

Resource Stewardship Strategic Plan

Pacific West Region
1998

Purpose of this Plan

The purpose of this plan is to provide strategic direction in actions necessary to establish a program for resource stewardship for the parks within the Pacific West Region (Region). This plan adopts the mission goals and format of the National Park Service (NPS) Strategic Plan, enabling the Region to meet the Government Performance and Results Act (GPRA) responsibilities and report resource stewardship activities within the framework of the overall NPS Strategic Plan. It also has incorporated long-term goals from the NPS Cultural Resources Strategic Plan to further the integration of natural and cultural resource stewardship.

The establishment of this program will provide the Regional Director and Region's three Cluster Executive Committees a clear **assessment of the current conditions** and overall trend of conditions of the cultural and natural resources within the parks of the Region. The plan provides a **basis for accountability** of the Service's activities in answering our basic resource stewardship question, "Are the cultural and natural resources within the Region's park units in good condition, and are resource conditions improving or declining over time?" This Strategic Plan proposes the adoption of a "**State of the Parks Report**" to provide the Regional Director with an assessment of the overall progress under the Strategic Plan and the overall resource conditions within the Region.

This plan incorporates the concept of "**vital signs**" as a new framework for assessing the condition of park resources. Vital signs are defined as those key resource components necessary for an understanding of overall ecosystem functioning and health. The key components adopted as vital signs provide an adequate set of **surrogates within the full range of ecosystem components** for the assessment of ecosystem conditions. For natural resources, the goal is to have vital signs of ecosystem health within the normal range of variation. For cultural resources, the goal is to determine acceptable standards or conditions for resources and assess whether resources are within the acceptable range of condition. In addition to providing a framework for answering basic questions about the condition of park resources, the vital signs concept enables the Pacific West Region to develop long-term and annual goals and overall performance measures for restoration of resources, for protection of resources from internal and external threats and for the establishment of strategic science needs. This Plan also adopts an ecosystem approach to management, wherein an ecosystem is understood to include natural and cultural resources and the influences of humans and their cultures over time within their environment.

This Plan incorporates the collective vision in resource stewardship from a number of recent Region initiatives, including the February 1996 Task Force white papers on the condition of resource stewardship and science; the 20 resource issue papers on a variety of topics developed during the April 1996 regional West by

Northwest Resource Stewardship Workshop; the Region's Cultural Resource Advisory Team's series of white papers, including implementation of National Historic Preservation Act section 106 compliance under realignment, merging the natural and cultural advisory teams; and allocation of Cultural Resource Preservation Program funds.

This Strategic Plan seeks to integrate the proposed adoption of a vital signs concept and ecosystem-based stewardship from above, and the previously recommended actions from other documents to develop mission goals and long-term goals to meet our resource stewardship responsibilities. The format follows that of the overall NPS Strategic Plan and GPRA requirements.

This Strategic Plan is intended as a guidance and framework document at this point. It is not mandatory that parks reflect these goals and measures in their initial GPRA strategic plans. The plan is intended to guide the Pacific West Region in the development of a program to address the issues of long-term accountability for our resource stewardship actions and the condition of the resources entrusted to us. As the vital signs concept and associated measures are refined over the next few years, we do anticipate that elements will be incorporated into future park updates of their strategic plans.

Significance Statement for the Pacific West Region's Resources

The Pacific West Region is entrusted with the preservation of a diverse array of our nation's most precious cultural and natural resources. This includes resources from World Heritage Sites such as Yosemite and Redwood National Parks, major Biosphere Reserves such as Olympic, Mt. Rainier, Yosemite, Sequoia and Kings Canyon, North Cascades, Point Reyes/ Golden Gate/Muir Woods, and Death Valley National Parks, to significant historical sites such as Fort Clatsop, Haleakala, Nez Perce, and USS Arizona Memorial, to major recreational areas such as Golden Gate, Santa Monica, and Lake Mead. While many of these units have immediate recognition for outstanding cultural, natural, or recreational resources, each also represents an array of interconnecting resource values. Just as important, each tells the story of human interaction with the landscape and resource values through time — past, present, and future.

The Region is involved in significant ecosystem initiatives and preserves resources significant to overall preservation of several key ecosystems within the Western United States. These include the northwestern forest ecosystems and vast wilderness preserved within Olympic, Mt. Rainier, and North Cascades National Parks; the best hopes for preservation of the world's most threatened ecosystems, the Hawaiian natural ecosystems and tropical rain forest within Haleakala and Hawaii Volcanoes National Parks; the anchoring of the Sierran ecosystem by Yosemite and Sequoia and Kings Canyon National Parks; the 7 million acres, including 4 million acres of wilderness of the Mojave Desert preserved by Death Valley and Joshua Tree National Parks, Mojave National Preserve, and Lake Mead National Recreation Area; the southern California coastal ecosystem encompassed in Channel Islands National Park, Santa Monica Mountains National Recreation Area, and the northern California coast and forest preserved within Golden Gate National Recreation Area, Point Reyes National Seashore, and Redwood National Park.

Thousands of years of human populations interacting with each other and their environment are also reflected in the natural and cultural resources of the parks of the Pacific West Region. Prehistoric and historic themes include settlement and migration, conflict and cooperation, exploration and trade, the exploitation of resources, and the subjugation of peoples. Cultural resources – districts, sites, landscapes, structures, and objects – are found in every park in the region. They range from prehistoric rock quarries and ancient heiaus, to the scenes of early exploration and contact between Native peoples and Euro-Americans, to sites representing the development of national institutions such as the National Park System and the international conflicts of the 20th century. Many of the natural resources in our parks have both spiritual and cultural significance and must be managed with this taken into account.

The Pacific West Region is a mosaic of many cultures, each holding onto its own values and traditions, while bound together by their shared occupation of the land and the institutions of community and government. As managers for the parks of this region, we must recognize that these multiple themes and cultural values are an advantage of both the formal partnership programs we manage and the opportunities for cooperative activities to reach out and mutually support each other, sharing research, understanding, access, and respect for all viewpoints.

Common Themes and Shared Values

The challenges of protecting the cultural and natural resources of the National Park System are much more complicated than anticipated a generation ago. Our visitation has increased beyond expectations. The integrity of the natural systems and resource values we protect are threatened by a host of complex biological and cultural changes. The American public does not have an understanding of what it takes to protect these resources. Neither have they internalized an appreciation for all of the tangible and intangible resource values that parks provide.

These challenges and other have been well documented in several initiatives over the past few years, including the Vail Agenda, the National Research Council report "Science in the National Parks," the NPS Natural Resources Strategic Plan, the report of the Ad Hoc Working Group on Natural Resource Management, the NR-MAP and CR-MAP programs, the NPS Strategic Plan, and the draft NPS Cultural Resources Strategic Plan.

In assessing these challenges, significant recurring themes and values for the NPS resource stewardship program stand out. Chiefly, in order for resource stewardship in the NPS to flourish, and for our resources to remain, **we need to help visitors and the public forge emotional, intellectual, and recreational ties with the nation's cultural and natural heritage.** The NPS has a major role to play in the public's understanding and appreciation of our individual units and their place in larger ecosystem integrity and preservation of cultural heritage. The summary paper from the Resource Interpretation and Education Work Session at the Region's West by Northwest Resource Stewardship Workshop states, "The National Park Service cannot preserve and protect its areas alone. Increasing threats in a rapidly changing world make it necessary to inform the public about resource issues and enlist their support now."

The increasing complexity of the NPS multidisciplined mission required **the adoption of an ecosystem management approach** at all levels of park operations. Ecosystem management is a long-term approach, with the goal to preserve, protect, maintain, and/or restore ecosystem integrity, and to maintain sustainable societies and economies. The September 1994 "Ecosystem Management in the National Park Service" discussion draft by the Vail Agenda Ecosystem Management Working Group provides an excellent discussion on ecosystem management. As described in this document, ecosystem management includes cultural resources management.

Ecosystem management for both natural and cultural resources shares a common methodology of research, inventory, evaluation and conservation that is only enhanced when the relationships between cultural and natural resources are recognized and acted upon. This entails recognizing that humans have interacted with their environment for thousands of years and that understanding the impact of this interaction is essential to wise management of both cultural and natural resources. Furthermore, it requires an understanding and taking into account of the many varied perspectives on the relationship between humans and nature that exist in contemporary cultures that value and seek access to park resources.

We must recognize that parks are a part of a larger system. This underscores the urgency to work with our neighbors and adjacent land managers. It also speaks to the need to understand diverse national and international publics, to forge emotional bonds, and to understand how societal and personal choices affect the environment. Within this document, the terms "ecosystem management" and "

resource management” refer to all park resources within their broad environmental and societal contexts.

In that light, **partnering and partnerships should become our way of doing business.** Ecosystem management and heritage preservation are best understood as shared responsibilities. The NPS must collaborate, communicate, cooperate, and coordinate with partners. Partnering also incorporates seeking opportunities to expand our physical and fiscal resources.

We recognize and draw strength from the diversity of our publics, as well as our staffs. Each employee has a role in furthering the overall mission of the NPS and a role in leadership. Individual resource staff members in parks should not feel powerless to carry out their jobs. Management must provide the framework for employees to share their expertise and for the NPS to achieve the synergy of our collective talent.

We recognize that the **NPS must be a model of resource stewardship and sustainability** in all of our operations. Resource conservation must be integrated into all park planning and operations. Our park operations must be appropriate models of resource stewardship and sustainability, demonstrating actions we would like our observers to adopt.

We value a professional research-based resource management program. Science must provide a foundation for managing our natural resources, just as the highest standards of research must increase our understanding and management of cultural resources. Strong ties must be built and fostered between our resource managers and their colleagues in the larger research community, based on a sharing of the highest standards of professional ethics and qualifications. Programs and activities need to withstand professional peer review and public scrutiny. In addition, our resource managers must find ways to recognize and take into account the value systems of all communities for which the parks’ resources have significance. This is not just a requirement of law and policy, but a fundamental commitment to being good stewards of the nation’s most treasured resources.

All disciplines within resource stewardship are important to the success of the overall mission. There can be no “stepchildren.” Our individual disciplines are as necessary to achieve our overall program as specific resource components are necessary to ensure proper ecosystem functioning.

MISSION GOAL IA: Natural and cultural resources and associated values are protected, restored and maintained in good condition and managed within their broader ecosystem and cultural context.

This goal, which encompasses the broad mandate of the National Park Service Organic Act, includes the concepts of biological and cultural diversity and the perpetuation of natural processes. Broader ecosystem and cultural context includes both natural and cultural systems that extend beyond the park unit to nearby lands. Park cultural resources must be identified, evaluated, interpreted, and managed within broad contexts related to themes, resource events, and/or cultural processes. For park units that share resource management concerns with other countries, broader context includes appropriate international cooperation. Special international designations, such as World Heritage Sites and Biosphere Reserves, are considered part of the broader cultural and/or ecological context. The enabling legislation for various parks requires the protection of the scenic grandeur of landscapes and the mandates of the Wilderness Act regarding wilderness values in designated or proposed wilderness. To preserve scenic grandeur and wilderness values in a natural area or the integrity of a cultural landscape, incompatible influences must be minimized.

Long-term goals related to this mission goal include maintaining resources within acceptable conditions and/or ranges of variation; restoring impaired resources to within acceptable conditions or ranges of variation; improving the overall status of T&E species; identifying and mitigating external threats; identifying and assessing multiple ecosystem boundaries and scales; maintaining and improving air quality; reducing adverse water-quality conditions; preserving historic and prehistoric structures, cultural landscapes, museum collections, and archeological sites; improving ethnographic and consultation programs with native populations; and identifying and protecting resource values that contribute to the human experience of parks.

Long-Term Goals: September 2002

- * **25 percent of targeted disturbed park lands, as of 1997, are restored, and 5 percent of priority-targeted disturbances are contained.**

To be accountable as to whether park lands are in better or worse condition over time, the Pacific West Region must assure that the vital signs of ecosystem health and condition are functioning and being maintained within an acceptable range of variation. This means that parks need to know which of the vital signs are

functioning within an acceptable range, the degree of divergence from the established range and what restoration activities are needed to bring them back into range. Those out of range become the targeted areas for restoration in this goal.

Impacts from land-use practices (such as roads, grazing, visitor use, mines, and other abandoned sites), invasion of alien species, and fire suppression can result in severe and persistent changes to habitat conditions and ecosystem functions. Successful restoration, including prescribed burning, accelerates the recovery of the biological and physical components of the ecosystem, including soils, vegetation, and the geomorphic and hydrologic setting. Baseline information will include information about the disturbed lands and the attributes necessary for successful recovery.

Presently, few parks know their vital signs and the range of variability for each sign. However, a great deal is known about certain areas such as riparian areas, invasive alien plant and animal species, and fire regime. These surrogates can be used as interim vital signs until our knowledge base improves. The intent is to start with what we know and refine as time goes on.

- * **25 percent of the 1997 identified park populations of federally listed threatened and endangered species with critical habitat on park lands or requiring National Park Service recovery actions and 25 percent of park-identified, sensitive species are in improved status, and an additional 25 percent have stable populations. No native species are lost from parks.**

Threatened and endangered species in the Pacific West Region are integral to the natural systems the Pacific West Region is charged to protect. This goal responds to the National Park Service Organic Act and to the Endangered Species Act which requires federal agencies to develop programs for the conservation of listed species and reflects National Park Service responsibility to know the condition of its resources. No consolidated data exist that indicates the size, condition, or stability of each population of listed species on park lands. This goal also includes activity that helps prevent species from being listed, such as the identification of sensitive species in stable or improved conditions. The direction is also to avoid the loss of any species within parks.

- * **80 percent of parks have identified present and future external threats and 20 percent of the threats on 1997 baseline have been mitigated.**

This goal addresses the need to clearly identify and understand both present and future threats external to each park that may result in impairment to park resources. Once identified, strategies need to be developed to address threats and actions prioritized and implemented to eliminate or mitigate them.

- * **50 percent of parks have identified and assessed the effects of multiple ecosystem boundaries and scales (variable zones of influence) tailored to environmental, cultural, social, and economic factors such as watershed, wildlife habitat, and floral ranges.**

This goal recognizes the reality that parks function as part of larger, dynamic systems and that humans and their culture, through time, must be considered part of the system. It underscores the importance of adopting ecosystem management as a management philosophy. It is imperative that the Pacific West Region participates in the decision-making process in all communities and in all public forums in which the fate of parks' natural and cultural resources are at stake.

As a starting point, parks need to assess and identify multiple ecosystem boundaries and temporal and spatial scales (variable zones of influence) tailored to environmental, cultural, social, and economic factors such as watershed, wildlife habitat, and floral ranges. Management plans and strategies then start shifting from a park or resource-specific approach to one focusing primarily on broader systems and settings. Parks become more active in helping facilitate the development of specific ecosystem vision statements of common long-term goals with partners. Existing park plans and planning processes are modified to support ecosystem management within the defined variable zones of influence. Parks are actively engaged in collaborative planning and management activity within the defined variable zones of influence. Information sharing networks are in place for exchange of data within defined zones of influence. These initiatives mentioned above need to proceed, recognizing that the goal measures will be adjusted at a later date to incorporate new measures once the identification and assessment of ecosystem boundaries (variable zones of influence) for each park is complete.

- * **Air quality in at least 50 percent of Class I park areas improves or does not degrade from 1997 baseline conditions. Air quality related values are identified in at least 50 percent of Class II park areas.**

This goal responds to the National Park Service Organic Act and the Clean Air Act which holds the Pacific West Region responsible for protecting park air quality and air quality-related resources from the adverse effects of air pollution. Because park air quality conditions result from the cumulative impacts of regional emission sources, the National Park Service has limited ability to effect changes in air quality but does participate in the formulation of federal and state regulatory programs and policies that protect park resources. Active participation in these later activities is needed to meet the goal measure.

*** Park waters meet Clean Water Act standards for beneficial uses.**

Park waters representing nationally significant ecological opportunities include rivers, lakes, and streams in both recreational and natural units. Considering the importance of clean water to healthy resources, it is important to assure that park waters meet the highest standards established under the Clean Water Act for established beneficial uses.

*** 50 percent of all structures listed in the List of Classified Structures, as of 1997, are in good condition.**

Historic and prehistoric structures, and the events surrounding them, are key park cultural resources forming the basis for 220 park units, Servicewide, and are integral to many other parks. Maintaining these structures in good condition responds to the National Park Service Organic Act, the National Historic Preservation Act, and the cultural resource integrity of the National Park System.

The List of Classified Structures (LCS) is the primary computerized database containing information (including condition) on the estimated 23,000 park historic and prehistoric structures Servicewide. Structures in the LCS are either on, or eligible for, the National Register of Historic Places or are treated as cultural resources. As of 1996, data on 18,239 structures in 242 parks have been gathered. By the end of 1998, the LCS will be substantially complete.

Current LCS data indicated that 45.4 percent of the inventoried structures are in good condition; 54.6 percent are in poor, fair, or unknown condition. Good condition is defined as the structure and significant features needing no repair, only routine or cyclic maintenance. This goal would increase the number of structures in good condition while maintaining those currently in good condition.

*** 50 percent of all cultural landscapes listed in the Cultural Landscape Inventory are in good condition.**

Cultural landscapes provide the physical environment associated with historical events and reveal aspects of our country's origins and development through their form, features, and use. They also illustrate the relationships among cultural and natural resources in a park.

The Cultural Landscapes Inventory is an evaluated inventory of all park landscapes having historical significance. As of 1996, 726 cultural landscapes had been inventoried. Based on currently available information, a target of 50 percent in good condition was established. When the baseline is finalized in 1998, the goal may need revision.

*** 68 percent of conditions in park museum collections, as of 1997, meet professional standards.**

The environmental security and fire protection conditions necessary to preserve and protect museum objects are identified in the National Park Service Checklist for Preservation and Protection of Museum Collections. The checklist is completed by parks with data compiled nationally. As of 1997, 64 percent of the conditions on the checklist were met Servicewide. Any collections added to the inventory since the 1997 benchmark will not be included in the baseline.

*** 40 percent of the recorded archeological sites are in good condition.**

To preserve recorded archeological sites, monitoring is necessary, and additional actions to enhance preservation may be required. The condition of the 25,000 currently recorded archeological sites, Servicewide, is reported in the national archeological site database, the Archeological Sites Information System. Currently, conditions are reported for 5,400 of the recorded sites with 45 percent of these reported to be in good condition. Good condition indicates that the site is not deteriorating due to natural processes such as erosion, or due to human impacts such as vandalism or looting.

*** 15 percent of all parks known to be associated with diverse social and cultural groups, including American Indian tribes or Native Hawaiian or other island groups, have initiated a systematic ethnographic and consultation program.**

The National Park Service has special legal and moral obligations to native peoples and nations. There is a clear legal foundation that requires the Pacific West Region to treat Indian governments as sovereign nations. The legal basis for the Service's responsibilities is contained in the American Indian Religious Freedom Act, the Native American Graves Protection and Repatriation Act, Religious Freedom Restoration Act, Executive Order 13007 (Sacred Sites), and others.

In addition to the legal foundation, the Department of the Interior has outlined procedures for agencies to follow in dealing with Indian Trust resources. For the National Park Service, these protocols are spelled out in the October 12, 1995, document entitled, "Carrying Out the Government-to-Government Relationship with American Indians and Alaska Natives in the National Park Service."

To best carry out these responsibilities, park units need to engage in a structured process of collaborative decision-making with representatives of native communities and domestic sovereign governments. This goal is oriented towards parks developing this more systematic ethnographic and consultation program.

*** Resource values that contribute to the human experience are identified for 75 percent of parks, and management or mitigation plans for protecting these values from impairment are completed for 25 percent of the parks.**

Resource values that contribute to the human experience in parks need to be protected from impairment by activities occurring within and outside of the parks. These resource values include such things as natural quiet, dark night sky, solitude, and other wilderness values. They may include the ability to utilize traditional cultural sites, to collect resources important to maintaining cultural systems, or to experience a historic trail site without modern recreational intrusions.

Acceptable levels of sound need to be defined where natural quiet is determined to be a significant resource. Action plans to mitigate sources of unacceptable noise need to be developed.

Likewise, acceptable levels of light need to be defined in those parks or portions of parks where dark night sky is important and action plans to mitigate sources of unacceptable light developed.

Outstanding opportunities for solitude and other wilderness values need to be achieved and/or sustained in designated and proposed wilderness in parks. Wilderness management plans need to be developed for those parks prescribing the acceptable range of solitude and other wilderness values to be provided, followed up by monitoring and surveys to verify that experiences are within the defined acceptable ranges.

MISSION GOAL IB: The National Park Service contributes to knowledge about natural and cultural resources and associated values; management decisions about resources and visitors are based on adequate scholarly and scientific information.

The ultimate long-term goal for resource stewardship within the Pacific West Region is the preservation of our natural and cultural heritage for future generations. Achievement of that goal requires knowledge of the functioning and condition of those resources.

The measure of success for that long-term goal is that the natural and cultural resources within parks function as healthy systems, within an acceptable range of variation, as part of larger dynamic systems. To have a complete understanding of the system, humans and their culture, through time, must be understood to be a part of that system.

Parks need a basic understanding of the normal or natural range of variation of resources, and assessments of the existing condition of resources in order to evaluate necessary actions to remain within or move towards the ultimate goal of resources functioning within their normal range of variation. For natural resources, that range of variation needs to be determined from ranges within the dynamics of ecosystem functioning over time. For cultural resources, the normal range of variation may exist as established standards, as well as understanding of changing conditions and different cultural values over time.

The concept of *vital signs* enables parks to monitor key elements of ecosystem health and resource condition in order to make those assessments. Adoption of the use of vital signs as a key measure of park ecosystem health and natural and cultural resource condition addresses the Pacific West Region's need to answer basic questions regarding our accountability within our stewardship role: Are our resources properly functioning within healthy ecosystems, and are they within normal range of variation? Are they improving, or moving further outside normal range? Likewise, the vital signs concept enables the NPS to develop program goals and overall success measures for the restoration of resources and for protection of resources from internal and external threats. A vital signs program in place at each park would also establish a scientifically based strategic plan for science needs.

Long-Term Goals: September 2002

- * 25 percent of all parks know their vital signs of ecosystem health or natural and cultural resource condition, and determined which are the most critical indicators to measure.**

Vital signs are defined as those key resource components necessary for an understanding of ecosystem and resource functioning, which provide adequate surrogates for the full range of components to develop an assessment of ecosystem condition. Vital signs serve as a model for overall system functioning. Each park's development of vital signs is expected to be a dynamic process, with the model continually refined as more information is available. The initial vital signs model may contain broad indicators of health such as number and extent of invasive alien species, percentage of historic structures meeting standards, distribution of species of special concern, acres of areas impacted by social trails, etc. Refined models may contain more sophisticated information such as abiotic and biotic soil functions, plant physiology, interactions of cultural landscapes and environmental conditions, etc.

The development of vital signs programs at parks should start with a peer-reviewed evaluation of the current knowledge base and resource management program. Vital signs program development will be a process including the development of an understanding of basic ecosystem and resource functions, development of the normal range of variability of resources, establishment of acceptable resource standards, establishment of monitoring protocols, and evaluation of whether the resources are within their normal or acceptable range of variation. Within the Pacific West Region, parks should identify their vital signs program in an inventory and monitoring component of an overall State-of-the-Parks report format.

- * 100 percent of all Pacific West parks will have assessed and understand the conditions of their cultural resources through an up-to-date Cultural Resource Management Plan and CR-MAP. Within the Region, the number of historic structures on the List of Classified Structures will increase 15 percent over the 1997 baseline; the number of cultural landscapes on the inventory will increase 100 percent over the 1997 baseline; the number of museum objects added to ABCS will increase by 10 percent over 1997 baseline; and the acreage of park lands, which have been adequately surveyed for archeological resources, will increase by 5 percent over 1997 baseline.**

Only a fraction of the nation's cultural resources have been identified and inventoried, leaving decision-making to be based on fragmentary and incomplete

information. Knowing the location and character of cultural resources is the first step in making good management decisions. This information must be collected in a cost-effective manner, evaluated to the highest-quality standards of professionalism and scholarship, and reflect park and community values. Increasing the knowledge base will also increase park capabilities to assess resource condition, establish standards, and improve the ecosystem model incorporated under the vital signs concept.

- * **All parks have developed a listing of their tactical and strategic research needs, and 25 percent of those needs are addressed through an integrated science delivery system.**

Many tactical research needs of parks are not being adequately addressed. Fiscal and human resources available for conducting research and providing technical assistance to parks is inadequate and diminishing. In order to meet these science needs, Pacific West Region will need to develop a framework of science providers and technical advisors, including internal NPS senior scientists, in-park scientists, close working relationships with the Biological Resources Division and other scientists within USGS, close working relationships with universities, and a cadre of in-park resource management professionals, such as the Pacific Great Basin Cluster's lead program specialists.

This framework requires that systems be in place, such as the implementation of the Cooperative Ecosystem Study Units, cooperative agreements with universities for access to expertise, a framework for locations of and access to NPS senior scientists and in-park scientists, and support for established circuit-rider teams to assist parks and resource managers. This framework must be reflective of all disciplines necessary for park management, including cultural resource scientists and professionals and social scientists.

Identifying research needs helps give focus to parks in their efforts to obtain the most-needed research information and helps ensure that research is targeted to the parks' highest-priority needs.

- * **100 percent of parks have integrated resource data management systems; 75 percent of parks have functional GIS systems; 100 percent of parks have ready access to library resources that provide existing scientific and technical literature related to their resource issues; and 100 percent of parks are connected via the Internet.**

Much data has been generated in various monitoring programs and planning documents. Much of this data has not been adequately analyzed nor archived, severely limiting its usefulness to managers.

Geographic Information Systems provide park managers with a state-of-the-art tool for analyzing data, as well as presenting data. Parks with GIS capability must also incorporate standard methods for GPS and geo-referenced data. Links to the

Internet enable us to share data with ourselves, and our research partners, and to provide educational opportunities. They also keep our professionals linked to the existing body of knowledge and the professional community.

- * **In 60 percent of the parks, at least 75 percent of the staff attend mission training which includes introduction to the full range of park resources and their values.**

Superintendents are responsible for conveying to park staffs the role of each staff member in fulfilling the NPS mission for resource protection and stewardship. This knowledge must be used to make sound decisions at all levels of field area and park operations.

- * **50 percent of all scientific and cultural/natural research reports are made available to the public through publication, the electronic media, and/or interpretive programs.**

The National Park Service needs to foster a public awareness of the complexity of resource dynamics and our management decisions. The public needs to understand its place within the resource dynamic and the relationship of societal choices to resource condition.

MISSION GOAL IIB: Park visitors and the general public understand and appreciate the preservation of parks and their resources for this and future generations.

Visitors' enjoyment of parks comes from understanding and appreciating the values of parks, why they exist, and the significance of their natural and cultural resources. Satisfactory visitor experiences result in support of preserving the natural and cultural resources of the parks and values associated with those resources. ~~Support also comes through formal designations, such as Wilderness and Wild and Scenic River and recognition by international programs like "World Heritage" and "Man and the Biosphere" (MAB).~~ Long-term goals related to learning, appreciating, and understanding park and resource purpose and significance are related to this mission goal.

Long-Term Goals: September 2002

- * **All new Pacific West Region interpretive and educational materials reflect current scholarship.**

Producing National Park Service educational materials that meet professional standards provides the public with the best information and maintains the agency's credibility.

- * **60 percent of park visitors and park stakeholders clearly understand and appreciate the significance of park resources.**

Visitors and stakeholders understand and appreciate the significance of parks and their resources through a variety of park programs and activities. These include park public education and interpretive programs designed to identify Regionwide issues of sustainability and resource protection; outreach programs on park resources to multiple audiences through such means as the Internet, environmental education, and news organizations; and publications on the wealth and diversity of the cultural and natural resources. These programs and activities help visitors and stakeholders make connections between the natural and cultural resources and the values which reside within them.

- * **60 percent of park visitors and park stakeholders clearly understand, appreciate, and support resource stewardship and research goals of the parks.**

Park visitors' and stakeholders' support for preserving the natural and cultural resources comes from understanding the significance of these resources, regionally, nationally, and internationally; the threats to these resources from within and from outside the parks; and what is needed to protect these resources.

Park general management plans and strategic plans, resources management plans, published scientific information and research results, interpretive and outreach programs, State-of-the-Parks reports, and park partnership programs provide mechanisms for understanding resource stewardship goals. This goal emphasizes the importance of all parks identifying their links and implementing strategies for addressing the question, "So what?" and communicating this effectively to visitors and stakeholders.

MISSION GOAL IVA: The National Park Service uses current management practices, systems, and technologies to accomplish its mission.

To become more responsive, effective, efficient, and accountable in resource stewardship, the Region must integrate its planning, management, accounting, reporting, and other resource information systems. Integrating or interfacing these systems will provide better cross communication, both within and between parks, during daily operations and will help the Region develop required annual performance plans for resource stewardship in compliance with the Government Performance and Results Act. Modern electronic technology makes it possible to integrate/interface these systems among the park units, the Regional Office, WASO, and Program Centers. Improvements in the areas of work force diversity, sustainable practices in park planning and park operations, professionalization of resource staff, and integration of major resource data systems will help the Region accomplish its resource stewardship mission. Long-term goals pertaining to organizational responsiveness, effectiveness, efficiency, and accountability are related to this mission goal.

Long-Term Goals: September 2002

- * 75 percent of parks have reduced their consumption of energy and resources by integrating sustainable practices into park planning, design, and operations. All construction projects incorporate measures to conserve energy and resources, and areas impacted by construction are restored as an integral part of the construction project.**

This goal includes ensuring that the amount of the waste stream generated by parks and their concessioners is reduced by 50 percent through recycling; all new facilities are constructed to optimize minimum impact technology, energy efficiency, sustainability, and compatibility with the aesthetic, ecological, and cultural environment; all administrative and public transportation facilities are designed to optimize use of power technologies and fuels that cause the least pollution, use of renewable resources, and most efficient transport of cargo and people; and all treatment projects on historic structures, cultural landscapes, and collection management plans incorporate sustainable practices to the extent that they do not compromise the Secretary of the Interior's standards. New construction must incorporate plans and funding for best practices to prevent resource impacts during construction and to restore impacts following construction.

- * 90 percent of projects supported by natural and cultural resource project**

funds are responsive to the highest priorities in the PWR Science and Resource Management Task Force Strategic Plan.

With the scarcity of project funding for natural and cultural resource projects, it is imperative that these funds are leveraged for the greatest benefits. Project funding requests will need to be well written in order to compete for these scarce dollars, both at the regional and national levels. Training sessions for resource managers in proposal writing and assistance from Program Center Offices and program leads within the Region will help in acquiring the needed project dollars.

- * 50 percent of the identified R-MAP need is met, and 100 percent of the parks meet at least 20 percent of their R-MAP needs.**

The R-MAP program has created a powerful tool for the NPS to evaluate its staffing and funding needs. While the current budget climate is not favorable to new programs, the Region needs to move ahead on the "Stewardship Today for Parks Tomorrow" initiative. The "State-of-the-Park Report" can help identify to the public the resource needs and threats. The R-MAP program is closely linked to the Resource Careers initiative. A process will be developed that will identify the most critical resource management and science positions needed and the parks in which they would be located over the next 5 years. An important part of the process will be to identify where positions can meet the needs of several parks.

- * 50 percent of the major resource data systems are integrated/interfaced, the backlog of data is reduced by 30 percent from 1997 levels, and 100 percent of parks are connected via e-mail, Internet, and the WWW.**

Major resource data systems, such as R-MAP, the RMP, the IAR, ProCite, and NPFLORA/NPSFAUNA, need to be integrated/interfaced. The Region will work with the Information Management Program Center at Fort Collins in integrating or interfacing these data systems in the Pacific West Region.

There is a significant amount of backlog data that has been collected in various regional monitoring programs. Much of this data has not been adequately analyzed or archived. An assessment will be made of whether various information management tools, GIS, etc., can be more effectively used to interface/integrate the data. Data generated and evaluated needs to be widely reported and available. Pathways will be developed for sharing with park units and cooperators. Regional metadata standards need to be developed.

Connecting resource professionals via e-mail, the Internet, and the World Wide Web, and developing a framework of program leads, program teams, and identified areas of expertise, and attendance at professional meetings and training will ensure that communications and exchange of resource information is maintained and enhanced.

- * 100 percent of the resource management programs in the Region meet core standards; 100 percent of resource personnel meet standards as identified in the Secretary of the Interior's Professional Standards or other**

applicable standards in the disciplines for which their position has been classified; and 100 percent of the resource professionals meet the essential competencies for their positions.

This goal includes identifying core program standards; establishing program evaluation teams to conduct park resource assessments; providing resource professionals with training and opportunities for training and career development; ensuring that all resource management programs in the field area meet core standards; and establishing a mentoring program for resource professionals.

*** The population of annual new hires for resource positions reflects the overall diversity of the civilian labor force.**

The regional resource stewardship work force has not reached parity for all Equal Employment Opportunity groups in all resource occupations and grade levels with their percentage of representation in the civilian labor force for those same or similar occupations. In some occupations minorities and/or women are severely under-represented or nonexistent. The Region is committed to increasing diversity in its resource stewardship work force. The Region will recruit and hire women, minorities, and individuals with disabilities in all resource occupational series and grade levels where they are underrepresented to achieve consistency with their percentage of representation in the civilian labor force.

Management at all levels of the organization will be held accountable through the performance evaluation system for eliminating underrepresentation and increasing diversity based upon the opportunities to recruit and hire employees. The Region will concentrate efforts on those occupational groups with 25 or more employees, Regionwide, who have underrepresentation of women, minorities, and/or individuals with disabilities. Efforts will target the 0401-General Biological Science, 408-Ecologist, and natural resource specialist occupational series.

MISSION GOAL IVB: The National Park Service increases its managerial capabilities, through initiatives and support from other agencies, organizations, and individuals.

In a time of flat or contracting budgets, it is imperative that park managers seek alternative support from other organizations and foster greater efficiency through the sharing of National Park Service internal resources. These approaches also broaden our collaborative planning efforts and strengthen our relationships with our communities.

Long-Term Goals: September 2002

- * **The number of volunteer hours for resources is increased 10 percent over the 1997 levels.**

Park volunteers provide diverse kinds of assistance for resource management, science, and cultural resource management. The regional Volunteer-in-Parks (VIP) program allows Region to accept and use voluntary help in ways mutually beneficial to the parks and the volunteers. Government downsizing increased the demand for additional volunteers and funding. This goal will be tracked through the annual VIP report completed by all parks.

- * **The resource budget in parks is increased by 20 percent, from 1997 ONPS levels, using alternative funding sources.**

With continually declining park natural and cultural resource and science ONPS budgets, it is imperative that alternative funding sources be sought out. A major effort will be started over the next 5 years to locate non-ONPS funding sources, i.e., foundations, cooperating associations, corporations, private grants, assistance from other state and federal agencies, and partnerships.

- * **The expertise, facility, and equipment sharing between parks, support offices, and program centers is increased by 25 percent over the 1997 level.**

Expertise, facility, and equipment sharing between parks, support offices, and Program Centers is essential if the Region is to meet its resource stewardship goals over the next 5 years. Mechanisms such as the program-lead concept, expertise

teams, project teams, and scoping groups for sharing expertise and equipment, inside and outside the NPS, will be expanded. Examples of effective sharing include alien plant/weed management, tree hazard management, prescribed burning, revegetation, and museum collections management.

*** Partnerships that further resource stewardship goals are increased by 25 percent over the 1997 levels.**

The number of park partnerships in parks will be increased. Fund-raising, marketing, donor recognition, and establishment of park friends groups or similar nonprofit partnership effective marketing initiatives will be in place for several parks. Cooperative agreements and MOUs will be developed that further Regionwide resource stewardship efforts, and collaborative relationships that enhance resource stewardship across boundaries will be established.