a statement would emphasize the NPS policy to employees and

¹More information regarding the CEMP can be found in, "Implementation Guide for the Code of Environmental Management Principles for federal Agencies (CEMP), EPA document number 315-B-97-001.

park users and explicitly demonstrate the goal of the NPS to be a leader in environmental stewardship and regulatory compliance. Moreover, an explicit and comprehensive policy would clearly signal internal NPS support for funding and personnel resources necessary to ensure a robust environmental program. Finally, such a policy would encourage NPS support and outreach components, such as concessioners and interpretive elements, to incorporate environmental stewardship and compliance into facility-level activities.

Compliance Assistance and Pollution Prevention

Current NPS support programs responsible for ensuring compliance with environmental regulations and promoting pollution prevention are housed under separate entities within the NPS organization. In addition, while many parks have programs for support of pollution prevention and recycling efforts, these programs do not fully exploit reduced compliance liabilities resulting from their efforts. Development and support of comprehensive regulatory compliance activities would significantly contribute to ensuring both compliance with applicable environmental regulations and pursuit of pollution prevention opportunities throughout the NPS system. This effort would integrate all current regulatory components at NPS and it would support and reflect ongoing efforts to implement environmental auditing procedures at NPS facilities. A comprehensive compliance assurance and pollution prevention program would also serve as a bureau-wide source for communicating both changing environmental compliance requirements and innovations in pollution prevention applicable to facility-level operations.

Enabling Systems

The various support and enabling systems that affect environmental management aspects of the NPS reflect a separate, media-based approach toward awareness and compliance. Additionally, the principal environmental review mechanism is the NEPA review process which may not adequately address day-to-day operations of NPS facilities. Identification of facility level operational training needs and implementation of broad-based training programs for facility personnel would ensure adequate knowledge and understanding of NPS environmental priorities as well as external environmental requirements. Further, facility personnel who are not directly responsible for facility environmental compliance but who may contribute to success of the facility's environmental program, should have a recognized role in contributing to overall NPS facility-level policies and goals for environmental excellence.

Performance and Accountability

Responsibility and authority for compliance with environmental requirements at NPS facilities is generally limited to collateral duties of facility management personnel who are also responsible for a broad range of other facility operations. This approach limits the ability of those personnel to concentrate on environmental management and compliance at the facility and restricts the degree of authority and accountability relative to facility environmental performance. This situation could be significantly enhanced by the establishment of an NPS policy that secures adequate authority for ensuring facility environmental compliance and gives that authority to the responsible party at each NPS facility. In addition, development of performance standards and performance evaluations for those facility personnel responsible for compliance and other environmental priorities should fully recognize those responsibilities. Additionally, goals for environmental performance that reflect overarching NPS environmental policies should be developed and included into regional and park operational standards. Finally, while individual "champions" are important to the success of any environmental program, policies and practices should be in place to ensure that environmental leadership is standard procedure and lack of a champion does not preclude sound environmental performance.

Measurement and Improvement

Results of the NPS CEMP review indicate that current systems for evaluation and measurement of environmental performance at NPS facilities are limited to certain regional efforts and developing audit systems. Evaluation of program performance is critical to the ultimate success of any environmental program. Support and further development of planned auditing systems with appropriate mechanisms to collect and analyze audit results

across the bureau will contribute significantly to the success of the NPS environmental program. Evaluation of audit results including root cause analysis of environmental problems and non-compliance would enable NPS to develop tools to support regulatory compliance and transfer cost-effective innovations and solutions throughout the NPS system. Additionally, effective measurement will provide necessary information for budgetary and personnel decision making to respond to problem areas as well as enhance efforts that meet the policies and goals established for the NPS environmental management program.

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LIST OF ACRONYMS

<u>Acronym</u>	<u>Definition</u>
BLM	Bureau of Land Management
CAP	Compliance Assistance Project
CEMP	Code of Environmental Management Principles
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERL	Construction Engineering Research Laboratory
CFA	Civilian Federal Agency
DOD	Department of Defense
DOE	Department of Energy
DOI	Department of the Interior
EIMS	Environmental Information Management System
EMR	Environmental Management Review
EMS	Environmental Management System
EPA	Environmental Protection Agency
FRP	Facility Response Plan
GMP	General Management Plans
GPRA	Government Performance Results Act
HWMPP	Hazardous Waste Management and Pollution Prevention
IC	Incident Command
IMR	Inter-Mountain Region
ISWAP	Integrated Solid Waste Alternatives Program
KSA	Knowledge, Skills and Abilities
MOU	Memorandum of Understanding
MWR	Midwest Region
NEPA	National Environmental Policy Act
NER	Northeast Region
NPS	National Park Service
NRDA	Natural Resource Damage Assessment
NREL	National Renewable Energy Laboratory
NRI	Natural Resource Initiative
OEPC	Office of Environmental Policy and Compliance
OSHA	Occupational Safety and Health Administration
P2	Pollution Prevention
P2OA	Pollution Prevention Opportunity Assessment
PHS	Public Health Service
PMIS	Project Management Information System
PWR	Pacific West Region
QA	Quality Assurance
RCRA	Resource Conservation and Recovery Act
SER	Southeast Region
SPCC	Spill Prevention, Control, and Countermeasures
WASO	Washington Area Support Office

INTRODUCTION

Background

During discussions held in January of 1998, U. S. Environmental Protection Agency (EPA) and the Department of the Interior (DOI) agreed to work jointly to enhance compliance assistance across DOI Bureaus and facilities with the overall goal of raising the level of regulatory awareness and compliance at all DOI facilities. While EPA's federal facilities program had previously conducted limited compliance assistance initiatives with specific environmental programs in other federal agencies, this was the first time that EPA pledged to provide compliance assistance across an entire federal agency. One of the most innovative and far-reaching efforts that resulted from the EPA/DOI compliance initiative was an analysis of environmental management systems (EMS) within the National Park Service (NPS), including an analysis of support relationships between NPS field-level facilities and NPS and DOI Headquarters environmental offices. This analysis was conducted the Code of Environmental Management Principles (CEMP).

CEMP

In coordination with other federal agencies, EPA developed the Code of Environmental Management Principles for federal agencies (CEMP) in response to requirements of Executive Order 12856. The CEMP is a collection of five broad management principles and underlying performance objectives that provide a basis for federal agencies to achieve and maintain effective and responsible environmental management. The five principles are:

- È Management commitment;
- È Compliance assurance and pollution prevention;
- È Enabling systems;
- È Performance and accountability; and
- È Measurement and improvement.

The five principles and accompanying objectives provide federal agencies with guidance to ensure environmental performance that is cost-effective, integrated, and sustainable.

Scope of the Assessment

The scope of the CEMP assessment was defined by: (1) assessed organization; (2) assessment period; and (3) assessment criteria. Additional information on each is presented below.

- È Assessed Organization: The assessed organization was the NPS. Formal and informal aspects of the NPS environmental management system (EMS) were reviewed at the field, regional and headquarters levels. The review also addressed portions of the "parent" DOI organization which directly influence NPS environmental management activities. In this regard, the DOI Office of Environmental Policy and Compliance (OEPC) and additional DOI-level units were included in the review.
- È Assessment Period: The assessment period for the CEMP review began in July 1998 and was completed in December 1998. During the assessment period, several changes to the NPS EMS were either underway or planned; the review documented those changes to the EMS as well. Consequently, the final document presents information collected during the assessment period about the existing EMS, as well as information on changes underway or planned.
- È Assessment Criteria: The assessment criteria for the NPS CEMP review were the performance objectives supporting each of the CEMP principles. Details on the performance objectives were extracted from the CEMP Implementation Guide prepared by EPA in 1997. Specifically, both the

text of the CEMP Implementation Guide and the Guide's Self-Assessment Matrix were used as a reference for the assessment study and results.

Assessment Approach

The first stage of the assessment focused on gathering DOI and NPS organizational baseline information with an emphasis on how the two organizations administered environmental management responsibility internally. The assessment also included a review of administrative relationships between EPA, NPS and DOI. Collection of this information provided a common understanding of existing management systems. For example, the EPA, DOI/OEPC, and the NPS each have a regional management structure but the geographical territory associated with each region is different. A summary of collected baseline information is included in the final assessment document.

The approach of phase two of the assessment focused on field and regional level aspects of environmental management at NPS. EPA, DOI/OEPC, and NPS were informed of assessment progress through monthly reports, meetings, and through informal discussions.

The assessment team collected information through interviews, record reviews, and by direct observations. Further information on each aspect is presented below:

- Ē Interviews: Over 75 interviews were conducted. Initial interviews, addressing all five principles, were broad in scope and lengthy (up to 2 hours). Towards the end of the assessment period, shorter interviews were used to fill information gaps or test initial conclusions on recommendations related to the principles. Nearly all interviews were structured to ensure specific objectives were met; however, there was no standard set of questions asked of all interviewees. Each interview was designed for specific information sought. In conducting interviews, the assessment team shared information about the CEMP as background and assured interviewees that their specific comments would remain confidential.
- Ē Record Reviews: Over 85 individual EMS-related records were reviewed. These documents included guides, manuals, policy statements, and training documents.
- Ē Direct Observations: A direct observation was defined as first hand information collected by the assessment team which was not derived from an interview or record review. Examples are:
 - Internal meetings where the assessment team observed information being shared; and
 - Observations on the availability of selected EMS related records. For example, in requesting information about records, observations were made on whether the records were available, understood, and/or used.

Only corroborated information is reported as findings in the document. For example, information based upon a single interview was not, for the purposes of the assessment, considered sufficiently reliable. To be reported as a finding, single interview information had to be supported by documentation or direct observation.

Findings

A set of recommendations was developed for each of the CEMP performance objectives as suggested areas for future improvement. The findings were designed to encourage further NPS review of the applicability of the CEMP in supporting the overall success of the NPS environmental management system. While the main body of the assessment focuses on NPS, an additional section presents EMS related findings on the relationship between DOI and NPS.

OEPC RELATIONSHIP WITH NPS AND OTHER DOI BUREAUS

The Office of Environmental Policy and Compliance (OEPC), within the Office of Policy, Management and Budget, provides national and regional leadership, bureau coordination, and program evaluation in environmental management for DOI. The operations of this office were evaluated as part of the CEMP study of the NPS. It should be noted, this evaluation focused on OEPC relationships with the NPS. It was not a comprehensive review of OEPC environmental management systems or the office's relationship with other bureaus.

Existing Environmental Management Activities

Management Commitment

OEPC's role is to provide assistance and coordination on environmental policy and program implementation for inter-bureau, inter-agency, and other external activities. OEPC does not have responsibility for management or direct oversight of bureau environmental programs. OEPC develops departmental environmental policies and guidance. These policies are subject to approval by bureaus and offices. Environmental policies that have been promulgated include: Departmental Manual Part 515, Chapters 2 and 3, which address environmental auditing and recycling programs; Part 516, which addresses NEPA compliance; Part 518, Chapters 1 and 2, which address waste management; Part 602, which addresses pre-acquisition site assessment.

With the exception of the central hazmat fund, OEPC has no responsibility for management or review of NPS or other bureau environmental budgets.

Compliance Assurance and Pollution Prevention

A baseline of DOI environmental compliance has not been completed. Regulatory notices and guidance are developed on an as-needed basis by OEPC and are disseminated to NPS and other bureaus in two ways: 1) to Regional Environmental Officers for distribution to NPS and other bureau and office regional contacts; and 2) to bureau and office headquarters for distribution to regions and field units. There is no mechanism to track or assure distribution of this information to the field level once it leaves OEPC.

Criteria for NEPA documentation review at the departmental level have been developed. Internal and external NEPA documentation describing significant impacts are subject to OEPC review. A majority of bureau environmental impact statements are tracked by OEPC.

A departmental system is in place to address emergency response and is coordinated with the NPS and other bureaus and offices.

Enabling Systems

OEPC does not have resources or agency-wide initiatives for training. Environmental training responsibility is predominantly delegated to the bureaus and offices; occasional inter-bureau training may be provided at the headquarters or regional level.

OEPC has a web site and electronic bulletin board. The web site currently provides limited environmental compliance data. The site contains linkages to the Construction Engineering Research Laboratory (CERL) TEAM Guide, Green Seal environmentally preferable product reports, damage assessment training modules, tools and regulations. With the assistance of one of the Bureaus, OEPC conducts periodic nationwide environmental conferences to assist Bureaus in addressing a wide variety of environmental issues. There is no linkage to relevant environmental compliance policies. OEPC is currently benchmarking it's site against those of other civilian federal agencies.

Performance and Accountability

OEPC has no line authority for environmental compliance of the NPS or other bureaus. Office performance measures relate to success in coordinating and facilitating bureau programs and inter-agency partnerships. OEPC staff performance goals are not based on individual bureau performance.

Measurement and Improvement

DOI has developed policy mandating environmental audits of all facilities by September 2002. Transmittal of bureau audit results to OEPC is not required by the policy; however, OEPC has developed an audit summary report. The report format was revised based on comments from the bureaus.

Calls for other environmental data are made by OEPC to complete mandated summary reports (e.g., USTs, CERCLA sites). The completeness and/or timeliness of this data is at the discretion of the bureaus and offices.

Recommended Next Steps

A number of opportunities were identified where OEPC has the opportunity to enhance the environmental performance of individual bureaus and DOI as a whole. These improvements can be made within the existing OEPC mission framework of providing national leadership, bureau coordination, and program evaluation. In particular, enhancements can be taken in five specific areas:

- È Policy;
- È Guidance;
- È Strategic tool development and deployment;
- È Information management; and
- È Quality assurance.

Policy

OEPC should develop minimum standards for all environmental program areas. These minimums should be clearly identified, and have specific emphasis on departmental applicability. They should not simply restate laws, regulations, and Executive Orders.

Policy developed by OEPC is subject to review and approval by each of the bureaus. This consensus building process often leads to a “watering down” of policy requirements. OEPC should issue interpretive guidance (which is not subject to the same level of bureau approval) to augment and re-strengthen the policy. OEPC should also develop strong strategic plans with bureau-level goals and measurement requirements which are tied to compliance requirements (e.g., EO 12856 pollution prevention goals).

Guidance

Guidance to bureaus is generally useful for any environmental management topic, but is especially important where:

- È Consistency is essential (e.g., roll-up reporting of environmental audit findings);
- È There are common bureau needs (e.g., affirmative procurement procedures and reporting);
- È Bureaus do not have sufficient resources or determination; and

- Timeliness is important.

OEPC should look use these criteria to identify opportunities to develop environmental program guidance that will be most beneficial to the bureaus.

Strategic Tools

Efficiency and economy of scale can be realized by department-level tools benefitting most bureaus. Examples may include model plans, budget models, training curriculum and tools, fact sheets (e.g., new issues, lessons learned), and resource guides.

Information Systems

OEPC should work to become a value-added environmental point of contact for internal and external (e.g., EPA) communications and a preferred resource and information center within the department. The provision of the CERL Team Guide and Green Seal environmentally preferable products reports on the DOI web site are good examples of environmental information OEPC can provide to assist bureaus in maintaining environmental compliance. Other useful information may include regulations, relevant departmental manual chapters, interpretive guidance and strategic tools.

Quality Assurance

OEPC should conduct routine and as-needed program evaluations and audits. These may be CEMP- or NEPA-related, or address other key factors. These evaluations can serve to assess the quality of bureau programs and be used by OEPC for targeting root causes such as resources and commitment. This information can be used in the strategic planning of OEPC programs and/or provide guidance and direction to the Secretary (e.g., budget requirements).

Implementation

OEPC can take several steps to help enhance the departmental environmental management program:

- Seek opportunities to develop an integrated staff with bureaus through details or special assignments;
- Host key leadership-focused intra-departmental initiatives (e.g., the active role OEPC has taken in the development of the federal strategic plan for EO 13101);
- Create Centers of Excellence at selected bureaus to recognize and encourage superior performance (e.g., BLM for military munitions);
- Promote OEPC capabilities and successes internally and externally; and
- demonstrate the economic, efficiency and quality benefits from OEPC involvement.

Organization of the Document

The remainder of this document summarizes the results of the CEMP assessment of the NPS EMS. It is organized according to the five CEMP principles.

PRINCIPAL 1: MANAGEMENT COMMITMENT

Performance Objective 1.1 -- Obtain Management Support

Sub-Objective 1.1.1: Policy Development -- The agency establishes an environmental policy followed by an environmental program that complements its overall mission strategy.

Existing

There is no stand-alone environmental policy for the NPS. The document, *NPS Management Policies*, which is only revised on a ten-year cycle, serves as a Service-wide or Level 1 policy document. However, the need for environmental compliance is only implied in the forward of the document. In addition, a number of subsections mandate compliance with specific federal laws and regulations, such as:

- Ē Chapter 2 - Park System Planning addresses National Environmental Policy Act (NEPA).
- Ē Chapter 4 - Natural Resource Management mandates compliance with the Clean Water Act and Clean Air Act and associated federal, state and local regulations.
- Ē Chapter 9, Park Facilities addresses compliance with all applicable laws and regulations associated with solid and hazardous waste, hazardous materials management and site restoration.

Special Directives and Staff Directives are considered Level 2 internal working policy. They are prepared and updated as necessary and provide more detail than the *NPS Management Policies*. The Special and Staff Directives are being replaced by Directors Orders as part of an overall revision to the NPS Directives System. Level 2 policy has been issued to address waste management, underground storage tank management, integrated solid waste management, pesticide use and other environmental programs.

Level 3 NPS Guidelines provide guidance on the implementation of Level 1 and Level 2 policy. Some policy is included in these guidance documents. NPS guidance with environmental compliance aspects include: NPS 12 -- NEPA Compliance Guideline, NPS 50 -- Loss Control Management (hazardous materials management, respiratory protection and hazard communication programs, and others), NPS 77 -- Natural Resources, and NPS 83 -- Public Health (water and wastewater treatment system management).

Under Development and Planned

The entire NPS policy system is being revised. This provides an opportunity to address environmental aspects more directly. There has been a broad call for input from NPS stakeholders on ways of strengthening policy language relative to environmental programs.

Several NPS program offices are in the process of updating or developing new Level 2 policy with stronger environmental language. Both the Concessions and Public Health policies are being revised. The Hazmat policy is also under review and an Oil and Hazardous Materials Spill Response policy has been drafted.

Other efforts may result in environmental policy. For example, the Environmental Leadership program currently under development includes environmental principles, which, if approved, could become policy. In addition, a proposed Natural Resources Initiative (NRI) includes Principal 9 that states "The NPS will comply with all environmental laws and apply the highest standards of environmental stewardship to its operations." The Environmental Leadership program and other initiatives with environmental aspects have growing key stakeholder involvement. An Environmental Leadership senior stakeholder meeting was held on January 6 and 7, 1999 and included discussions on NPS environmental policy goals.

The NPS plans to share the messages from initiatives such as the Environmental Leadership program and NRI internally by integrating it in management training and other “normal” channels, as well as externally to concessioners and other stakeholders through training, conferences, and public information mechanisms.

Recommended Next Steps

The following are recommended next steps to more fully address Sub-Objective 1.1.1.

- Ë **Develop a comprehensive environmental policy.** To be most effective, this policy should stand-alone and cross program lines. This policy should fully address traditional compliance aspects, but also consider pollution prevention and “beyond compliance” aspects, such as sustainability, which are key to the mission of the NPS. This policy should include and address independent efforts currently underway. It should be developed with wide internal and external participation at all levels to build consensus and assure completeness. The policy should establish goals for key environmental indicators so that performance can be tied to policy requirements.
- Ë **Educate all employees and park users on the content of and management commitment to a robust environmental policy.** NPS should include environmental policy review in staff and stakeholder education (e.g., staff Compass training, concessioner training). In addition, NPS can spread the policy message through periodic management-supported promotions such as conferences, brochures, contract language, training, and web page posted documents.
- Ë **Include specific reference to concessioners in environmental leadership policy.** The NPS is currently developing an “umbrella” policy on environmental leadership. The policy will reinforce the NPS commitment to baseline environmental compliance, pollution prevention, sustainability, and education. The Directors Order on environmental leadership should include a specific reference to concessioner compliance with the policy.

Sub-Objective 1.1.2: System Integration -- The agency integrates the environmental management system throughout its operations, including its funding and staffing requirements, and reaches out to other organizations.

Existing

Several NPS budget processes have been established to account for environmental aspects. The Annual Hazardous Waste Management and Pollution Prevention (HWMPP) team project funding review involves project selection based on four categories:

- Ë Waste reduction and management;
- Ë Fuel storage;
- Ë Contaminated sites; and
- Ë Technical support.

Each category has ranking criteria. NPS planned to integrate the existing system into a Project Management Information System (PMIS) in FY 1999. The annual natural resources program funding allocation process also employs environmental management criteria.

Environmental due diligence reviews occur for property acquisition. The bureau also formed a Contaminants Technical Advisory Group that meets quarterly.

Under Development and Planned

Through the EPA/DOI Compliance Assistance Partnership, NPS offered itself as a pilot subject for a CEMP study to obtain a Service-wide baseline environmental management system assessment and recommendations on ways to improve these systems. Participation in this study may also improve NPS's working relationship with EPA.

The Environmental Leadership program is being developed within the NPS to enhance the bureau's environmental management systems. The program has broad NPS participation. It is intended to link independent initiatives and move the NPS toward Service-wide environmental goals of environmental compliance, pollution prevention and sustainability, and internal and external environmental education. Environmental staff and budget requirements are being addressed as part of Environmental Leadership program development.

Regional environmental support capability is being expanded through the NPS internal audit program. Regional environmental coordinators have been assigned for the program. park-level points of contacts are to be established prior to site visits. Responsibility for environmental management and corrective actions identified during the audits will be specified. The incorporation of environmental audit program data into the budget/funding allocation process is also planned.

Recommended Next Steps

To integrate environmental management more effectively throughout the organization and meet Sub-Objective 1.1.2, the following next steps are recommended:

- Ë **Develop and provide environmental “awareness” training to all levels of management** to foster environmental compliance and sustainability concepts throughout the organization.
- Ë **Broaden the scope of environmental categories and criteria (e.g., waste and water) in the budget process** so that all project funding requests are addressed in one integrated evaluation of environmental aspects and priority.
- Ë **Integrate environmental aspects in the resource allocation and planning process** at the park, region and headquarters level by requiring that environmental performance be specifically addressed in strategic and general management plans.
- Ë **Develop policy that recognizes and endorses support for the Service-wide need for funding and personnel allocated specifically to environmental compliance.**
- Ë **Develop a Concessions Division environmental policy that mandates concessioners comply with “Concessions Environmental Guidelines”** (see Principle 3.2).
- Ë **Modify concessions contracts and facility operating plans to include performance criteria related to the Concessions Environmental Program (e.g. requirements for environmental audits).**
- Ë **Incorporate environmental program needs into Concessions Program budget process.** The NPS Concessions Program should integrate environmental program development/implementation needs into the budget allocation process for the Division. Elements of this budget process could include:
 - Direction of funds from new sources, such as the 20/80% budget process, and
 - Use of partnership/cost sharing to provide integrated NPS staff/concessioner environmental services (e.g. environmental auditing and training).

Performance Objective 1.2 -- Environmental Stewardship and Sustainable Development

The agency strives to facilitate a culture of environmental stewardship and sustainable development.

Existing

Environmental stewardship and sustainability are founding philosophies of the NPS. The *NPS Management Policies*, Level 2 policies, and Level 3 guidelines such as NPS 77-- Natural Resources, address resource stewardship and sustainable design.

The *Guiding Principles of Sustainable Design* were published by NPS and are considered by some to be the quintessential work on sustainable design. These guidelines and other sustainable design tools are on the NPS "Renew" web site. NPS line item budget projects are designed following a sequence recommended in the Draft NPS 70 -- Design Process Guideline: The Built Environment. This guideline uses a "design for the environment" approach that incorporates ecosystem planning, life cycle cost, value analysis, and choosing by advantage methods. Alternative energy programs are promoted through on-going partnerships with the Department of Energy (DOE).

The NPS has an Environmental Quality Division within the Natural Resource Stewardship and Science Directorate that is responsible for managing internal and external NEPA reviews, the NPS integrated pest management program, and internal and external natural resource damage assessment and environmental response. The NPS also reportedly established a site restoration cost recovery program that includes a potentially responsible party search manual and a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) manual.

Draft Environmental Leadership training has been developed. The training is geared toward program and project managers and addresses environmental management, sustainability, and pollution prevention. The Environmental Leadership senior stakeholder summit conducted in January 1999 also had a strong emphasis on sustainability.

Regional and park-level efforts have also occurred. Green procurement training has been conducted (Northeast and National Capital Area). Sustainable Re-Development Addenda have been prepared for selected general management plans (GMPs) (e.g., Grand Canyon National Park).

Under Development and Planned

A Service-wide NRI is being developed and is supported by the Director. The NRI establishes natural resource stewardship goals and programs that include resource planning, environmental stewardship, and education.

The ongoing Environmental Leadership program has a strong emphasis on sustainable practices. The Denver Service Center is planning training telecast via satellite in partnership with academia. The NPS also participated in the DOI environmental conference in April 1999, which had a focus on sustainability and green procurement as well as other environmental topics.

The NPS is continuing its partnerships with DOE to conduct energy audits design and install alternative energy systems. A Memorandum of Understanding (MOU) between the DOE Federal Energy Management Program and NPS for participation in DOE regional contracts was signed in January 1998. A National Renewable Energy Laboratory (NREL) MOU focuses on sustainable design for energy systems. Sustainable transportation system demonstration projects are being conducted or are planned under a Department of Transportation/DOI MOU signed in November 1997.

Regional sustainability programs are also being launched in the Midwest Region (MWR), Northeast Region (NER), and Pacific West Region (PWR). Green team surveys and opportunity assessments are being conducted in the NER and Sustainability Program Opportunity Projects are being conducted in the PWR.

Recommended Next Steps

To more fully and efficiently address Sub-Objective 1.1.2 and to account for existing and planned environmental management responsibilities (e.g., compliance) in Service-wide and regional sustainability initiatives, NPS should implement the following:

- È **Ensure communication and coordination between sustainability coordinators and compliance coordinators** (e.g., HAZMAT, Solid Waste, Fuel Storage Tank Coordinators). In this way, compliance realities can be better understood and considered in sustainability project planning and implementation.
- È **Merge/coordinate various environmental initiatives and projects to minimize redundancy and provide an integrated approach.** This approach can provide a focus on sustainable solutions, but within the context of a “compliance first” strategy. For example, sustainability assessments could be coordinated with the environmental audit program. Sustainable pollution prevention solutions could be promoted as the best solution for waste management compliance issues during compliance assistance projects.
- È **Ensure that sustainability and stewardship initiatives are integrated into the NPS environmental management system.** Build a system that will address all current issues and be sufficiently flexible to address future needs. For example, the environmental management system should integrate pollution prevention projects such as point source air permitting and transportation plans designed to minimize traffic in the park, both which contribute to establishing a program to sustain regional/park air quality.
- È **Increase awareness of understanding and dealing with environmental impacts (i.e., NEPA).** One means to accomplish this is NEPA training for managers and staff. The Environmental Quality Division offered this in the past. Training has not been conducted recently due to budget constraints.
- È **Enhance the enforcement capability and posture for actions damaging NPS resources (e.g., illegal dumping).** The recent enforcement action conducted at Mojave National Park where a large illegal dumping action was successfully prosecuted demonstrates that this activity occurs. It is also a model environmental crimes team approach within the NPS that could be effective at other locations.

PRINCIPLE 2: COMPLIANCE ASSURANCE AND POLLUTION PREVENTION

Performance Objective 2.1 -- Compliance Assurance

The agency institutes support programs to ensure compliance with environmental regulations and encourages setting goals beyond compliance.

Existing

Two headquarters programs have the most involvement in management of environmental compliance programs. The Parks and Operations Directorate is responsible for hazardous materials and waste management, solid waste, water and wastewater treatment, CERCLA, storage tanks and PCB management, energy and water conservation. The Natural Resources Directorate manages the NPS NEPA and pest management programs. There are some cross-directorate environmental management programs. An example is the management of air and water pollution sources in which Park Operations is responsible for park pollution source management, while Natural Resources is responsible for regional air and water quality. Similarly, affirmative procurement issues effect both the Administration Directorate (Contracting and Procurement) and the Parks and Operations Directorate.

Environmental compliance guidance is currently distributed via standard means (i.e., a hard copy is sent to regions for dissemination to parks). Guidance has been promulgated for hazardous waste management, solid waste management, CERCLA compliance, fuel storage tanks, water and wastewater treatment (Public Health Service), NEPA, and pesticide management, affirmative procurement (Contracting Officers Technical Memorandum 93-1) and others. There is no formalized regulatory update process. The NPS relies on information provided by the DOI OEPC and ad hoc sources for information.

The NPS is participating in a EPA/DOI Environmental Compliance Assistance Partnership. Partnership projects include the CEMP study. There are also regional EPA/DOI and NPS partnerships (e.g., Inter-Mountain Region (IMR)/EPA Region 8 Compliance Assistance Projects, OEPC San Francisco/EPA Region 9 Hazardous Waste Management Training).

A draft Environmental Audit program document and 21 draft Envirocheck Sheets have been developed for the NPS audit program. Audit program training was also conducted in October 1998. Regional audit initiatives have also been developed. P2OAs have occurred at 76 locations in the IMR; Compliance Assistance Projects (CAPs) have been conducted at 12 parks in the Midwest Region (MWR) and National Capital regions. Contracted audits have been conducted at five locations in the Southeast Region (SER).

Under Development and Planned

The draft Environmental Leadership implementation strategy documents environmental compliance and beyond compliance sustainable practices as key objectives. Beyond compliance goals are to be integrated into the NPS strategic plan through the Government Performance Results Act (GPRA) process. A number of ongoing projects have been incorporated in the draft Implementation Strategy. Other tasks have been identified that address current deficiencies in the NPS environmental management system.

Twenty-eight Envirofact Sheets are in the final phase of production. They provide background compliance information and self-assessment checklists for waste streams, environmental compliance, and management programs at parks. The Envirofact Sheets were disseminated via the Internet in FY 1999. Additional Envirofact Sheets are planned as needs are identified.

The National audit program is currently under development. Thirty draft Envirocheck Sheets (i.e., environmental audit protocol sections) have been prepared and are undergoing review.

Audits will be conducted by individual regions with oversight and program management by headquarters. The audit program is being designed to meet the following objectives:

- Ë Establish baseline compliance;
- Ë Identify needs for compliance guidance;
- Ë Encourage pollution prevention as a management approach;
- Ë Elevate issues to upper management;
- Ë Encourage self-audit and reporting; and
- Ë Address non-regulated risk.

Following completion of baseline audits, periodic audits of each park-level facility are planned. A system will be developed to track corrective actions identified during the audit program.

The NPS Concessions program is developing new environmental standards and a self-audit/awards program. A regional pilot program in hazard analysis is underway in the IMR. Staff from NPS headquarters and regions have participated in the EPA/Civilian Federal Agency (CFA) Task Groups and Roundtable and intend to participate in the future.

Recommended Next Steps

The following steps are recommended to more fully address Objective 2.1:

- Ë **Establish a reliable regulatory information transfer and updating system** to communicate changing environmental compliance needs to parks.
- Ë **Develop a multi-media compliance workgroup** to ensure that all environmental program areas are addressed and compliance requirements and goals are evaluated comprehensively. For example, ensure that air quality and water quality issues are addressed by involving Natural Resource Air Quality and Water Quality Divisions in program development. This workgroup should be established at an appropriate level to ensure adequate management support.
- Ë **Include an assessment of the risk of non-compliance in the budget assessment and planning process** and strategic planning process at the park, region and Service level.
- Ë **Seek and exploit opportunities to make good use of DOI (OEPC), other bureaus and other agencies** for cost-effective solutions to department-wide challenges. These could include:
 - Training;
 - Policy;
 - Quality assurance - audits;
 - Regulatory updating;
 - Reporting; and
 - Sharing lessons learned.
 - Beyond compliance activities

Performance Objective 2.2 -- Emergency Preparedness

The agency develops and implements a program to address contingency planning and emergency response situations.

Existing

The NPS instituted an Incident Command (IC) system that is used for fire and flood management. The program includes both national and regional incident commanders. Superintendents are provided with IC training through the Parks and Education Directorate fire management program.

Other Service-wide programs include a dam, bridge and road safety program managed through the Park Facility Management Division and a natural resource damage assessment (NRDA) program for oil spill response and assessment managed through the Environmental Quality Division.

Spill response systems at the park level vary widely. Comprehensive emergency response teams are established at some parks (e.g., Padre Island). Over 500 park staff have received hazardous waste operation and emergency response (HAZWOPER) training. Some parks have spill prevention, control, and countermeasures (SPCC) plans, facility response, OSHA emergency response, and/or Resource Conservation and Recovery Act (RCRA) contingency plans. However, a comprehensive needs analysis and park emergency planning compliance assessment has not been completed for the NPS.

Under Development and Planned

SPCC, facility response plans (FRP) and RCRA contingency plan applicability and plan deficiencies for parks will be assessed through the national audit program. Draft Envirocheck Sheets have been prepared for both SPCC and RCRA programs.

A hazard analysis pilot is underway at five parks in the IMR. Plan automated response and communication system software to develop park integrated contingency plans is being developed by the Environmental Quality Division with the assistance of the University of Virginia.

Spill response management has historically been divided between the Park Facility Management Division and Environmental Quality Division. Directors Order #79 on emergency response is being prepared to clarify roles and responsibilities.

Recommended Next Steps

Establish park-level emergency response task forces and procedures to enhance the emergency response and contingency planning process at Park facilities. Procedures should include the periodic review of park emergency response and contingency plans to ensure currency and compliance with regulatory requirements.

Ensure adequate facility hazardous waste training for emergency response and preparedness.

PRINCIPLE 3: ENABLING SYSTEMS

Performance Objective 3.1 -- Training

The agency ensures that personnel are fully trained to carry out the environmental responsibilities of their positions.

Existing

The NPS does not currently have a Service-wide environmental training curriculum. The only consistently offered training courses are HAZWOPER and integrated pest management. Approximately 10 HAZWOPER training courses are offered per year. The Public Health Service currently conducts these courses. The course is a NPS customized program and consists of four hours of HAZCOM training, an eight-hour HAZWOPER refresher training, 24 hours of HAZWOPER training, and two to four hours of pollution prevention training. The Environmental Quality Division offers the integrated pest management training to park and regional integrated pest management coordinators.

Over the last five years, other courses have been offered on a sporadic or one time basis. These have included training on CERCLA, hazardous waste, underground storage tanks, solid waste, and NEPA compliance. Regions have offered additional, unique environmental training (e.g., green procurement, hazardous materials transport, SPCC, etc.). NPS personnel, other bureaus and agencies, NPS contractors, and academic institutions provide this training.

Bureau of Land Management (BLM) environmental compliance training courses have been made available to the NPS. These courses include an introduction to environmental compliance and pollution prevention, emergency response/removal actions and emergency preparedness, environmental site characterization, hazardous materials recognition for field employees, and CERCLA site assessment.

The NPS has conducted several pilot training courses over the last year. A draft Environmental Leadership training for managers was piloted in April 1998. In November 1998, a distance learning pilot was conducted on the NPS Envirofact Sheets through a partnership between the Hazardous Waste Management and Pollution Prevention Team and Indiana University. The NPS has also begun investigations into distance learning opportunities in partnership with the USEPA Region 8 and Front Range Community College in Colorado.

Under Development and Planned

The NPS maintenance training program in cooperation with the Hazardous Waste Management and Pollution Prevention Team, in cooperation with Indiana University is developing a core environmental training curriculum. This process involves the identification of “essential competencies” for all relevant positions in the NPS and the development of a plan on what and how to deliver the required training.

In conjunction with the development of the curriculum, the NPS is continuing to investigate training presentation methods. A distance learning pilot in hazardous waste management is underway. The NPS is also planning to move forward with the Environmental Leadership training first piloted in April 1998. A pilot of the complete training course was held in 1999.

Recommended Next Steps

The following are recommended next steps to more fully address Objective 3.1.

- È **Expand environmental training requirements to address training needs beyond “traditional” environmental career paths.** Personnel conducting environmental functions are in a variety of career tracks, particularly at the park level, where staff often have multiple duties. For example, environmental compliance jobs such as hazardous materials management at the park

level may involve the Safety Officer (Rangers), Buildings and Utilities Staff (Maintenance), Fire Management and Aviation personnel, and Contract and Procurement Staff (Administration).

È **Develop an integrated training function.** This should begin with a training needs assessment which can reflect various NPS career fields. The integrated training function should address a variety of environmental management programs including:

- Environmental compliance;
- Pollution prevention;
- Sustainable practices;
- Energy;
- NEPA;
- Integrated pest management;
- Natural resources;
- Environmental management systems; and
- Health and safety.

The NPS environmental training program should extend beyond first line workers to senior staff and managers and provide the appropriate type and level of training. For example, HAZWOPER training may not be appropriate for personnel only requiring HAZCOM training or a comprehensive RCRA course may not be appropriate for staff at a park that is defined as a conditionally exempt small quantity generator under RCRA.

È **Pursue training partnerships where resources are already available or efficiencies can be gained.** Joint training opportunities should be implemented with other DOI offices and bureaus. The EPA should be used as a training resource both at headquarters and the regions. Other government agencies should also be explored such as the Department of Defense (DOD) and DOE.

È **Develop a tracking system to verify that training is received and completed,** particularly where there is a regulatory requirement for the training. This program should be developed on a Service-wide basis to ensure consistency.

È **Training requirements should be reflected in position descriptions; completion of training should be recognized in employee evaluations.**

È **Conduct a training needs assessment for concessioners.** The information from this needs assessment should be considered in the training needs assessment and training implementation plan for the NPS.

È **Conduct awareness training for concessioners.** This training should address general environmental stewardship, environmental issues of particular importance to concession operations, and NPS and Concessions Division-specific environmental policy programs and procedures.

Performance Objective 3.2 -- Structural Supports

The agency develops and implements procedures, standards, systems, programs, and objectives that enhance environmental performance and support positive achievements of organizational environmental and mission goals.

Existing

The NPS has established planning and budget processes that can account for environmental impacts and guidance documents which can enhance environmental performance. Some organizational goals have been established.

There is currently no formal process for the review of environmental regulations and the dissemination of updated information to the field. The Hazardous Waste Management and Pollution Prevention Team subscribes to the Environmental Reporter published by the Bureau of National Affairs. The Reporter is reviewed and regulatory updates are disseminated to the field on an ad hoc basis.

A formal NEPA process to evaluate environmental impacts has been developed within the NPS. A NEPA Guideline, NPS 12 is currently used for all NPS proposed actions. The Environmental Quality Division at headquarters manages the NEPA program. Procedures have been developed for internal and external NEPA evaluation, documentation, and review. The NEPA process is addressed in the NPS Management Policies and Level 2 policies.

The new Service-wide PMIS budget prioritization processes can include environmental ranking criteria. A priority ranking process is in place for hazardous waste management and pollution prevention-specific program funding.

Manuals and guidance containing operational procedures related to environmental management have been prepared and updated. Manuals include an Integrated Solid Waste Alternatives Program (ISWAP) Manual (1996), Hazardous Waste Handbook (1994), CERCLA Manual (revised in 1998), Fuel Storage Tank Management Handbook (1996). NPS Guidance include NPS-77, Chapter 2, Integrated Pest Management (revised 1997), NPS-50, Loss Control (OSHA programs) (1991), NPS-83, Public Health (Water and Wastewater Treatment) (1993).

A draft Environmental Leadership implementation plan provides an environmental management system-based three-year strategic plan for the NPS. The plan was developed based on park level, regional, Washington Area Support Office (WASO) and senior NPS management stakeholder input. General mission and goals for Environmental Leadership have been established as part of the planning process. A workgroup consisting of park, regional and WASO representatives from various programs are spearheading the Environmental Leadership effort.

Although general goals have been established through the Environmental Leadership and strategic planning processes, defined, measurable, environmental program goals for most environmental programs at the national level have not yet been established. The only documented NPS goal is for solid waste reduction and recycling under the ISWAP. The IMR has established a specific set of environmental performance goals through its Goals 2000 program.

Under Development and Planned

Implementation of various aspects of the Environmental Leadership strategic plan is currently underway. These include policy development, development and promulgation of several environmental management tools (e.g., Envirofact Sheets), and others. Full implementation of the plan was planned for 2000.

The NPS is in the process of reviewing its Level I Management Policies and Level 2 policies to reflect Environmental Leadership goals and ensure completeness relative to environmental programs. A Level 2 policy on Environmental Leadership is under development. This policy will be overarching and provide comprehensive standards and procedures for the majority of environmental management programs within the NPS. These will include hazardous materials and waste management, affirmative procurement, fuels management, energy and water efficiency, and others. An environmental audit policy is also planned. This policy may be stand-alone or part of the Environmental Leadership policy.

Several other Level 2 policies and guidance are being revised. These include those for the Public Health Service (NPS water and wastewater treatment), Risk Management (OSHA programs) and NEPA compliance. An updated HAZWOPER Manual and Lands Acquisition Guidance and Forms are currently being developed.

The Environmental Leadership training which is being developed, will provide awareness training in environmental management systems, sustainability, contracted relationships, and other environmental management programs.

Two objectives of Environmental Leadership strategic plan are the linking of action items to GPRA based Service-wide strategic planning goals and the integration of the plan with other NPS initiatives (Natural Resource Initiative, DOE/NPS Energy Partnership, Sustainability Initiatives). The later is already underway, the former is one of the higher priority action items in the Environmental Leadership implementation plan. The encouragement and promotion of Centers of Environmental Excellence is also planned.

Recommended Next Steps

The following are recommended next steps to more fully address Objective 3.2.

- Ē **Clearly and explicitly link environmental compliance and sustainability needs and any results of needs analysis to budget and resource planning and requests.**
- Ē **Ensure that all environmental-related initiatives throughout the organization are integrated** and coordinated to minimize redundancy, share lessons learned, and provide consistency throughout the organization. This includes national initiatives (e.g., Natural Resources Initiative, Energy Initiatives, Cultural Resource Program, Training and Development Program, Ranger Activities) and regional/program initiatives (e.g., regional audit programs, regional sustainability and pollution prevention programs, Denver Service Center and regional design processes).
- Ē **Extend the National Environmental Leadership program to the regional and park level.** Establish regional and park Environmental Leadership strategic plans which will complement the national plan and consider regional/park specific goals and needs.
- Ē **Establish a process to review and revise existing environmental management structural supports** (i.e., procedures, standards, systems, programs, objectives, and goals) to ensure performance and currency. For example, if a new Executive Order is promulgated that establishes new federal agency energy efficiency goals, the bureau should have processes in place to identify these new requirements and change policy, standards and implementation tools to meet these new requirements. The NPS must also be able to react to and change procedures if they are determined to be inefficient or outdated (e.g., technological changes).
- Ē **The Concessions Division should develop NPS "Level 3" guidelines that outline operational requirements for concessioners to comply with federal, state, and local regulations, and DOI and NPS policy (at a minimum).**

Performance Objective 3.3 -- Information Management, Communication & Documentation

The agency develops and implements systems that encourage efficient management of environmentally related information, communication, and documentation.

Existing

The Hazardous Waste Management and Pollution Prevention Team manages an Environmental Information Management System (EIMS) to track their environmental project status. The bureau also maintains a

tracking system for internal and external NEPA actions. The Team maintains a full time consultant on-site at headquarters as an environmental information advisor.

Information management projects considered by the Hazardous Waste Management and Pollution Prevention team are ranked like all other projects based on established environmental criteria. These projects include green products databases, web site design, document conversion to web-compatible files for uploading.

DOI and the bureau have a number of electronic environmental information management/ communications systems. The Park Facility Management Division manages a Green Alert bulletin board on which NPS personnel can post information on environmental compliance, pollution prevention, and sustainable design and practices. The IPM program of the Environmental Quality Division has an on-line pesticide application approval and reporting system. The bureau also maintains a "Renew" web site that provides information on energy and water efficiency and sustainable design. OEPC maintains a web site that provides some policy and guidance and provides links the CERL Team Guide for those with password access. Regional web sites also provide information on sustainability and NEPA program compliance.

In addition to distribution of materials by electronic means, hard copy documents such as manuals and memorandum are distributed as needed. The typical distribution is to regional support office environmental program coordinators who distribute the materials to the field.

Under Development and Planned

The PMIS, which is a Service-wide interactive, web-based system is likely to supercede the existing EIMS. However, it is anticipated that the functionality (e.g., environmental ranking criteria) of the existing system will be maintained.

The CERL Team Guide is planned to be used to update federal regulatory requirements. The NPS is developing a Service-wide audit reporting and tracking system to support the national audit program currently under development.

The Hazardous Waste Management and Pollution Prevention team is planning to offer Envirofact Sheets, guidance documents and other environmental management tools on the web. As part of the Environmental Leadership implementation plan, this web site may be integrated with other NPS environmental management web sites such as the Renew energy and sustainable design site.

Recommended Next Steps

The following next steps are recommended to improve the existing, underway and planned information management, communication and documentation systems at the NPS.

Ë **Develop an integrated environmental information strategy.** Such a strategy should include the following:

- Assessment of critical information needs;
- Inventory of existing information sources;
- Strategy that integrates existing tools (national and regional, internal and external), considers emerging technologies and has an architecture that will provide for expansion; and
- Implementation program to address information gaps by priority.

The NPS should establish or rely upon a periodic organization-wide update (e.g., newsletter) to provide a reliable communication mechanism for routine but important information.

- Ē **Develop and implement guidance on centralized filing and recordkeeping systems at the regional and park level for all environmental records and documents.** Such an approach will help assure compliance with regulatory reporting and recordkeeping requirements and facilitate park/region internal reporting. It can also be helpful in identifying environmental management deficiencies on an ongoing basis and at the time of audits, and will provide a consistent program which environmental program managers and superintendents will understand even if transferred from one location to another.

- Ē **The Concessions Division should develop electronic (Internet) and other systems to effectively transmit environmental program information and data to concessioners (e.g. policy and procedures, environmental audit data).**

PRINCIPLE 4: PERFORMANCE AND ACCOUNTABILITY

Performance Objective 4.1 -- Responsibility, Authority, and Accountability

The agency ensures that personnel are assigned the necessary authority, accountability, and responsibilities to address environmental performance, and that employee input is solicited.

Existing

Park superintendents and regional directors maintain line responsibility for park and regional activities, respectively.

Regional environmental program coordinators have been identified in each region. These coordinators address Hazmat, CERCLA, underground storage tanks, and solid waste programs. Staff range from a single coordinator in a region, to coordinators for each of the programs. NEPA environmental compliance coordinators are also present in each region. These staff have no line authority. Their role is primarily advisory; they also assist in the annual environmental budget prioritization process.

Regional environmental audit coordinators have been designated to conduct the NPS internal audit program in their regions. This is not a new position, but an additional duty for the existing regional environmental program coordinators.

Park level environmental coordinators have been established in less than 15 percent of the parks. Environmental program management responsibility at the park resides with the superintendent. Maintenance staff, the park safety officer, or others conduct day-to-day operations, often as a collateral duty.

Under Development and Planned

The NER is developing an accountability management system for its park superintendents. The system includes a best practice measurement criteria on Environmental Leadership which states that the park must, "meet or exceeds all environmental laws, and fosters sustainability in all aspects of park operations."

Under the Service-wide environmental audit program, NPS plans to develop park-level audit points of contact. These individuals may be responsible for coordinating the audit and follow-up actions. A Service-wide environmental coordinator position has also been proposed. This coordinator would help implement the NPS Environmental Leadership strategy currently under development. The coordinator would be responsible for overseeing multi-directorate environmental management activities including some with regulatory compliance aspects (e.g., hazardous waste management, affirmative procurement). Direct line responsibility for compliance would still reside with the Director, Regional Directors, and Superintendents.

The Environmental Leadership training which was piloted in April 1998 provides awareness of management responsibility for environmental compliance programs.

Recommended Next Steps

The following next steps are recommended to more fully address Objective 4.1.

- Ë **Assign responsibility and authority to manage environmental programs and ensure environmental compliance at each park.** These individuals should be responsible for managing environmental information systems and assuring environmental training and facility management requirements are met at the park level. They should be responsible for all overseeing all aspects of environmental management so that environmental compliance can be addressed through an integrated approach. They should be answerable to the superintendent on park environmental performance. The time commitment for this position should be commensurate with the

complexity of the park and associated environmental programs/issues. The position may be accomplished as one of several assigned duties at a smaller park. At a larger park, the duties may be full-time.

- È **Establish environmental coordinators in each region.** These individuals would serve as a single environmental management point of contact for oversight and coordination of regional environmental programs and a technical support clearinghouse to the parks. Responsibilities would include environmental information dissemination, coordinated reporting and budget requests, and integration of tasks with multi-program implications (e.g., green procurement that involves facility management (requisition) and administration (contracting and procurement)). Efforts of individual regional program coordinators would not necessarily be eliminated, but could be facilitated and coordinated. The coordinator would be accountable for ensuring parks and headquarters have the information necessary to be environmentally compliant.
- È **Establish a policy on environmental accountability and include this in the Service-wide environmental policy (see Objective 1.1).** This policy could serve to standardize expectations across the bureau. The policy should establish environmental compliance as a minimum requirement for parks, not as a best management practice.
- È **Provide a Service-wide environmental coordinator with the authority to resolve conflicting spheres of authority and designate line responsibility where not established** (e.g., emergency response, water and air pollution control). This position should not be expected to have full responsibility for overall bureau environmental performance.

Performance Objective 4.2 -- Performance Standards

The agency ensures that employee performance standards, efficiency ratings, or other accountability measures, are clearly defined to include environmental issues as appropriate, and that exceptional performance is recognized and rewarded.

Existing

The DOI and the NPS have award programs for exceptional environmental achievement. DOI and NPS environmental achievement awards may be given to specific individuals, project teams, or external stakeholders (organizations and contractors). DOI and NPS also established awards for natural resource stewardship (Departmental Conservation Award and Directors Award for Natural Resource Management).

Environmental criteria have been incorporated into performance standards for most regional environmental program coordinators and for a number of NPS headquarters staff (6 to 8 full-time equivalents). These individuals reside primarily in the Hazardous Waste Management and Pollution Prevention Team and Environmental Quality Division. The performance criteria for these personnel are for duties in an advisory capacity, which are not based on park/region/bureau performance.

Environmental performance is infrequently used as a performance measure for park staff. Only a small number of park have staff accountable for environmental programs (safety officers or environmental protection specialists).

Under Development and Planned

The development of standardized Environmental Leadership language is planned for position descriptions and performance standards as part of the Service-wide Environmental Leadership program.

Incentive programs (monetary rewards and publicity) are planned to promote Centers of Environmental Excellence in the NPS. It is anticipated that monetary rewards will help offset some of the cost associated with

providing assistance outside standard job requirements. The existing NPS environmental awards program is planned to be expanded to include all career fields and programs. Monetary awards and protocols for regional and park Environmental Leadership rewards are planned.

Recommended Next Steps

The following next steps are recommended to enhance the performance standards and reward programs at the NPS:

- Ë **Measure personnel performance in light of the environmental responsibilities that have been assigned.**
- Ë **Develop organizational environmental compliance goals.** Use this information to develop and customize regional and park level goals.
- Ë **Ensure that park-level personnel with environmental management and/or compliance responsibilities have those responsibilities included in their performance standards.** Link individual environmental compliance and management performance standards with organizational goals. Also ensure that personnel environmental performance goals are linked specifically to compliance as well as other sustainable practice measures.
- Ë **Ensure that performance criteria are formally incorporated into the managerial and employee performance evaluation process.** Performance goals and standards are not effective unless they are instituted. Make sure that environmental criteria are adequately weighted based on the level of accountability and responsibility. Provide means to penalize poor performance as well as reward good performance.
- Ë **Institutionalize environmental compliance into the NPS** by fostering the development of environmental compliance as a professional and valued career path in the NPS. In addition, make environmental management experience a required Knowledge Skills and Abilities (KSA) for NPS Managers. This will 1) institutionalize an understanding of environmental management importance and issues in senior management (having experienced it first-hand) and 2) generate a pool of professionals to do the environmental management work by creating the market.
- Ë **Promote the DOI and NPS environmental achievement awards** so that they become valued rewards within the department/bureau and also with other Agencies. As a bureau that has a mission responsibility of environmental stewardship, an environmental achievement award should be highly valued. Recognition by the Director and public promotion of the program and recipients should be considered as well as monetary compensation.
- Ë **Develop an environmental recognition program for concessioners that have demonstrated consistent environmental compliance and implemented “beyond compliance,” pollution prevention, and sustainable operations.**

PRINCIPLE 5: MEASUREMENT AND IMPROVEMENT

Performance Objective 5.1 -- Evaluate Performance

Sub-Objective 5.1.1: Gather and Analyze Data -- The agency institutes a systematic program to periodically obtain information on environmental operations and evaluate environmental performance against legal requirements and stated objectives, and develops procedures to process the resulting information.

Existing

For the past few years, selected NPS regions have developed and implemented systems to collect environmental performance data. These have included:

- Ē Environmental audits in the SER where a contractor has completed five audits to date.
- Ē CAPs in the MWR, where 14 of 56 park units have been addressed and in the NER, where 3 of 96 park units have been addressed. CAPs are traditional environmental compliance audits with an emphasis on pollution prevention as a preferred approach for follow-up actions. The MWR also includes safety and health issues in the CAP scope.
- Ē Pollution prevention opportunity assessments (P2OAs) conducted in the IMR. Since 1995, 79 of 81 park units have been addressed.
- Ē RCRA Subtitle C compliance audits completed by the Alaska Department of Environmental Conservation. These audits are funded by EPA through the EPA/DOI partnership. Of the 13 planned, two have been completed.

In 1998 the NPS initiated a national environmental auditing program in response to DOI Departmental Manual 515, Chapter 2. Initial steps taken to establish the new program included assignment of a national program manager and regional program managers. A national program orientation and planning meeting was held (10/98) with all regions participating. Substantial regional input was incorporated into the national program.

The US Public Health Service (PHS) conducts sanitation orientated evaluations of park-units independent of the audit program. These address water and wastewater treatment systems and food services.

Under Development and Planned

The NPS plans to strengthen the national auditing program to ensure consistency in evaluation, follow-up, and information management, including reporting. To do this, the following are expected:

- Ē Development and dissemination, internally and externally, of an audit program guide that will document key aspects of the national program, including expectations for regional program implementation.
- Ē Development and implementation of an auditor training program. Currently envisioned as week of hands-on auditing instruction and a periodic refresher course.
- Ē Development and dissemination of NPS audit tools, including: compliance-focused checklists emphasizing pollution prevention and sustainable practices, NPS functional summaries, reporting formats, and compliance assistance tools such as fact sheets. In the initiation phase, the national program is expected to provide regional program staff with these tools. The tools will specify minimum national program requirements. Regional audit program staff will be allowed to customize the tools to address unique regional needs or priorities, as long as national program needs are met.

- Ē Development and deployment of an audit information management and reporting system. Data on audit findings and corrective action status will be maintained in a regional/national database to facilitate efficient periodic and ad-hoc analyses and reporting. The database is expected to be used to evaluate environmental performance and identify areas requiring additional attention.
- Ē Development and implementation of a NPS audit protocol that is unique to NPS facilities and operations. The protocol will be designed for an internal audit function and wide-ranging staff experience and expertise.
- Ē Development of audit criteria for evaluating management support for environmental programs at the park-unit level.
- Ē Development and implementation of an audit data utilization plan. Audit data will be used in management-level decision-making on topics including: project funding, training, policy, staff performance evaluations, and environmental management program planning.

The NER and the PWR plan to develop supplemental audit criteria. In the regard, the NER is developing "green" audit criteria and the PWR is developing "sustainability" audit criteria. These criteria may be addressed during regional audits or by a separate evaluation process.

Recommended Next Steps

The following are recommended next steps to more fully address Sub-Objective 5.1.1.

- Ē **Develop and implement a quality assurance (QA) function for the audit program.** At a minimum, the QA function should be designed to ensure national consistency in auditing and evaluate the effectiveness of the audit program. Suggested quality indicators include: (1) number and severity of audit findings; (2) number and timeliness of corrective actions; and (3) quantities of pollution prevented. Quality indicators should be linked to audit program performance objectives.
- Ē **Ensure that root cause analysis is included in park-level audits.** Root cause issues should be addressed as both audit findings and as the basis of corrective actions. Root cause analysis should be linked to EMS issues already planned to be addressed in audit criteria and account for portions of the CEMP relevant to park-units.
- Ē **Ensure that all audit functions remain independent and objective.** To be independent, auditors must be organizationally separate from the facilities and operations audited. To be objective, auditors must not have an actual or perceived conflict of interest; must not suffer negative consequences or enjoy rewards resulting from audits; and must not have a general bias that affects their work. To do this, NPS may find it necessary to implement organizational changes, such as creating an independent audit group.
- Ē **Ensure that audit data and information is widely used in NPS facility and organization management.** Audit information should be heavily weighted and integrated into project planning, budgeting, and performance evaluation decisions. Audit information should routinely be considered by senior management as a reliable indicator of environmental performance at the park level and higher.
- Ē **Ensure that facility-level concession operations are included in the service-wide environmental auditing program currently being implemented and that environmental performance results should be tied to contract evaluation.**

Sub-Objective: 5.1.2: Institute Benchmarking -- The agency institutes a formal program to compare its environmental operations with other organizations and management standards, where appropriate.

Existing

Formal and documented benchmarking activity comparing the NPS environmental organization against others and standards has not occurred. To a large extent, NPS environmental staff consider their organization and activities unique, and therefore incomparable.

During the interview portion of this review, various NPS staff indicated that they were leaders in environmental management simply because, “they were the Park Service.” Thus, there appears to be a perception that NPS environmental management is a de facto standard for other organizations, and therefore it is not necessary to benchmark against other organizations.

A few NPS staff expressed some interest in understanding how their EMS and compliance record compared with other civilian federal agencies; however, evidence of a widespread NPS commitment to a comprehensive inter-organizational understanding was absent. Such an absence seemed incongruous with the recently launched Environmental Leadership program. However, “Leadership” in this case, seems to refer to the development of leadership internal to the NPS, not of the NPS compared to other organizations. This approach overlooks the potential benefit of learning from others.

Informal benchmarking activities have included:

- Ë Occasional NPS staff participation in EPA Regional and headquarters roundtable discussions;
- Ë Staff participation in the DOI environmental and energy task groups;
- Ë Staff participation in internal (NPS and DOI) environmental meetings as presenters or attendees; and
- Ë Staff participation in external interest groups and professional associations, especially related to sustainability.

It is entirely possible that NPS is an EMS leader in some areas, however, benchmark data to demonstrate such leadership was not available.

Under Development and Planned

Formal EMS benchmarking activities were neither under development nor planned.

Recommended Next Steps

Benchmarking offers an attractive path to NPS EMS performance improvement through adoption of practices already proven to be effective by other organizations. To do this the NPS should take the following steps:

- Ë **Identify specific management areas most likely to benefit from benchmarking.** These include key EMS elements defined by the CEMP (e.g., auditing, training, and others) and key NPS functional or organizational characteristics (e.g., civilian federal agency, natural or cultural resource management, or eco-tourism). These may be public or private.
- Ë **Participate in or conduct periodic documented benchmark studies.** Use the resulting information to advance development of a refined EMS.

- Ë **Explore a formal EMS protegee relationship with a more advanced organization in each of the targeted areas identified in the previous step.** One organization is not likely to be a perfect mentor in all relevant areas so several may be necessary.
- Ë **Maintain a constant level of benchmark activity with other DOI bureaus and offices.** Given many similarities among these organizations, the participants (NPS and other DOI units) should reap significant short-term benefits. This activity will likely result in a more cohesive and cost-effective DOI-wide EMS.
- Ë **Explore the possibility of mentoring another organization.** By serving as a mentor, the NPS should be motivated to maintain a more advanced EMS. The mentored organization may be public or private. A regional or state park organization may be a good candidate.
- Ë **Support and encourage active staff participation in relevant professional organizations and conferences.** This should be considered an essential activity for key staff career advancement.

Performance Objective 5.2 -- Continuous Improvement

The agency implements an approach toward continuous improvement that includes preventive and corrective actions as well as searching out new opportunities for programmatic improvements.

Existing

Suggestions for environmental management improvement within NPS are generally encouraged. Some specific mechanisms include:

- Ë Annual regional NPS environmental coordinators meetings. At past meetings a list of action items for improvement was developed and included in staff objectives.
- Ë The Green Alert BBS is an internal electronic communication system to share information on environmental experiences. The BBS also has been used to solicit input on environmental issues and to post notices on issues of broad interest.
- Ë The MWR newsletter “CAP Tion” focuses on sharing information on audits (i.e., CAPs) lessons learned, compliance issues, and pollution prevention.
- Ë Informal networks of focused interest groups. Some examples include the sustainability task group, and groups on solid waste management. Additionally, when groups assemble for regional training, (e.g., HAZWOPER) there is often informal discussion about ideas for environmental program improvement.
- Ë The PWR assembles a meeting of zone coordinators annually where EMS issues are raised.
- Ë Environmental projects are considered and discussed at annual budget meetings. These typically focus on facility (e.g., building) improvements.

It is clear that NPS staff eagerly seek information on EMS improvements in multiple ways; however, operating procedures for environmental management are evaluated by NPS regions and headquarters on an as-needed, rather than periodic, basis. In addition, “sustainability champions” actively seek lessons learned from other agencies, the commercial sector, and international organizations. In general, the onus for continuous improvement efforts appears to lie with committed individuals. An organization-wide continuous improvement mechanism addressing the NPS EMS was not apparent.

Under Development and Planned

- Ë The environmental audit program is expected to be used extensively to identify opportunities for improvement.
- Ë The audit tools "EnviroCheck Sheets" will provide information on lessons learned to educate both auditors and staff at audited entities during site visits.
- Ë Regional based audit programs will allow internal comparisons and sharing of best management practices.
- Ë Root-cause analysis will be included in audit findings to identify underlying needs which, if addressed, will prevent future occurrences.
- Ë Audit data will be extrapolated to identify national or regional needs so they can be addressed earlier.
- Ë The Draft Environmental Leadership program training is expected to include lessons learned in key environmental management system areas. Examples include procurement, training, response, and waste management.

Recommended Next Steps

The following steps are recommended to the NPS to establish and maintain a continuous improvement process.

- Ë **Seek ways to integrate compliance issues into other environmental or green initiatives.** All related initiatives must acknowledge the importance of regulatory compliance.
- Ë **Conduct periodic review of operating procedures.** Most aspects of NPS operations are addressable by an EMS. Consequently, all NPS operational procedures should be reviewed periodically for current EMS issues. This includes, for example, internal operations, concessioner and other contracted relationships, and visitor programs. Ensure that identified improvements are incorporated into the next planning cycle.
- Ë **Formalize an organization-wide EMS improvement suggestion system.** The system should be open to staff, concessioners, visitors or others. Ensure that suggestions are considered by management with sufficient knowledge of EMS objectives and with authority to implement. Consider implementing a reward system for "best" suggestions.
- Ë **Employ results of environmental audit program and related root cause analyses to identify opportunities for EMS improvement** (not just compliance) and periodically assess the effectiveness of corrective actions.
- Ë **Establish partnerships with "Best in Class" organizations** to jump start ideas for EMS improvement. These leading organizations can be identified from benchmarking activities. See related recommendations in 5.1.2 on mentor and protégée relationships.

MATRIX OF CEMP FINDINGS AND RECOMMENDATIONS

CEMP Study of the National Park Service

Principle 1: Management Commitment

Performance Objective: 1.1 Obtain Management Support

Sub-Objective: 1.1.1 Policy Development - The agency establishes an environmental policy followed by an environmental program that complements its overall mission strategy.

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
<p>1. Current policy (1988) addresses environmental aspects (e.g. recycling, waste management) as part of overall Management Policies. Compliance addressed in :</p> <ul style="list-style-type: none"> • CH 2: NEPA • CH 4: Air and Water • CH 9: Water, Wastewater, Hazmat, Toxic Waste, and Solid Waste. <p>Overall “compliance“ is implicit.</p> <p>2. Special Directives and Staff Directives (considered internal working policy) address waste management, USTs, ISWAPS, pesticide use, and other environmental programs.</p>	<p><i>Entire policy system is under revision at this time.</i></p> <p>1. Existing Management Policies are under review (~10 year cycle), providing opportunities to address environmental aspects more directly. Broad call for involvement.</p> <p>2. Various efforts addressing environmental policy:</p> <ul style="list-style-type: none"> • Proposed EL initiative includes environmental principles which, if approved, could become policy. • Proposed NR initiative addresses environmental compliance in Principle No. 9. “The NPS will comply with all environmental laws and apply the highest standards of environmental stewardship to its operations.” <p><i>(EL, NR, and other initiatives with environmental aspects have growing key stakeholder involvement.)</i></p> <ul style="list-style-type: none"> • Concessions Operations is revising environmental policy applicable to contracted services. • Hazmat policy collection under review. 	<p>1. Share results of initiatives (e.g. EL and NR) internally and externally (e.g. concessions) through management training (e.g. EL) and “normal” channels.</p> <p>2. Obtain additional input on NPS policy goals through EL initiative senior stakeholder meeting.</p>	<p>1. Develop a comprehensive environmental policy. In doing this:</p> <ul style="list-style-type: none"> • Account for: (1) traditional (e.g. compliance); (2) planned (e.g. sustainability); and (3) independent efforts underway. • Prepare draft and final policy with wide internal and external participation. • Use policy development as a consensus building exercise for key stakeholders at all levels. • Set goals for key environmental indicators. <p>2. Include environmental policy in staff and stakeholder education (e.g Compass I, II). Make sure message gets out through periodic and management supported promotion (e.g. brochure, contract language, awareness training, web page, posted document).</p> <p>3. Include specific reference to concessioners in environmental</p>

CEMP Study of the National Park Service

Principle 1: Management Commitment

Performance Objective: 1.1 Obtain Management Support

Sub-Objective: 1.1.2 System Integration - The agency integrates the environmental management system throughout its operations, including its funding and staffing requirements, and reaches out to other organizations.

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
<ol style="list-style-type: none"> 1. Annual HWMPP team project review funding occurs with selection based on relevance to four categories: Waste Reduction and Management; Fuel Storage; Contaminated Sites; and Technical Support. Each category has ranking criteria; system to be integrated into a Project Management Information System (PMIS). 2. Environmental due diligence reviews occur with property transfer. 3. Annual report to DOI on project status and resources for site restoration. Included in DOI FY Accountability Report. 4. Concessions Operations has an environmental coordinator on staff. 	<ol style="list-style-type: none"> 1. Regional support capability is being made more broad (e.g. multimedia) through internal audit program. 	<ol style="list-style-type: none"> 1. Through the proposed environmental audit program: <ul style="list-style-type: none"> • A park-level POC is to be established in advance of the site visit; and • Responsibility for environmental management and specific corrective actions will be specified. 2. Incorporate environmental audit program data into budget/funding decisions. 	<ol style="list-style-type: none"> 1. Develop and provide “awareness” level training to all levels of management (different than environmental training in 3.1). 2. Broaden scope of environmental criteria (e.g. waste and water) to review all project funding requests in one integrated environmental aspects evaluation. 3. Acknowledge Service-wide need for funding and personnel allocated specifically to environmental compliance. 4. Develop a Concessions Division environmental policy that mandates concessioners comply with “Concessions Environmental Guidelines” (see Principle 3.2).
<p align="center">NPS Comments/Additions</p> <ol style="list-style-type: none"> 1. Annual natural resources funding allocation process. 2. Contaminants Technical Advisory Group quarterly meetings. 			<ol style="list-style-type: none"> 5. Modify concessions contracts and facility operating plans to include performance criteria. 6. Incorporate environmental program needs into Concessions Program budget process.

CEMP Study of the National Park Service

Principle 1: *Management Commitment*

Performance Objective: *1.2 Environmental Stewardship and Sustainable Development - The agency strives to facilitate a culture of environmental stewardship and sustainable development.*

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
<ol style="list-style-type: none"> 1. Stewardship and sustainability are founding philosophies of the NPS. 2. Sustainable Design Guidelines and web site. 3. A few regions (e.g. NER, NCR) offer training in green procurement and sustainable design. 4. Sustainable Re-Development Addendum's to selected GMPs (e.g. GCNP). 5. Management Policies and internal direction (e.g. Natural Resources, Concessions Operations) include sustainable design. 6. Draft Environmental Leadership Towards Sustainability training. 7. Design for Environment concepts incorporated into building design. 8. NPS experts participate in external projects (Easter Island, Australia). 9. NPS cost recovery program (PRP search manual, CERCLA manual). 	<ol style="list-style-type: none"> 1. Training telecast via satellite on sustainability in partnership with academia (Denver Service Center). 2. Annual DOI environmental meeting participation with focus on sustainability (and other environmental topics). 3. DOE-sponsored sustainability initiative with DOI-focused on transportation 4. NR initiative. 5. NER/PWR sustainability initiatives. 	<ol style="list-style-type: none"> 1. Assistant Secretary directed EL initiative focused on sustainability. 2. National Renewable Energy Laboratory (NREL) Memo of Understanding focused on sustainability. 	<ol style="list-style-type: none"> 1. Account for existing and planned environmental management responsibility (e.g. compliance) in sustainability initiatives. <ul style="list-style-type: none"> • Link sustainability coordinators with compliance coordinators to facilitate harmony. • Merge and coordinate various environmental initiatives (e.g. DOI, DOE-NREL, EPA, NPS) 1. Ensure integration of sustainability and stewardship initiatives in NPS environmental management system. Build a system that will address all current issues and be sufficiently flexible to address future needs. 2. Link and increase awareness of understanding and dealing with environmental impacts (e.g. NEPA). 3. Enhance enforcement capability (i.e., additional resources) and posture for actions damaging NPS resources (e.g., illegal dumping).

CEMP Study of the National Park Service

Principle 2: Compliance Assurance and Pollution Prevention

Performance Objective: *2.1 Compliance Assurance - The agency institutes support programs to ensure compliance with environmental regulations and encourages setting goals beyond compliance.*

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
<ol style="list-style-type: none"> 1. Compliance guidance distributed via standard means for: hazwaste, solid waste, CERCLA, tanks, water and wastewater treatment, NEPA, pesticide management. 2. Participate in EPA/DOI partnership. 3. Other regional (e.g. IMR) EPA/DOI partnerships exist; EMR's being implemented at several parks. 4. Rely on DOI/OEPC and ad-hoc sources for regulatory updating. 5. P2/sustainability is a preferred environmental management approach. 6. Two HQ groups focused on compliance: park operations and education - hazmat, hazwaste; natural resources - NEPA, air, water, pesticides. 7. Regional Initiatives: P2OAs in IMR (76); Compliance Assistance Projects (CAPs) in the MWR and NER (12); and contracted audits in the SER(5). 8. Draft Envirocheck Sheets and training for 21 audit criteria areas. 	<ol style="list-style-type: none"> 1. Twenty nine EnviroFacts on waste streams, compliance, and environmental management programs for parks; to be disseminated on the Internet. 2. National Environmental Audit Program: <ul style="list-style-type: none"> • Baseline compliance; • Identify needs for compliance guidance; • Encourage P2 as an approach; • Elevate issues to upper management; • Encourage self audit and reporting; and • Addresses non-regulated risks. 1. Participate in EPA/CFA Task Group. 2. Regional pilot program in hazard analysis (IMR). 	<ol style="list-style-type: none"> 1. Periodic audits of each park-level facility. 2. Track corrective actions via new information system (Environmental Audit Program). 3. Establish standard records management system. 4. Establish "beyond compliance" goals and assure completion. 5. Additional EnviroFacts and Envirocheck Sheets. 6. Concessionaire self-audit program. 	<ol style="list-style-type: none"> 1. Establish a reliable regulatory updating system to communicate changing needs to parks. 2. Develop multimedia compliance workgroup to ensure all environmental program areas are addressed and program environmental compliance requirements and program and goals can be evaluated comprehensively. 3. Include compliance liability risk assessment as a park-level management decision tool. 4. Seek opportunities with DOI (OEPC) for cost-effective solutions to Department-wide challenges. <ul style="list-style-type: none"> • Lessons learned. • Cost sharing solutions benefiting other bureaus and offices. For example: <ul style="list-style-type: none"> * training * policy * QA - audits * regulatory updating * reporting

CEMP Study of the National Park Service

Principle 2: Compliance Assurance and Pollution Prevention

Performance Objective: *2.2 Emergency Preparedness - The agency develops and implements a program to address contingency planning and emergency response situations.*

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
<ol style="list-style-type: none"> 1. Regulatory programs include: <ul style="list-style-type: none"> • SPCC Plans • Facility Response Plans 1. Dam, Bridge, and Road Safety program 2. NRDA component (e.g. oil spill) 3. Incident Command (IC) system; national and regional incident commanders; superintendent IC training via Parks and Education Fire Management Program 4. Preventive Maintenance and Rehabilitation programs 5. >500 HAZWOPER trained staff nationally. 6. Fully established emergency response teams at some parks (e.g. Padre Island). 	<ol style="list-style-type: none"> 1. Hazard Analysis Pilot at five parks in IMR. 2. Plan Automated Response and Communications System (PARCS) software to develop integrated contingency plans. 3. Directors Order #79 on emergency response clarifies roles and responsibilities. 	<ol style="list-style-type: none"> 1. SPCC FRP and RCRA contingency requirements for parks to be screened in NPS environmental audit program. 	<ol style="list-style-type: none"> 1. Establish park-level ER task forces and procedure for periodic park-level emergency planning task force review. 2. Identify non-regulated, but unacceptable, risk areas (e.g., known PCB contamination below action levels, non-NPS transport incidents on NPS property) and include in preparedness programs. 3. Seek advanced prevention programs for remote or highly sensitive areas. 4. Implement Integrated Medical Monitoring program (e.g. RPP gaps). 5. Provide awareness to parks on emergency response team support requirements (training, H&S Plan, equipment, etc.). 6. Confirm programs for: <ul style="list-style-type: none"> • EAPs (OSHA) • RCRA Contingency Plans (EPA) • “One” Plan Utilization 7. Expand superintendent IC training beyond parks by including fire management requirements.

CEMP Study of the National Park Service

Principle 2: Compliance Assurance and Pollution Prevention

Performance Objective: *2.3 Pollution Prevention and Resource Conservation - The agency develops a program to address pollution prevention and resource conservation issues.*

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
<ol style="list-style-type: none"> 1. National evaluation of recycling in NPS conducted in 1993. Waste stream analysis conducted in 10 parks in 1995. 2. National Integrated SW Management program established: policy, guidance, training; waste reduction/recycling goals. 3. Most parks have established SW recycling programs; feasibility studies conducted for composting at larger parks. 4. P2 is a preferred management approach. 5. P2 assessments in the IMR (76); sustainability assessments in regions (e.g. PWR). 6. LCC and material reuse is promoted through NPS Sustainable Design Guidelines. Some regional sustainability guidelines (MWR, NER). 7. Energy conservation projects/audits completed through NPS/FEMP and university (JMU) partnerships. 8. Green product cost differential underwriting program through HQ. 	<ol style="list-style-type: none"> 1. Green product selection database pilot in IM region. 2. Green procurement, waste reduction, recycling EnviroFacts. 3. Full scale alternative energy projects (PV, geothermal) via NPS/FEMP partnership. 4. Concessionaire polices being developed which encourage waste reduction and green procurement. 5. Environmental Leadership training includes modules on waste management with P2 focus and contracted relationships with focus on EPP principals. 6. Chemical substitution fact sheets (IM region). 	<ol style="list-style-type: none"> 1. Green procurement pilot for concessionaire operations at Yellowstone. 2. Green procurement, water conservation, energy conservation, and solid waste management screening during environmental auditing. P2 opportunities to be addressed in audits. 3. NPS/University/FEMP partnership energy audits (6+ parks). 4. Standard contract language encouraging green procurement. <hr/> <p align="center">NPS Comments/Additions</p> <ol style="list-style-type: none"> 1. Employ P2 strategies as a means of reducing potential compliance liabilities (e.g., toxics use reduction/ elimination) 	<ol style="list-style-type: none"> 1. Update waste stream analyses for NPS to determine current recycling/reuse opportunities and to track ISWAP success.

Principle 2: Compliance Assurance and Pollution Prevention (Continued)

Performance Objective: *2.3 Pollution Prevention and Resource Conservation - The agency develops a program to address pollution prevention and resource conservation issues.*

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
<p style="text-align: center;">NPS Additions/Comments</p> <p>1. Developed SOP for solid waste stream characterization.</p>		<ol style="list-style-type: none"> 1. Implement pollution prevention and waste reduction programs at parks based on environmental audit program recommendations. 2. Integrate EPP purchasing into NPS procurement procedures (national program and in parks). 3. Conduct P2 opportunity assessments (PPOA) in all NPS regions or include PPOA in audit program protocol. 4. Develop and implement Service-wide green procurement programs. 	

CEMP Study of the National Park Service

Principle 3: Enabling Systems

Performance Objective: *3.1 Training - The agency ensures that personnel are fully trained to carry out the environmental responsibilities of their positions.*

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
<ol style="list-style-type: none"> 1. Environmental awareness training has occurred sporadically on: USTs, hazmat, and solid waste management; and periodically (10x+/yr) for HAZWOPER (PHS). 2. Customized HAZWOPER training available (~10 per yr.) to cover: <ul style="list-style-type: none"> • HAZCOM (4 hr) • HAZWOPER Refresher (8 hr) • HAZWOPER (24 hr) • P2 (2-4 hr) 1. BLM environmental compliance training program is available to NPS. 2. Distance learning pilot (via IU) on EnviroFacts occurred 11/98. 3. Draft environmental leadership training piloted (4/98). 4. Courses in solid waste, CERCLA, hazwaste and fuel storage tanks, and NEPA offered over last five years. 5. Annual pesticide management training. 6. Regions have additional unique 	<ol style="list-style-type: none"> 1. Distance learning program pilot in hazardous waste management. 2. Environmental Leadership Towards Sustainability training pilot for management. 	<ol style="list-style-type: none"> 1. Explore effectiveness of distance learning for environmental requirements. 2. Environmental training core curriculum analysis. 	<ol style="list-style-type: none"> 1. Update training needs assessment by NPS career path <u>and</u> environmental management program; address full dissemination of training beyond first line workers. 2. Implement joint training opportunities with other DOI bureaus and offices. 3. Pursue EPA as a training resource (regions/HQ). 4. Pursue other government training source opportunities (e.g. DOD/COE). 5. Form an integrated training function addressing: <ul style="list-style-type: none"> • Health and Safety • Natural Resources • Energy • Sustainability • Environmental Compliance and Beyond • P2 • EMS 6. Develop means of verifying that

Principle 3: Enabling Systems (Continued)

Performance Objective: *3.1 Training - The agency ensures that personnel are fully trained to carry out the environmental responsibilities of their positions.*

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
			<p>7. Conduct a training needs assessment for concessioners.</p> <p>8. Conduct awareness training for concessioners.</p>

CEMP Study of the National Park Service

Principle 3: Enabling Systems

Performance Objective: *3.2 Structural Supports - The agency develops and implements procedures, standards, systems, programs, and objectives that enhance environmental performance and support positive achievements of organizational environmental and mission goals.*

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
<ol style="list-style-type: none"> 1. Internal and External NEPA program through EQD. Guidelines established. 2. New NPS-wide PMIS budget prioritization processes can include environmental ranking criteria. A priority ranking process is in place for HWMPP specific program funding. 3. Manuals and guidance containing operational procedures have been prepared or updated: (e.g. Solid Waste (ISWAP) ('96), Hazwaste Handbook ('94); CERCLA Manual (rev. '98); Tank Manual ('96); Pesticides ('97); Loss Control (OSHA programs) ('91); Public Health ('93)). 4. Draft EL strategy provides EMS-based plan for NPS. 1,2,3-yr plans and estimated funds. Developed based on stakeholder input. Active ELI workgroup. 	<ol style="list-style-type: none"> 1. Level I and II policy review for environmental programs completeness and to reflect ELI goals. Part of ongoing Directives Management Program revisions and 10-yr Level I Management Policies review. 2. Revised PHS (water and wastewater treatment), risk management, and NEPA guidelines. 3. Updated HAZWOPER training manual. 4. ELI training which will provide awareness training in EMS, sustainability, contracted relationships, and others. 5. Natural Resources Initiative establishes goal for environmental stewardship through environmental compliance. 6. Revised lands acquisition guidance and forms. 	<ol style="list-style-type: none"> 1. Integrate GPRA and EL to establish measurable goals tied to NPS strategic plan. 2. Implement EL strategic plan. 3. Policy Office review of policies to address new Directive Management System requirements (e.g. policy in level I and II, implementation guidance in Level III). 4. EL/NR integration between DOE/NPS. 5. Encourage development of and promote existing or new Centers of Environmental Excellence. 	<ol style="list-style-type: none"> 1. Integrate all environmental related initiatives throughout organization (e.g. ELI, NRI, energy, risk management, and sustainability). 2. Develop Park Strategic Environmental Management Plans. 3. Establish internal management review program and conduct periodic evaluation (e.g. annual) to ensure currency. 4. The Concessions Division should develop "Level 3" guidelines that outline operational requirements for concessioners to comply with federal, state, and local regulations, and DOI and NPS policy (at a minimum).

CEMP Study of the National Park Service

Principle 3: Enabling Systems

Performance Objective: *3.3 Information Management, Communication, Documentation - The agency develops and implements systems that encourage efficient management of environmentally-related information, communication, and documentation.*

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
<ol style="list-style-type: none"> 1. HWPPT manages an Environmental Information Management System (MS/Access) to track their environmental project status. Parallels FEDPLAN. 2. NEPA tracking database. 3. Green Alert bulletin board system. 4. Sustainable design web site. 5. Regional web sites provide information on sustainability and NEPA. 6. Resident FTC environmental information advisor (HWPPT). 7. Information management projects are ranked for implementation as are all other projects – based on environmental criteria (HWPPT) such as green products database. 8. Hard copy documents distributed (manuals) as needed. 	<ol style="list-style-type: none"> 1. PMIS (interactive web-based) likely to supersede EIMS but maintain functionality. 2. NPS to use CERL Team Guide for Federal and state regulation updating for Service-wide environmental audit program. Will link with NPS audit checksheets. 3. Developing audit reporting and tracking system. 	<ol style="list-style-type: none"> 1. Web page offering EnviroFacts, guidance documents, and other environmental management tools. 	<ol style="list-style-type: none"> 1. Develop integrated environmental information strategy. <ul style="list-style-type: none"> • Inventory critical information needs. • Identify universe of existing information sources. • Address information gaps by priority. 1. Establish or rely upon a periodic organization-wide update (e.g. newsletter) to provide a reliable communication mechanism for routine, but important information. 2. Develop and implement guidance on centralized filing and recordkeeping system (region and park-level). 3. The Concessions Division should develop electronic (Internet) and other systems to effectively transmit environmental program information and data to concessioners (e.g. policy and procedures, environmental audit data).

CEMP Study of the National Park Service

Principle 4: Performance and Accountability

Performance Objective: *4.1 Responsibility, Authority, and Accountability - The agency ensures that personnel are assigned the necessary authority, accountability, and responsibilities to address environmental performance, and that employee input is solicited.*

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
<ol style="list-style-type: none"> 1. Regional environmental program coordinators identified (hazmat/waste, CERCLA, USTs, solid waste); no line authority. 2. WASO and Regional environmental audit coordinators designated. 3. Park-level environmental coordinators established in parks (<15%). 4. Park superintendent and regional directors maintain line responsibility, authority, and accountability for park or region activities. 	<ol style="list-style-type: none"> 1. Accountability management system for superintendents. Best practice for environmental leadership “meets or exceeds all environmental laws...” 2. Environmental Leadership training providing awareness of management responsibility for environmental compliance programs. 	<ol style="list-style-type: none"> 1. Park-level environmental coordinators/ points of contact at all parks. 	<ol style="list-style-type: none"> 1. Assign responsibility and authority to a specific individual to ensure environmental compliance at park-level. 2. Establish policy on environmental accountability and include in Environmental Policy (see 1.1). 3. Review performance in light of environmental responsibility issues (see 4.2). 4. Service-wide environmental Coordinator position. 5. Empower environmental coordinator position with authority to resolve conflicting spheres of authority and designate clear responsibility where not established (e.g. emergency response, water pollution control). 6. Regional environmental coordinator positions.

CEMP Study of the National Park Service

Principle 4: Performance and Accountability

Performance Objective: *4.2 Performance Standards - The agency ensures that employee performance standards, efficiency ratings, or other accountability measures, are clearly defined to include environmental issues as appropriate, and that exceptional performance is recognized and rewarded.*

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
<ol style="list-style-type: none"> 1. DOI and NPS award programs for exceptional environmental achievement. 2. In many cases environmental program coordinator performance goals are established by supervisors which do not have environmental performance responsibility or accountability. 3. Environmental performance standards are not clearly defined for many environmental program personnel (particularly park-level). 4. Environmental criteria are incorporated into performance standards for regional support staff (0.5-2 FTE/ region), HQ (6-8 FTE) as advisors but infrequently at the park-level as managers or environmental protection specialists. 	<ol style="list-style-type: none"> 1. Procedures for the evaluation of superintendent performance. 2. Incentives to encourage development of Centers of Environmental Excellence. 		<ol style="list-style-type: none"> 1. Develop environmental compliance performance goals, then address P2/sustainability. Use to develop customized regional or park standards. 2. Link individual environmental compliance and management performance standards with organizational goals, then address P2/sustainability. 3. Develop procedures for evaluation of environmental compliance performance, then address P2/sustainability. 4. Develop procedures for rewarding or penalizing responsible staff based on environmental compliance performance, then address P2/sustainability. 5. Elevate visibility of environmental achievement awards, particularly with respect to other agencies, then address P2/sustainability.

Principle 4: Performance and Accountability (Continued)

Performance Objective: *4.2 Performance Standards - The agency ensures that employee performance standards, efficiency ratings, or other accountability measures, are clearly defined to include environmental issues as appropriate, and that exceptional performance is recognized and rewarded.*

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
			<p>6. Institutionalize environmental program accountability by specifying environmental performance criteria in managerial and employee performance evaluations. Recognize importance of environmental management in staffing.</p> <ul style="list-style-type: none"> • Formalize concept of one lead point-of-contact responsible for environmental management at each park. • Formalize coordinated and integrated HQ advisory and management environmental function. • Make environmental management experience a required KSA for management. <p>7. Develop an environmental recognition program for concessioners.</p>

CEMP Study of the National Park Service

Principle 5: Measurement and Improvement

Performance Objective: *5.1 Evaluate Performance*

Sub-Objective: *5.1.1 Gather and Analyze Data - The agency institutes a systematic program to periodically obtain information on environmental operations and evaluate environmental performance against legal requirements and stated objectives, and develops procedures to process the resulting information.*

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
<p>1. Regional activities:</p> <ul style="list-style-type: none"> • MWR, NER – Compliance Assistance Projects. • IMR – Pollution Prevention Opportunity Assessments. • SER – Contracted Audits. • AR – RCRA Compliance Audits conducted by state. <p>1. National environmental audit program manager.</p> <p>2. Regional and park environmental staff participating in audit program development.</p> <p>3. PHS park evaluation process covers water and wastewater treatment and food service.</p>	<p>1. National environmental audit program with:</p> <ul style="list-style-type: none"> • Audit program guidance document. • Auditor training program. • Audit criteria focusing on compliance and screening for P2 and sustainable practices. • An information management and reporting system. • Unique audit protocol. • Audit criteria for evaluating park management support for environmental program. <p>2. NER “green” audits.</p> <p>3. PWR sustainability audits.</p>	<p>1. Develop corrective action tracking and issue forecasting system.</p> <p>2. Audit data utilization plan to:</p> <ul style="list-style-type: none"> • Identify environmental program needs (e.g. training, policy). • Set priority to funding and project decisions. • Encourage and reward top performance. • Transfer solutions internally (lessons learned). <p>1. System for updating audit criteria.</p> <p>2. System for addressing state and local audit criteria.</p>	<p>1. Develop and implement a quality assurance function to evaluate audit program performance.</p> <p>2. Include root cause analysis in audit program criteria.</p> <p>3. Create independent audit group.</p> <p>4. Integrate audit information and reporting (e.g. corrective actions) with related systems (e.g. projects and budget). Make sure audit program data is used in project and program decision-making.</p> <p>5. Ensure that facility-level concession operations are included in the environmental auditing program and that environmental performance results are tied to contract evaluation.</p>

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Principle 5: Measurement and Improvement

Performance Objective: 5.1 Evaluate Performance

Sub-Objective: 5.1.2 Institute Benchmarking - The agency institutes a formal program to compare its environmental operations with other organizations and management standards, where appropriate.

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
<ol style="list-style-type: none"> 1. Some interest in benchmarking. 2. Some participation in EPA Regional Environmental Roundtable. 			<ol style="list-style-type: none"> 1. Participate in benchmark studies for appropriate sectors such as: <ul style="list-style-type: none"> • Federal • Resource Management • Eco-Tourism to learn about environmental practices proven to be effective. 2. Explore establishing an EMS protégé relationship with a more advanced organization such as Forest Service. 3. Explore the possibility of mentoring another organization: <ul style="list-style-type: none"> • Federal: land management • Resource Management: museums, International World Heritage sites. • Eco-Tourism: concessionaires, recreation, tourism, hospitality • Full participation in EPA Roundtables 4. Consider benchmarking against other DOI bureaus.

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Principle 5: Measurement and Improvement

Performance Objective: *5.2 Continuous Improvement - The agency implements an approach toward continuous environmental improvement that includes preventive and corrective actions as well as searching out new opportunities for programmatic improvements.*

EXISTING	UNDER DEVELOPMENT	PLANNED	RECOMMENDED NEXT STEPS
<p>1. Suggestions for environmental program management improvement are encouraged generally and specifically through:</p> <ul style="list-style-type: none"> • Annual regional environmental coordinators meeting. • Green Alert BBS. • Informal networks (e.g. sustainability taskgroups). • PWR annual zone coordinators meeting. • Contaminants Technical Advisory Group. <p>1. Operating environmental management procedures are evaluated as needed by region (e.g. new staff) and at HQ (e.g. new budgeting system).</p> <p>2. Sustainability champions actively seek to borrow lessons learned from other organizations (internationally).</p>	<p>1. Environmental audit program to eventually address root cause of current deficiencies and, through information sharing, prevent future occurrences.</p> <p>2. Draft ELI training includes lessons learned in key environmental management issues.</p>		<p>1. Establish partnerships with “Best in Class” organizations to jump start ideas for improvement (See potential mentors 5.1.2).</p> <p>2. Formalize an environmental management improvement suggestion system. Include staff, concessionaires, and visitors.</p> <p>3. Explore the possibility of champions from various initiatives (e.g. sustainability); adopt and include environmental compliance as part of their mission.</p> <p>4. Employ results of environmental audit program to identify opportunities for improvement and assess effectiveness of corrective actions.</p>

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List of Acronyms

BLM – Bureau of Land Management
CAP -- Compliance Assistance Project
CFA – Civilian Federal Agency
COE – Corps of Engineers
DfE – Design for Environment
DoD – Department of Defense
DOE – Department of Energy
DOI – Department of the Interior
EL – Environmental Leadership
EMR – Environmental Management Review
EMS – Environmental Management System
EPA – Environmental Protection Agency
EPP – Environmentally Preferable Products
EQD – Environmental Quality Division
FEMP – Federal Energy Management Program
GCNP – Grand Canyon National Park
GMP – General Management Plans
GPRA – Government Performance Results
HWMPP – Hazardous Waste Management and Pollution Prevention
IC – Incident Command
IMR – Inter-Mountain Region
ISWAP – Integrated Solid Waste Alternatives Program
IU – Indiana University
JMU – James Madison University
KSA – Knowledge, Skills and Abilities
MOU – Memorandum of Understanding
NEPA -- National Environmental Policy Act
NER – Northeast Region
NPS – National Park Service Act
NREL – National Renewable Energy Laboratory
NR – Natural Resource
OEPC – Office of Environmental Policy and Compliance
OSHA – Occupational Safety and Health Administration
P2 – Pollution Prevention
PHS – Public Health Service

PFMD – Park Facility Management Division
PMIS – Project Management Information System
PPOA – Pollution Prevention Opportunity Assessment
PWR – Pacific West Region
RPP – Respiratory Protection Program
SER – Southeast Region
SOP – Standard Operating Procedure
ST – Underground Storage Tank

