

**EVALUATION OF THE ENVIRONMENTAL PARTNERSHIP BETWEEN THE
NATIONAL PARK SERVICE INTERMOUNTAIN REGION
AND THE ENVIRONMENTAL PROTECTION AGENCY REGION 8**

Prepared for:

U.S. Environmental Protection Agency
Office of Planning, Analysis, and Accountability

and

EPA Region 8

Prepared by:

Industrial Economics, Incorporated
2067 Massachusetts Avenue
Cambridge, MA 02140
617-354-0074

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EXECUTIVE SUMMARY

Initiated in 1994, the National Park Service Intermountain Region/Environmental Protection Agency Region 8 Environmental Partnership (NPS/EPA Partnership or Partnership) has served to identify environmental issues and set priorities in the parks in the Intermountain Region, identify and marshal the EPA Region 8 resources to address those issues, and develop targeted tools, training and technical assistance. In 1994, the NPS Intermountain Region committed to the goals of empowering parks to develop and implement an effective environmental management system that would meet the challenges outlined in their initiative *Park Environments 2000: Investing in Safe Unimpaired Park Environments*.

Through the Partnership, EPA Region 8 provides pollution prevention technical assistance and other services to help parks meet certain goals outlined in the *Parks Environment 2000* initiative. In designing the initial program, EPA Region 8 and the NPS Intermountain Region developed the following objectives for the Partnership:

- Conduct baseline pollution prevention and regulatory compliance assessments of all parks to determine where assistance is most needed;
- Provide guidance, based on pollution prevention audits/assessments, to each park on how to meet the initiative's goals;
- Develop and offer regulatory compliance, pollution prevention, solid waste management, hazardous waste minimization, and emergency response training tailored to the needs of the Park personnel; and
- Develop "user friendly" pollution prevention and environmental management programs and manuals designed to address park environmental needs. These include the Green Purchasing Program, the Environmental Compliance Audit Program, the Tool Kit for

Environmental Management, the Resource Manual for Environmental Management, the Tool Kit for Solid Waste Management, and the Chemical Products Clean-out Manual.

A workgroup consisting of representatives from the NPS Intermountain Region, EPA Region 8 and Headquarters conducted an evaluation of the Partnership, focusing on whether the Partnership was effective in meeting its goals; what aspects such as tools, training, or technical assistance provided the most value to parks; the degree of operational and behavior changes resulting from the Partnership; "lessons learned" to shape the Partnership's ongoing work to develop and implement an Environmental Management System for the Intermountain Region parks, and to provide guidance for other federal agencies interested in partnering with EPA. Industrial Economics, Inc. (IEc) provided contractor support to the workgroup. The workgroup developed a survey and sent it to Superintendents in 75 parks in the eight Intermountain Region states. In addition, IEc conducted eight phone interviews with EPA and NPS employees in Regional and Headquarter offices to understand more broadly the role of partnerships within the NPS and EPA.

Surveys were mailed to 75 parks in the NPS Intermountain Region and 60 completed surveys were returned. This degree of return (i.e., 80 percent) provides an excellent sample size from which to draw reasonable conclusions. Major findings from the survey results include: the need for greater communication of Partnership efforts within the parks (i.e., 42 percent of park respondents were not aware that technical assistance originated from a Partnership effort); parks identified the provision of technical assistance and compliance information as the most effective in mitigating the challenges of implementing environmental projects; more than 90 percent of respondents reported that the compliance audit and green purchasing programs were valuable; and, on the whole, parks felt that the Partnership was effective in helping them meet their environmental goals.

In addition to evaluating the Partnership's contribution to park progress in meeting environmental goals, the workgroup was also interested in understanding what components contributed to an effective partnership. Based on the survey information and insights obtained from interviews with EPA and NPS headquarters and regional staff, three key characteristics of a successful partnership emerged – support for a long-term relationship and commitment, shared vision and objectives, and the right metrics or systems for measuring performance.

In summary, IEc provides several recommendations for the Partnership's next phase of work with Intermountain Region parks:

- The Partnership should develop a comprehensive communications strategy that addresses its different audiences: parks, Regions, and Headquarters. This strategy will ensure awareness of Partnership efforts, momentum, progress towards the goals of the Partnership, greater visibility, and the possibility of increased funding.
- It is important that the Partnership clarify the role of each partner and brand the Partnership as focused on pollution prevention and compliance assistance. For EPA technical assistance personnel to overcome a

reluctance by certain NPS staff to partner with a regulatory agency, the Partnership, its materials, and all communications from participants must be clearly branded as emanating from the Partnership so that EPA's role, intentions, and assistance are clear.

- The Partnership needs to actively seek broader institutional support within its respective agencies to support scale-up of its activities. Despite public endorsements for partnerships, there is no formal framework to fund, assess, support, and champion Partnership activities within either the EPA or the NPS.
- As the Partnership assists parks in implementing the EMS designed specifically for parks, it faces the challenge of documenting the impact of the EMS on levels of compliance, pollution prevention practices such as green purchasing, waste minimization, and all other environmental outcome measures pertinent to the parks. The Partnership needs to map its goals to specific performance measures.
- The Partnership should develop an evaluation strategy to allow for ongoing assessment and program improvement. The Partnership needs to set specific goals and objectives, organize its data collection needs to support an assessment of progress toward these objectives and collect any necessary additional baseline data against which progress can be measured.

I. INTRODUCTION

Background

Initiated in 1994, the National Park Service Intermountain Region/Environmental Protection Agency Region 8 Environmental Partnership (NPS/EPA Partnership or Partnership) has served to identify environmental issues and set priorities in the parks in the Intermountain Region, identify and marshal the EPA Region 8 resources to address those issues, and develop targeted tools, training and technical assistance. In 1994, the NPS Intermountain Region committed to the goals of empowering parks to develop and implement an effective environmental management system that would meet the challenges outlined in their initiative *Park Environments 2000: Investing in Safe Unimpaired Park Environments*. The *Park Environments 2000* initiative identified a series of goals for the Parks relating to concessionaires, solid and hazardous waste, air and water protection, and the adoption of the safest (to human health and the environment) and most efficient environmental practices.¹ Goals associated with concessionaires are addressed as part of a separate effort through the NPS' Concession Environmental Management Program. Similarly, issues of drinking water and sanitary waste are handled by the U.S. Public Health Service.²

Through the Partnership, EPA Region 8 provides pollution prevention technical assistance and other services to help parks meet certain goals outlined in the *Parks Environment 2000* initiative. In designing the initial program, EPA Region 8 and the NPS Intermountain Region developed the following objectives for the Partnership:

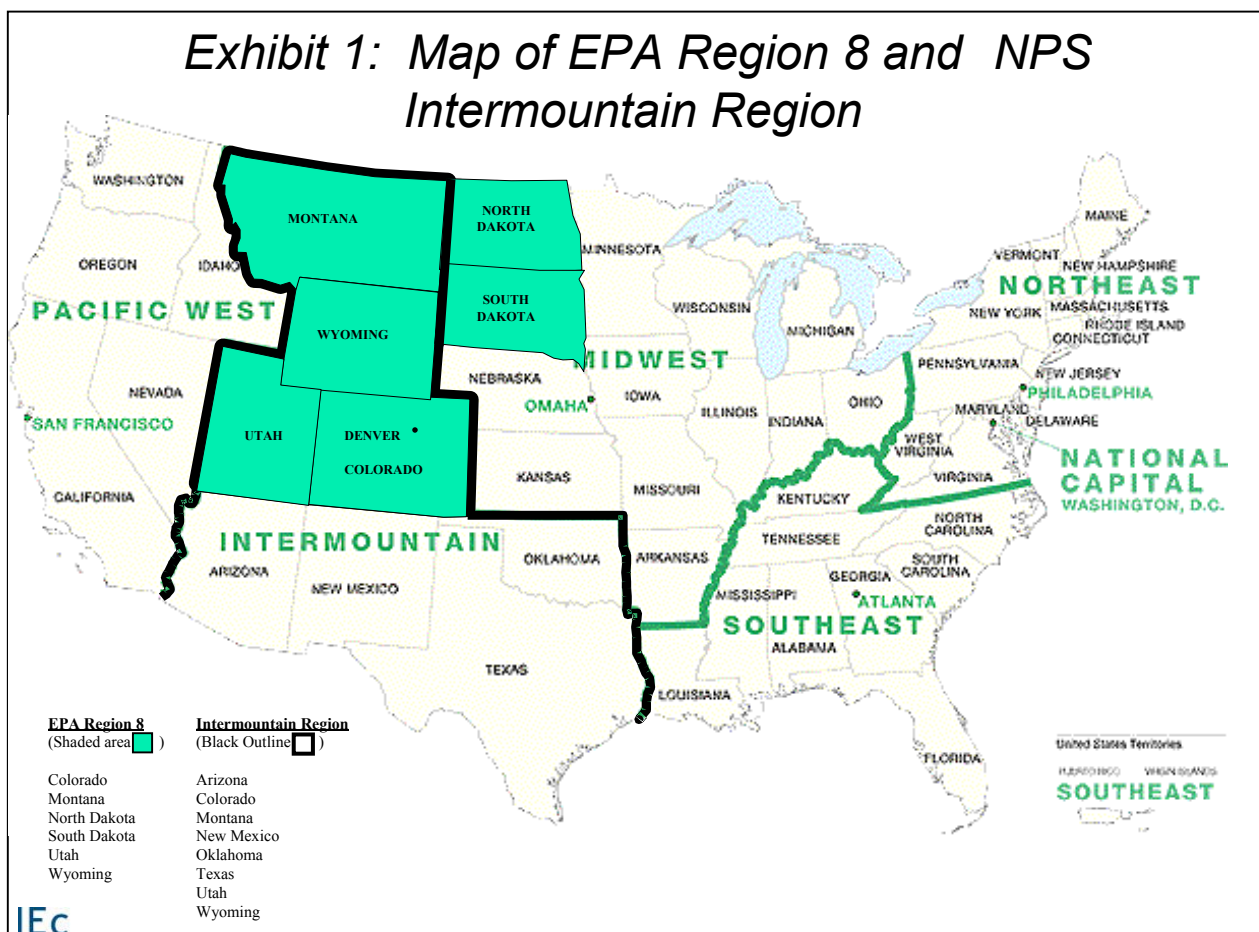
- Conduct baseline pollution prevention and regulatory compliance assessments of all parks to determine where assistance is most needed;
- Provide guidance, based on pollution prevention audits/assessments, to each park on how to meet the initiative's goals;
- Develop and offer regulatory compliance, pollution prevention, solid waste management, hazardous waste minimization, and emergency response training tailored to the needs of the Park personnel; and

¹ Schene, Michael and Marie Zanowick. The National Park Service, Intermountain Region/Environmental Protection Agency, Region 8, "Environmental Partnership Collaboration in Wise Stewardship," *Federal Facilities Environmental Journal*, Spring 1999.

² On March 13, 2003, NPS Director Fran Mainella and EPA Administrator Christine Todd Whitman signed a Memorandum of Understanding to promote cost-effective environmental management practices by 590 NPS concessioners that deliver services to parks nationwide, article published in *Arrowhead: The Newsletter of the Employees & Alumni Association of the National Park Service*, Spring 2003, Vol. 10, No. 2.

- Develop "user friendly" pollution prevention and environmental management programs and manuals designed to address park environmental needs. These include the Green Purchasing Program, the Environmental Compliance Audit Program, the Tool Kit for Environmental Management, the Resource Manual for Environmental Management, the Tool Kit for Solid Waste Management, and the Chemical Products Clean-out Manual.

The Partnership focuses on national parks within the NPS Intermountain Region. The Intermountain Region includes states in three EPA regions: Region 6, Region 8, and Region 9 (see Exhibit 1). EPA officials in Region 8 worked with their counterparts in Regions 6 and 9 to provide technical assistance and training to NPS personnel in Texas, Oklahoma, New Mexico and Arizona.



Recent Partnership Activity

By 1996, more than fifty pollution prevention assessments had been conducted at Intermountain Region parks in connection with the Partnership. In 1999, the Brendle Group, a Colorado-based environmental consulting firm, analyzed the extent to which parks in the Intermountain Region had implemented recommendations made by the Partnership and

evaluated the “green” purchasing practices of the parks.³ The information gathered in these evaluations was used to further refine the Partnership products and to identify the best channels through which to support sound environmental practices in parks. These efforts culminated in the introduction in 2002 of the Environmental Management System (EMS) Program for the National Park Service Intermountain Region. The Partnership designed an EMS tailored specifically to address the challenges to environmental stewardship faced by parks. The EMS’ Internet-based tools emphasize pollution prevention, environmental compliance auditing, and adoption of the international standard ISO 14001.⁴

Purpose of the Evaluation

Upper-level management within the EPA and the NPS recognize the importance of partnering to leverage scarce resources and develop more effective strategies for enhancing environmental performance. In order to ensure the success of these relationships, The Agency wants to identify those elements that contribute to successful partnerships. As it approaches its ten-year anniversary, the Partnership secured funding through EPA’s Program Evaluation Competition funded by the Office of the Chief Financial Officer (OCFO) and the Office of Policy, Economics & Innovation (OPEI) to evaluate those elements of the program that contribute to its success. Working with Marie Zanowick, Environmental Engineer, Pollution Prevention Team, EPA Region 8, Wendy Lubbe, Environmental Protection Specialist, Office of Planning, Analysis, and Accountability, OCFO, and Dr. Michael Schene, Environmental Compliance Officer, National Park Service, Intermountain Region, OCFO hired Industrial Economics Inc. (IEc) to provide contractor support.

The purpose of this evaluation is to identify those elements of the Partnership that are making the greatest contribution to effective environmental management within the parks, as identified by park personnel. In addition, the evaluation can help identify those elements of the Partnership that have not been as effective and therefore might be avoided by other partnerships. More specifically, the evaluation team identified the following goals for the evaluation:

³ *"Effectiveness of Pollution Prevention Surveys Conducted at National Parks in the Intermountain Region, Southwest Corner"*, the Brendle Group, September 1999; and *"A Survey of Green Purchasing Practices by National Parks in the Intermountain Region"*, the Brendle Group, December 1999.

⁴ The NPS Intermountain Region, in partnership with EPA Region 8 and Management and Engineering Services, is in the process of developing and implementing an Environmental Management System for parks in the Intermountain Region to comply with Federal Executive Order 13148. This next phase of partnering, called The Environmental Partnership, is described in a nomination submitted by the U.S. Department of the Interior to The White House Closing the Circle Awards, *Implementing an Environmental Management System Program for the National Park Service Intermountain Region – A Partnership Effort to Comply with Federal Executive Order 13148*, January 21, 2003. See <http://ofee.tteam.com/apply/thanks.cfm?ID=39&agency>.

- Determine which components of the Partnership (e.g., tools, training, or technical assistance) provided the most value to parks and which aspects provided the least value;
- Assess the degree of operational and behavioral changes resulting from the Partnership;
- Determine how effective the Partnership has been in meeting its goals;
- Identify “lessons learned” for the Partnership as it shapes its ongoing work to develop and implement an Environmental Management System for the parks in the Intermountain Region as well as offer guidance to other federal agencies interested in partnering with EPA;
- Assess whether this partnership improved the national park’s environmental commitment and performance;
- Determine whether there are duplication of efforts in providing environmental services to federal agencies; and
- Develop a model that can be used to evaluate other partnership efforts.

The evaluation team sought to identify areas in which the greatest environmental results had been realized as a result of Partnership activities. Due to the lack of adequate baseline and current data, the evaluation team was unable to determine clear environmental outcomes resulting from Partnership activities. In the following chapters, we discuss the methodology used to conduct the evaluation including broad-based surveys and questionnaires and the survey response rate (Chapter 2), the major findings from our data collection (Chapter 3), describe the components of successful partnerships and “lessons learned” from the Partnership that can inform future partnering activities (Chapter 4), and finally, offer summary conclusions and recommendations (Chapter 5). Attachments to this report include the survey sent to park respondents, a list of national parks which received the survey, the telephone interview questions for EPA and NPS Headquarters and Regional personnel, tabulated results of the data received from the park respondents, and write-ups of the telephone interviews.

2. METHODOLOGY AND SURVEY RESPONSE RATE

Methodology

The project team met in Colorado to discuss the goals and activities of the Partnership and to identify the goals of the evaluation. Following this initial meeting, IEC developed a draft outline for next steps, focusing on a survey to be distributed among the parks and selected phone interviews as the primary mechanisms of data collection. Working closely with the EPA Region 8 and NPS Intermountain clients, IEC developed a draft and then final version of the survey instrument, a copy of which is included at Attachment 1.

The survey consists of three main sections. The first section gathered general background information about the survey respondents and their role in the park. The second section focused on the individual's experience with the Partnership and the final section of the survey examined the relative strengths and weaknesses of the Partnership. In particular, survey respondents were asked to identify :

- what aspects of implementing environmental projects were the most challenging;
- what Partnership elements were the most effective in mitigating these difficulties;
- whether the Partnership helped parks to meet environmental goals; and
- whether the parks made any operational, behavioral, or management changes as a result of the Partnership's work.

Surveys were mailed to Superintendents in 75 parks in the eight Intermountain Region states (See Attachment 2 for a list of the 75 Intermountain Parks). Each superintendent was asked to give the survey to the individual most familiar with the Partnership in the park. To maximize the return rate, one-week after mailing the survey, reminder postcards were sent to all potential respondents in accordance with the Dillman survey methodology (See Attachment 3).⁵ Three weeks after the initial mailing, a follow up letter was sent with another copy of the survey enclosed to those individuals who had yet to respond. IEC developed a database to store and analyze the data from the 60 surveys that were returned. This degree of return (i.e., 80 percent) provides an excellent sample size from which to draw reasonable conclusions. Complete survey results are included in Attachment 4.

To supplement the information gathered from the surveys, we conducted telephone interviews with individuals at EPA and NPS Headquarters and Regional offices who provided support or services to the Partnership effort, or who had knowledge of the Partnership. We developed questionnaires for Headquarters and Regional staff (See Attachments 5 and 6) that we shared with interviewees in advance, and that were used to guide the discussion. The interviews were designed to gather information regarding awareness of the NPS/EPA Partnership and participants' experiences with, and thoughts about, partnerships in general. We conducted interviews with three EPA Headquarters personnel -- one from the Prevention Integration Branch

⁵ Dillman, Don A., *Mail and Internet Surveys: The Tailored Design Method*, 2nd edition, 2000.

in the Office of Pollution Prevention and Toxics and two from the Office of Federal Facilities Enforcement in the Office of Enforcement and Compliance Assurance. EPA Regional interviewees included three representatives from the Office of Federal Facilities Enforcement in Regions 1, 6, and 9. For the NPS, we interviewed a manager involved in the Environmental Management Program in Headquarters and an environmental coordinator for the Midwest Region. A summary of each interview is included in Attachment 7. Ms. Zanowick selected the EPA interviewees for their involvement in partnerships and, in the case of the Regions 6 and 9 staff, for their jurisdiction in Intermountain Region states. Dr. Schene selected the NPS interviewees for their role in the agency’s environmental activities.

Survey Response Rate

As noted earlier, 80 percent of the parks contacted returned surveys, with considerable variation from state to state. Fifty percent of parks in Montana and 60 percent of parks in Wyoming responded, while the response rate was 85 percent in New Mexico, and 91 percent in Colorado (*see Exhibit 2*).

***Exhibit 2: NPS Intermountain Region/
EPA Region 8 Partnership Survey Response Rate***

Region 8 States	Number of Parks Surveyed	Number of Parks Responding	Response Rate
Colorado	11	10	91%
Montana	4	2	50%
Utah	10	8	80%
Wyoming	5	3	60%
Total	30	23	77%
Non-Region 8 States	Number of Parks Surveyed	Number of Parks Responding	Response Rate
Arizona	18	15	83%
New Mexico	13	11	85%
Oklahoma	3	2	67%
Texas	11	8	73%
Total	45	36	80%
Unknown		1	
Intermountain Region Total	75	60	80%

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3. MAJOR FINDINGS

Awareness of the Partnership

The survey asked how respondents learned about the technical assistance available from the partnership and among the various options cited, 25 of the 60 individuals indicated that they were not even aware of the existence of the Partnership. As an initial matter, this demonstrates the need for greater communication of Partnership efforts within the Parks. As shown in *Exhibit 3*, the level of awareness was about the same for parks in and outside of EPA's Region 8.

Exhibit 3: Number of Parks Aware of Partnership by State

	Number of Respondents	
	Aware of Partnership	Unaware of Partnership
Region 8 States		
Colorado	6	4
Montana	2	0
Utah	3	5
Wyoming	3	0
Total	14	9
Percent of Region 8 Respondents	61%	39%
	Number of Respondents	
	Aware of Partnership	Unaware of Partnership
Non-Region 8 States		
Arizona	8	7
New Mexico	7	4
Oklahoma	1	1
Texas	4	4
Total	20	16
Total Non-Region 8 Respondents	56%	44%
Unidentified	1	
Total Respondents	35	25
Intermountain Region Total	58%	42%

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We examined a number of factors and determined that the length of time the individual respondents had spent in that Park had the greatest impact on awareness of the Partnership. Although ten of the 25 respondents who were unaware of the Partnership did not indicate how long they had been in their current park, 33 percent of those that did respond had worked at their parks for less than 1 year, 40 percent for one to five years, 20 percent for six to 10 years, and only seven percent for more than 15 years. As *Exhibit 4* highlights, awareness increases between years one and five, indicating that information about the Partnership reached new park personnel within this time frame and highlighting the need to periodically conduct outreach efforts to increase and maintain awareness of the Partnership.

Exhibit 4: The Effect of NPS Tenure on Partnership Awareness

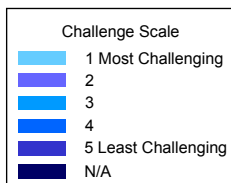
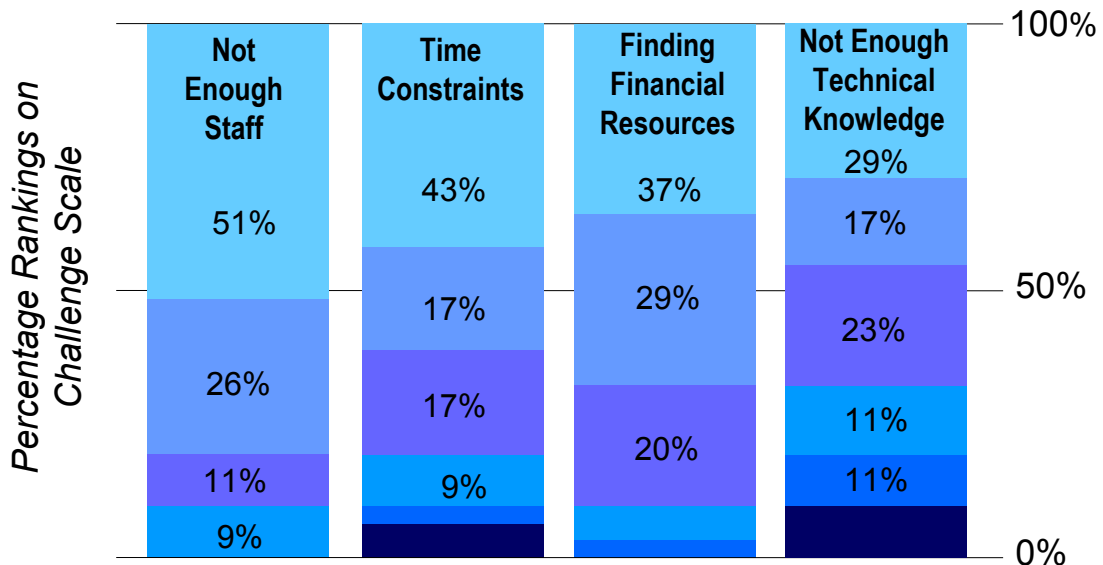
Tenure	Aware	Percent of Total Tenure Category	Unaware	Percent of Total Tenure Category	Total
Less than a year	0	0%	6	100%	6
1 to 5 Years	15	75%	5	25%	20
6 to 10 Years	10	77%	3	23%	13
11 to 15 Years	5	100%	0	0%	5
> 15 years	5	83%	1	17%	6
NR	0	0%	10	100%	10

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Challenges to Environmental Progress

Respondents were asked to indicate, on a scale of one (most challenging) to five, the most challenging aspects of implementing environmental projects. Insufficient financial resources, staff, and technical knowledge were cited as the most challenging aspects of implementing environmental programs (see Exhibit 5).

Exhibit 5: Most Challenging Aspects of Implementing Environmental Projects



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Responses to a question concerning the days per month dedicated to environmental activities corroborate the challenges of finding sufficient time to dedicate to environmental projects. More than a quarter of respondents reported spending three to five days on environmental activities a month, while twenty percent spent only one day a month. Less than 20 percent reported spending five days a month on environmental activities (*see Exhibit 6*).

Exhibit 6: Time NPS Employees Devoted to Environmental Activities Each Month

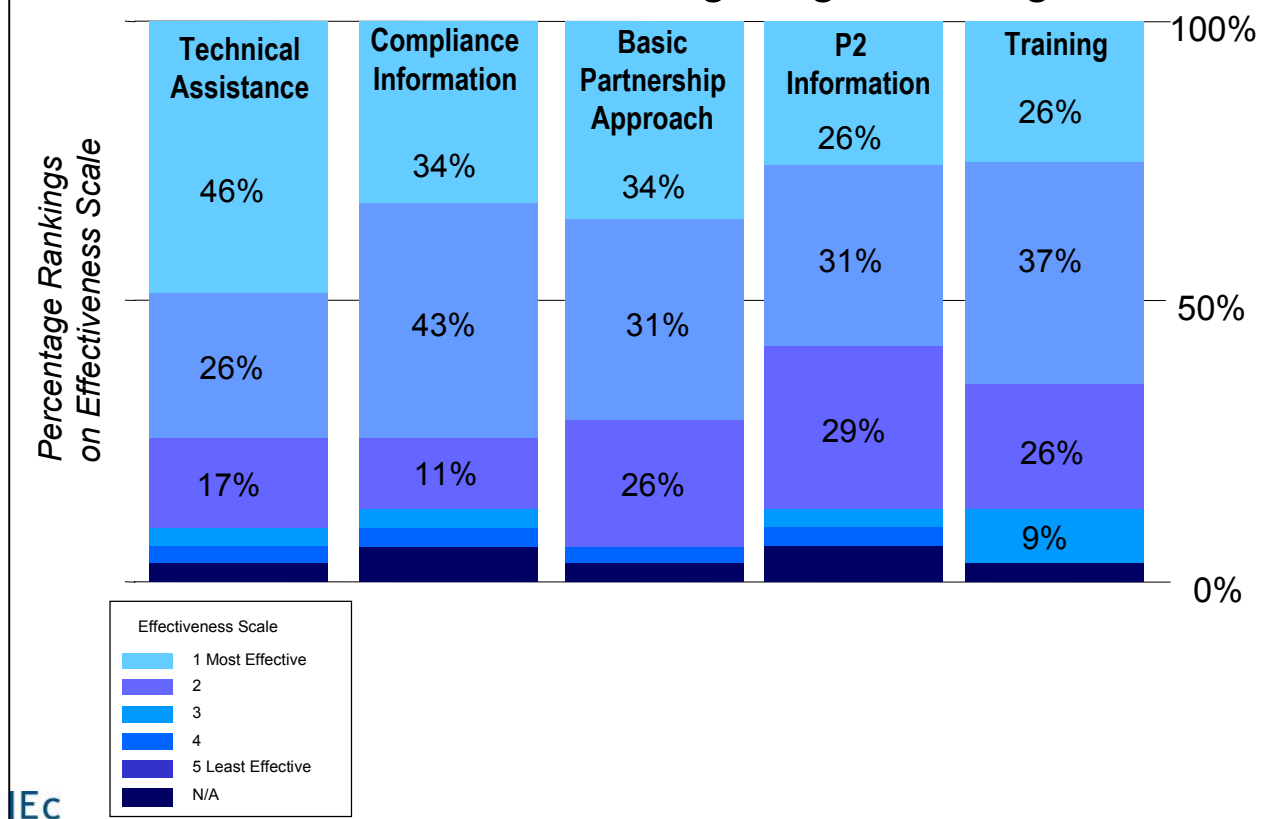
	<i>Response</i>	<i>Percent of Total</i>
< 1/2 day	4	11%
1 day	7	20%
2 days	5	14%
3 to 5 days	9	26%
5 days	6	17%
Other	4	11%
Total	35	100%

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To see how well the partnership addresses these impediments, we asked respondents to identify elements of the Partnership most effective in mitigating the difficulties they had identified. As shown in *Exhibit 7*, the provision of technical assistance and compliance information was seen as the most effective elements provided by the Partnership. In addition, training, the provision of P2 information, and the overall partnership process were also cited as effective, though not as highly as the aforementioned factors.

These identified elements indirectly address the time constraint and manpower issues faced by Parks and rated as important constraints. Technical assistance by its very nature addresses staff, time, and financial constraints in one shot, providing additional knowledgeable staff on a temporary basis to both execute and train park employees on environmental protocols. Sixty-two percent of the respondents who identified either the lack of time, of staff, or of technical knowledge as significant constraints also noted that the provision of technical information effectively addressed identified barriers. In addition, familiarity with environmental regulations and processes can speed up the implementation process, alleviating time constraints and the burden on existing staff members while improving environmental stewardship.

Exhibit 7: Elements of Partnership Most Effective in Mitigating Challenges

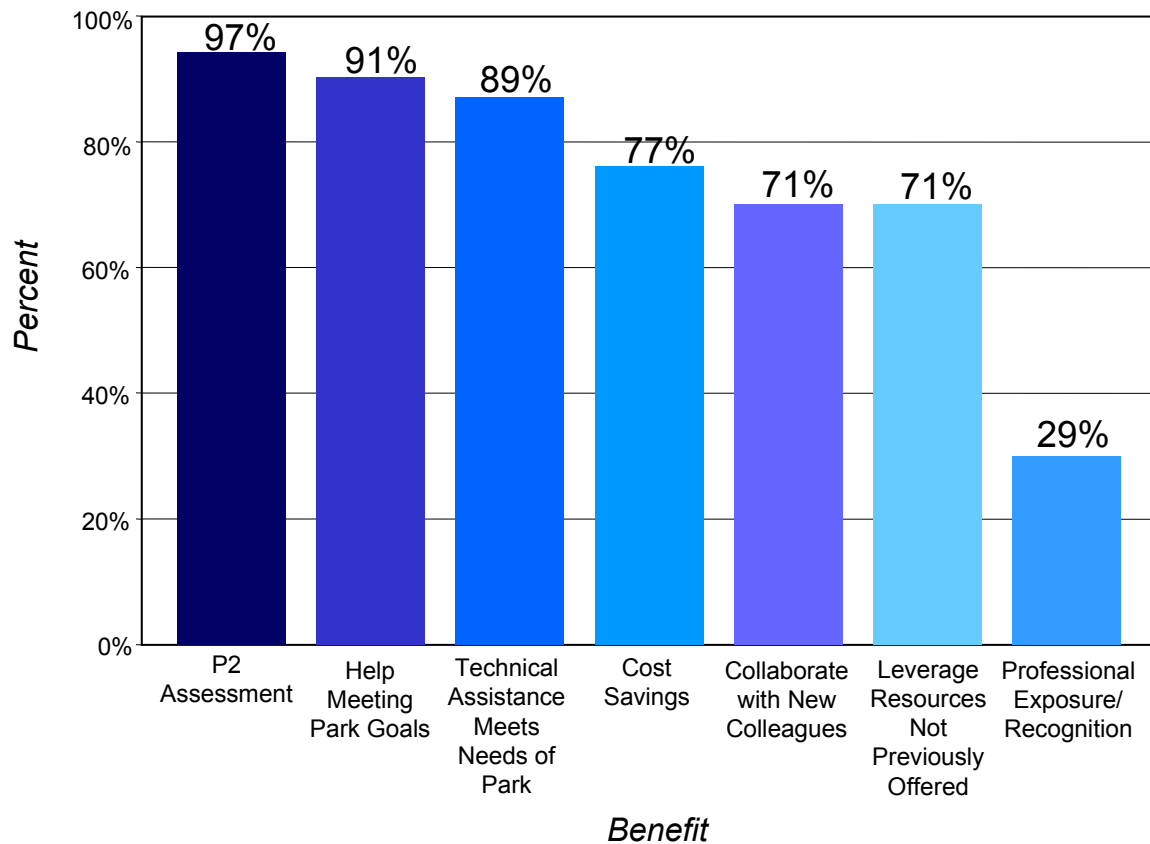


Potential to Benefit from Partnership

In order to assess the value of the Partnership and its specific components, we asked survey participants to rank the importance of potential benefits offered by the Partnership (*see Exhibit 8*). Almost all respondents (i.e., 97 percent) indicated that the P2 assessments would help provide additional technical expertise and resources. In addition, 91 percent indicated the Partnership would help them meet park environmental goals. Respondents indicated that participation in the Partnership would allow them to take advantage of additional resources and could help reduce costs of environmental activities.

In a telephone interview, the NPS Midwest Regional representative pointed to the additional resources, technical expertise, and the potential for cost savings as inducements to partnering with EPA. He noted his frequent use of EPA's web-site as a resource to support his work in providing environmental services such as hazardous waste clean-up, environmental audit support, and fuel tank upgrades to parks in the Midwest Region. This representative did note however that the formation of new partnerships was often hindered by the same issues: insufficient budgets, time, and personnel.

Exhibit 8: Potential to Benefit from Partnership



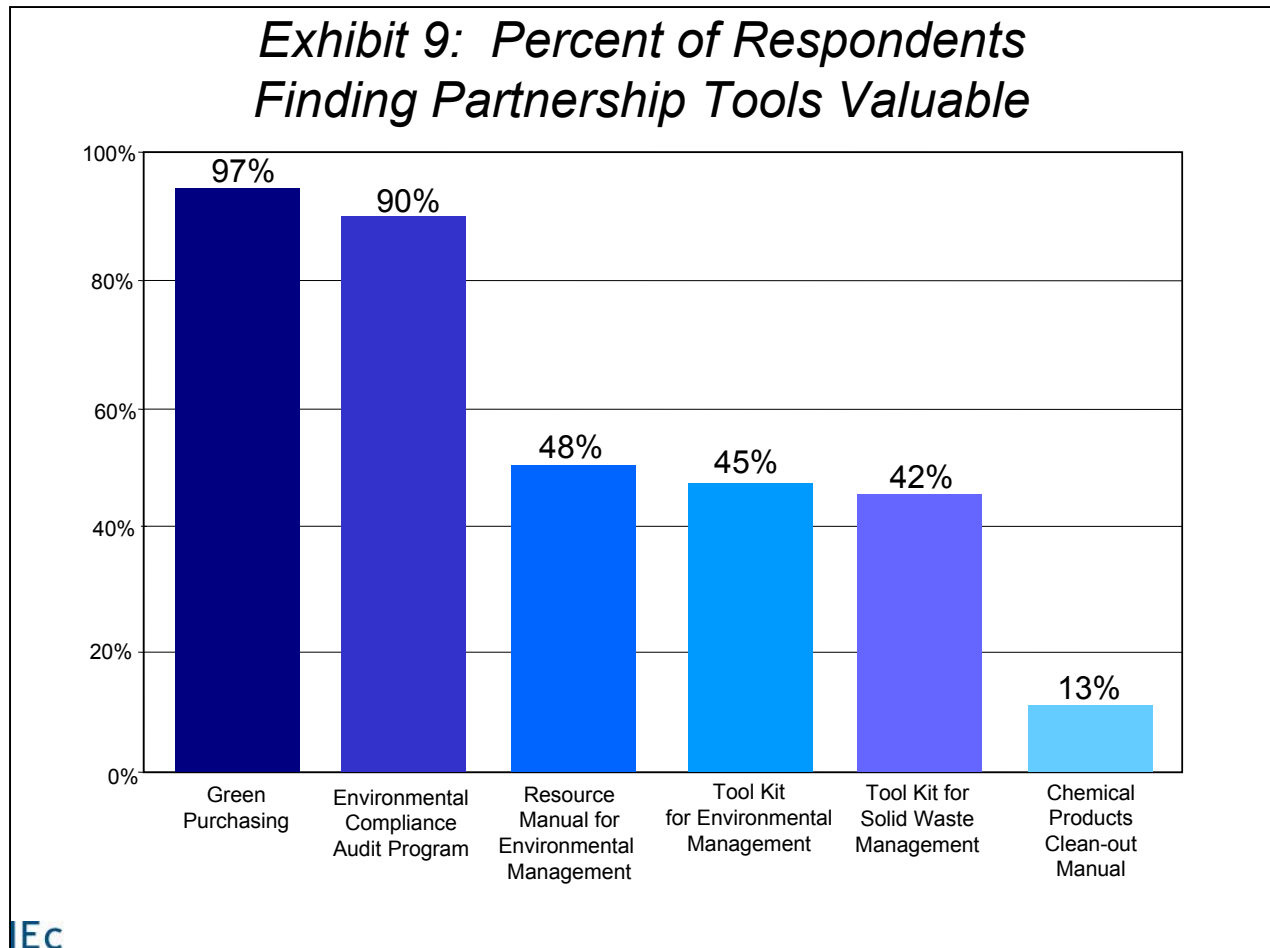
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Most Effective Elements of Partnership Assistance

In addition to asking about perceived benefits from participating in the Partnership, we also asked respondents to reflect on those elements of the Partnership that had proven to be most beneficial in practice.

As can be seen in *Exhibit 9*, more than 90 percent of respondents reported that the Intermountain Environmental Compliance Audit Program and the Green Purchasing Program were valuable. These programs provided the parks with assistance to enhance environmental compliance, to correct environmental findings, and offered suggestions on how to maintain the park's environmental health through the use of green products. Additional information resources were also cited as being useful, including the Tool Kit for Environmental Management and the Resource Manual for Environmental Management, by more than 40 percent of respondents. The former focused on pollution prevention by providing recommendations for "source reduction" and by presenting a discussion of eleven key federal regulations. The latter offered park managers lists of key contacts and service providers that could help them achieve their

environmental goals. These documents were developed based on requests from the parks for “park specific” environmental guides that also provided vendor information.



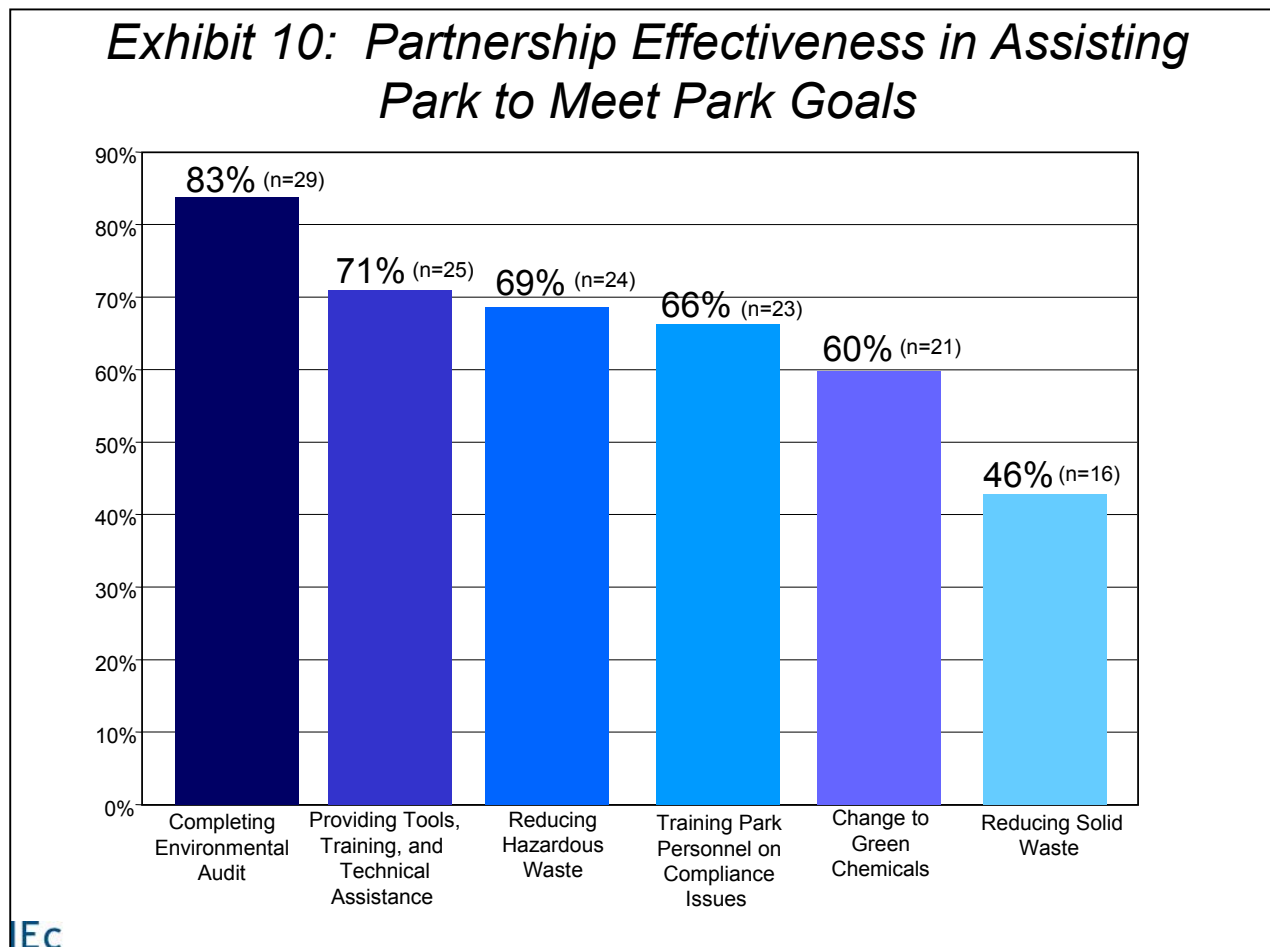
Similar to the message sent by the survey data, interview respondents also pointed out the value of partnerships as vehicles for developing tools to improve environmental performance such as training, technical assistance, support in developing an environmental management system, resource materials, and access to environmental experts. Regional respondents were particularly interested in using tools developed and tested in the context of the NPS/EPA Partnership for the national parks in their region.

Progress Towards Goals

The service-oriented nature of the Partnership’s initial goals, providing tools, training, and technical assistance to Intermountain Region parks, have been largely met. Moreover, pollution prevention assessments have been carried out and EPA Region 8 has provided extensive technical assistance and guidance to parks. As noted earlier, parks ranked technical and compliance assistance as the most effective element of Partnership assistance. The

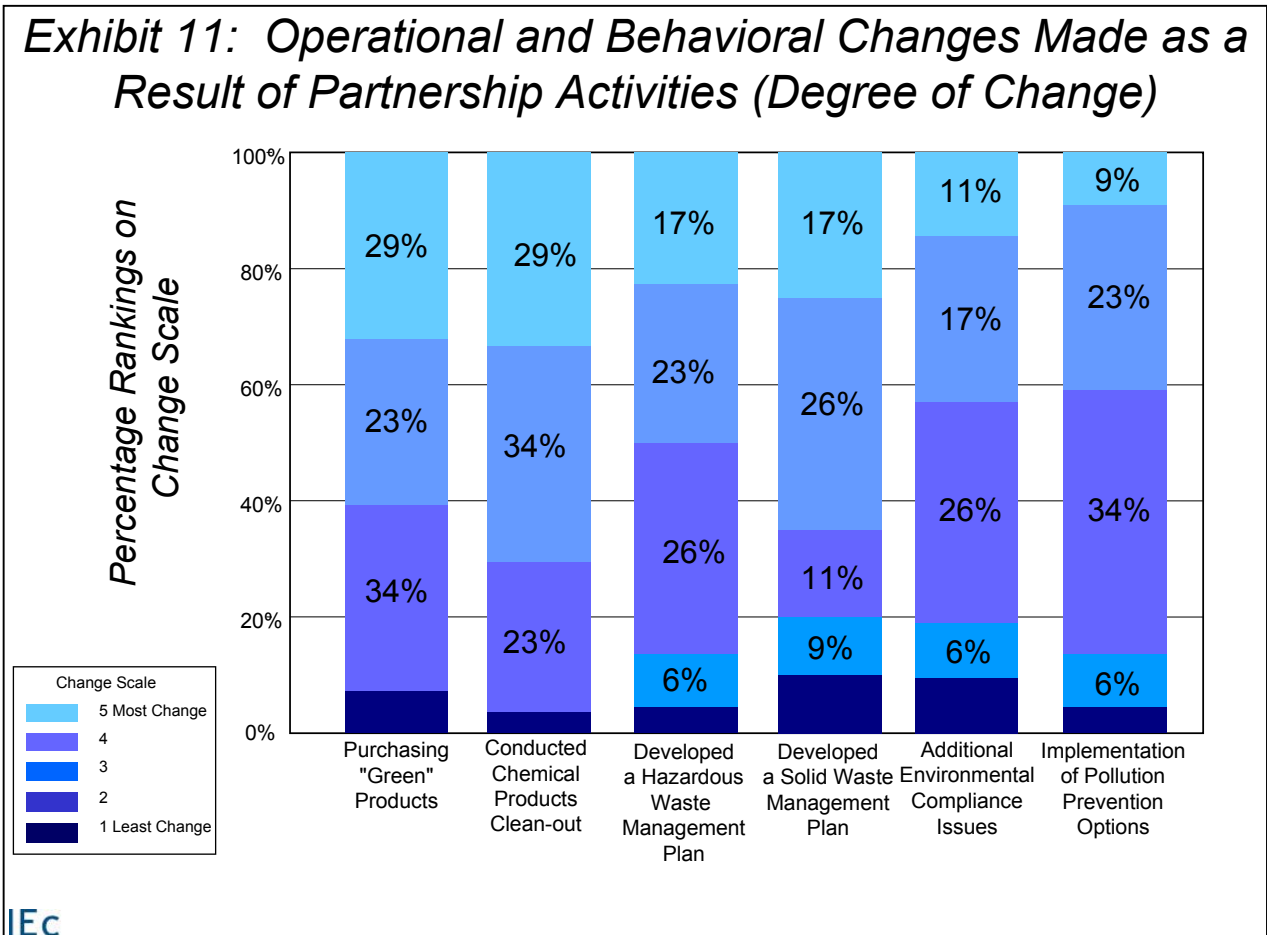
Partnership’s goals regarding training and development of “user friendly” manuals were accomplished through the development and provision of a number of compliance assistance and pollution prevention training courses and resource materials.⁶ Survey responses on the utility of these documents clearly indicate that the Partnership was successful in meeting this goal.

On the whole, respondents felt that the Partnership was effective in helping them meet their environmental goals. In particular, 83 percent of respondents noted that the Partnership facilitated the completion of the environmental audit. Between 60 and 70 percent of respondents indicated the Partnership was effective in reducing hazardous waste, encouraging the shift to green products, training park personnel, and offering training, tools, and technical assistance on environmental issues (see Exhibit 10).



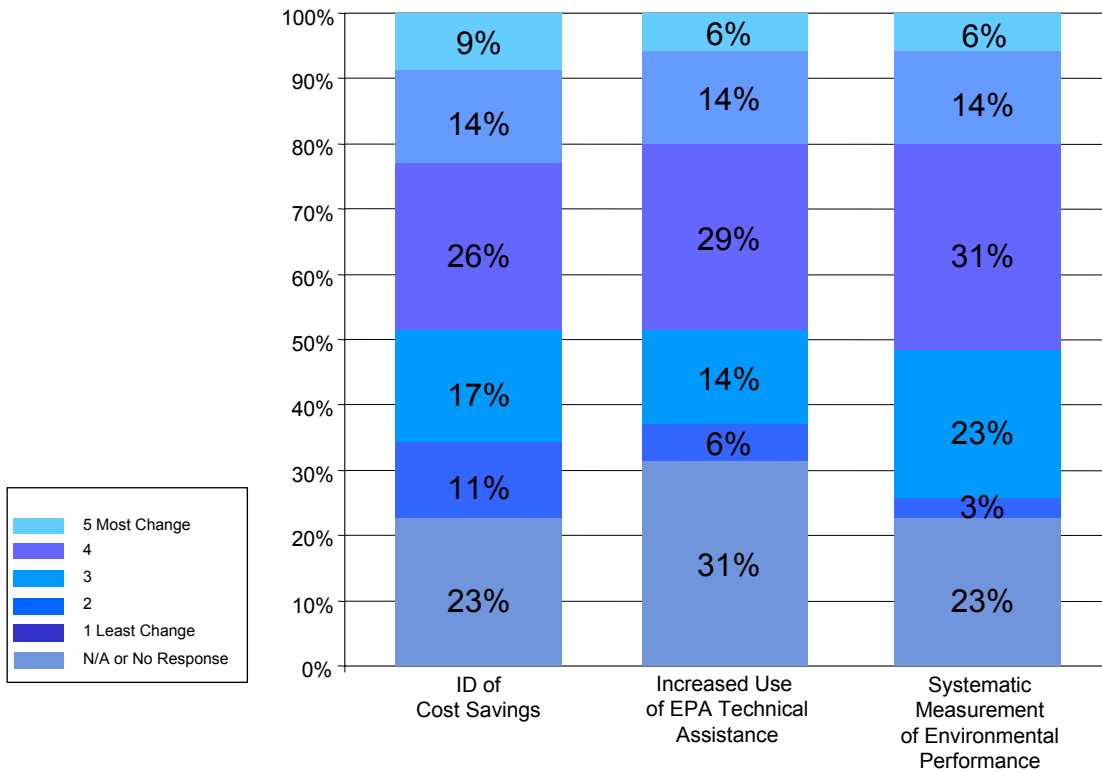
⁶ The Partnership commissioned PRC Environmental Management, Inc. to evaluate three of its training sessions in 1995. This report is entitled *Evaluation of Three Training Sessions on Regulatory Compliance and Pollution Prevention for the National Park Service*, September 1, 1995.

The Partnership was cited as having affected the most change on quantities of stored chemicals and the use of green products. Asked to rate the degree of change (from 1 (least) to 5 (most)) experienced at the park in the various aspects of environmental stewardship targeted by the Partnership, roughly 30 percent specified purchasing “green” products and chemical products clean-out exhibited the greatest degree of change (*see Exhibit 11*). This response corresponds directly to the green purchasing program, which was considered most valuable by 97 percent of respondents.



While aiding individual activities, such as the purchasing of “green” products or the completion of a chemical products clean-out, respondents did not indicate that the Partnership led to systemic change such as an increased use of EPA technical assistance or a systematic measurement of environmental performance. One-quarter to one-third of total respondents did not provide any indications about the level of change. Of those respondents that did indicate that the partnership increased their use of EPA technical assistance, encouraged the systematic measurement of performance, or offered cost savings, the majority rated the degree of change a three, or average (*see Exhibit 12*).

Exhibit 12: Changes in Priorities Resulting from Partnership



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Whether the Partnership improved a national park's commitment to environmental compliance and performance is difficult to assess. A park's participation in Partnership activities and the resulting improvements in stewardship activities could be interpreted as evidence of an increased commitment. On the other hand, the lack of adequate baseline data about the level of commitment prior to the Partnership constrains us from reaching this conclusion. It is anticipated that as the Partnership moves forward, such data will be available to demonstrate this connection.

4. COMPONENTS OF AN EFFECTIVE PARTNERSHIP

This chapter describes the components of an effective partnership, how the NPS/EPA Partnership addresses some of these components, and opportunities for building on the “lessons learned” by the Partnership to develop more successful partnering models.

Characteristics of Effective Partnerships

Literature on what components make up a successful partnership focus on three key characteristics – long-term relationship and commitment, shared vision and objectives, and the right metrics or systems for measuring performance. Other partnership attributes such as senior-level advocacy and support, mutual trust and shared risk, and the flexibility to change partnership scope are cited as likely to improve the partnership’s potential for success.⁷

Long-Term Relationship and Commitment

The commitment to a long-term relationship is an important element of an effective partnership. Ms. Zanolick and Dr. Schene have been working together since 1994 with the support of their Regional management. Their efforts and the involvement of specialized technical assistance staff from Region 8 have been instrumental in the success realized thus far. However, it has been difficult for the Partnership to generate recognition and support from Headquarters’ offices even though both Agencies have committed to enhancing partnerships. NPS cited its commitment in a July 2, 2003 report to President Bush, *National Park Service: Partnering & Managing for Excellence* and the EPA’s draft FY 2003-2008 *Strategic Plan* includes the strengthening of partnerships among its cross-goal strategies.⁸ The Partnership needs to develop a communication strategy to connect with its Headquarters’ counterparts. In addition, the Partnership needs to frame its accomplishments in a performance metric that will be understood and championed by NPS and EPA Headquarters management.

Without this commitment, Partnerships are difficult to develop or maintain. Many of the EPA headquarters and regional interviewees noted the ad hoc nature of partnership development and implementation, with one respondent citing the difficulty in generating management and financial support. A NPS headquarters interviewee also noted the lack of formal channels for establishing partnerships or securing funding within his Agency, despite the general support from the NPS for such endeavors. Standardized mechanisms for promoting and supporting partnerships do not appear to exist within the EPA, although there are examples of support from

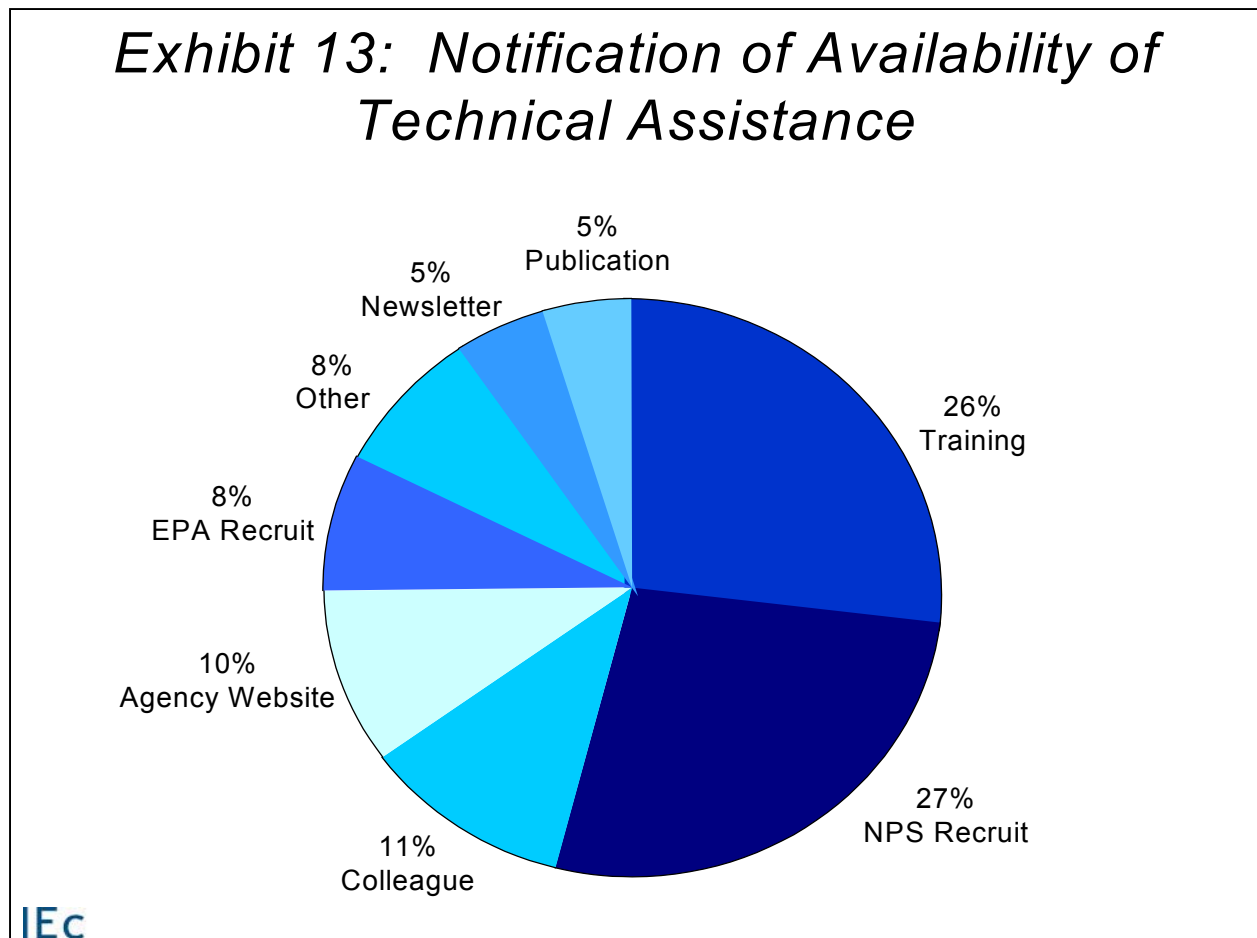
⁷ For helpful discussions of effective partnerships in the literature, see U.S. General Accounting Office, *Depot Maintenance: Public-Private Partnerships Have Increased, but Long-Term Growth and Results are Uncertain*, April 2003, GAO-03-423; and Lorraine Segil, Marshall Goldsmith, and James Belasco, eds., *Partnering: The New Face of Leadership*, 2003.

⁸ These documents can be accessed at the following websites:
<http://www.nps.gov/accompreport2003/> and <http://www.epa.gov/ocfo/plan/plan.htm>

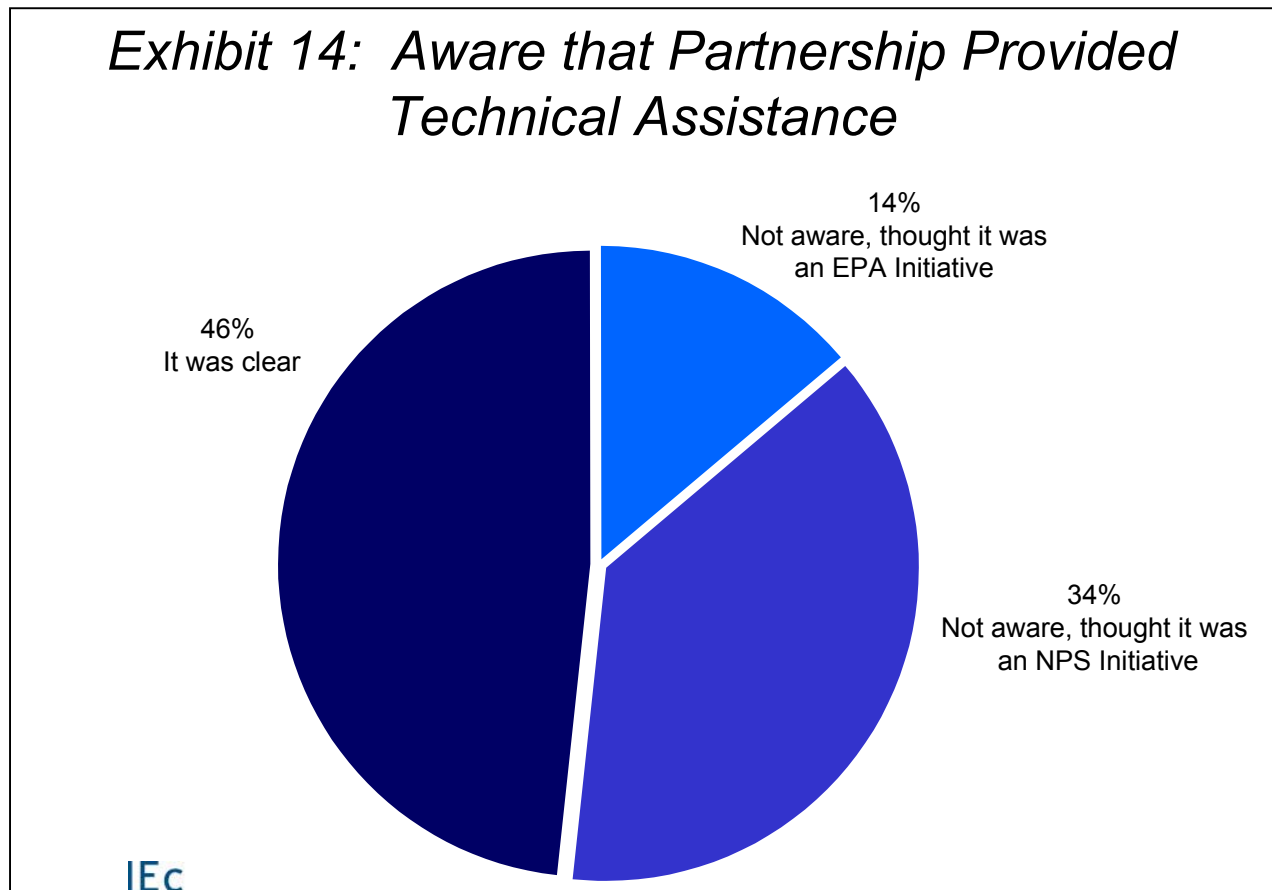
program or regional offices. (See Attachment 8 for a copy of the most recent Memorandum of Agreement entered into by NPS Director for the Intermountain Region and the EPA Region 8 Administrator).

Communication

To understand how the Partnership communicated with parks, we asked participants to identify how they learned about the Partnership. Respondents were asked whether they learned about the Partnership through participation in training, recruitment by a NPS or EPA employee, word of mouth from a colleague, publication in a newsletter, the agency website, or other publication. Twenty-six percent of respondents indicated that they became aware of the Partnership through involvement in a training program; and twenty-seven percent indicated that they learned of the Partnership because of NPS recruitment efforts. Respondents noted that colleagues and the Agency website were equally valuable tools for increasing awareness, with 21 percent of respondents citing these means of communication. In contrast, only eight percent of respondents indicated that they learned of the Partnership as a result of EPA recruitment efforts (see Exhibit 13).



Even those respondents familiar with the Partnership noted some confusion about the nature of the Partnership. Thirty-four percent of respondents indicated that they believed that technical assistance provided by the Partnership was exclusively provided by a NPS program and 14 percent thought the Partnership was an EPA program (see Exhibit 14). The variety of channels through which individuals learned about the program and the confusion over EPA/NPS involvement indicates a need to improve communication about the Partnership. Going forward, the Partnership should outline a clear communication strategy. The Partnership might consider providing parks with an information dissemination plan so all park employees are aware.



Although awareness of the opportunities that the Partnership provides is key to ensuring participation, branding the Partnership in such a way as to enhance its legitimacy and more clearly communicate its message is critical. An ongoing commitment to partnership branding needs to be made in order to maximize the effectiveness of this strategy. With park employees circulating within and outside of Intermountain Region parks, increasing awareness among all park employees, regardless of current involvement in the Partnership, would assist the Partnership to enhance its presence within the Region.

Shared Vision and Objectives

As described in the Introduction to this report, the Partnership identified a set of goals oriented around providing environmental services such as tools, training, and technical assistance to parks in the Intermountain Region. In addition, the Partnership was interested in providing parks with a system to manage environmental responsibilities. To avoid duplicating efforts, the Partnership also deliberately avoided addressing environmental services that were being handled by other federal initiatives such as work with NPS concessionaires or issues handled by the U.S. Public Health Service. However, the evaluation was not designed to specifically question whether any of the Partnership efforts resulted in a duplication of efforts. EPA representatives who were interviewed agreed that by identifying a common mission and set of goals, the Partnership and its activities would be more successful. EPA's Region 6 respondent offered the shared mission statement included in the Texas Environmental Partnership Charter as an example of a formal, public agreement among multiple agencies participating in a partnership. In Texas, the Texas Commission on Environmental Quality, EPA Region 6, Texas Army National Guard, NASA-Johnson Space Center, U.S. Coast Guard, and the U.S. Department of Energy defined the mission of their partnership as one promoting environmental stewardship by implementing model initiatives, building trust, and validating results. An EPA headquarters respondent, however, cautioned that agreement on goals is not sufficient if the burdens of responsibility and benefits are disproportionately allocated among the parties.

Several EPA and NPS regional and headquarters interviewees, as well as data from the survey results, point to the challenge for EPA in partnering with other federal agencies and sharing a common mission. A NPS Headquarters environmental manager reinforced the fundamental differences between the two agencies, stressing the difficulty of establishing a productive partnership between an enforcement agency such as EPA and a regulated entity such as the NPS.⁹ The survey results highlight this tension. According to our survey, although 83 percent of respondents would have accepted technical assistance from the EPA if the NPS had not been involved, 80 percent reported having received assurances from the EPA that enforcement action would not be taken against them unless conditions presenting imminent threats to the environment or public safety were discovered. Asked if they would have accepted the technical assistance had they not received assurances regarding enforcement, only 31 percent indicate they would accept the help, an equal percentage offered no response, and 37 percent indicated that they would not.

Systems for Measuring Performance

As indicated in the Partnership literature, the “right metrics ... are needed to effectively measure that progress is being made and ensure that the partners are effectively motivated to

⁹ Although the Partnership offered a distinctly compliance assistance approach, this NPS manager continued to view “[t]he traditional culture of environmental protection ... [as one that] incorporate[s] a classic enforcement mentality,” Malcolm Sparrow, *Imposing Duties: Government's Changing Approach to Compliance*, 1994, p.ix.

achieve partnership goals and objectives.”¹⁰ While the results of the survey indicate that the Partnership had a positive impact on improving environmental performance in the Intermountain Region parks, it is important to develop a more systematic approach to measuring progress. Measuring park progress against a baseline assessment can more directly indicate program success and can then be used to leverage more resources to support the Partnership. For example, measuring the degree of green purchasing occurring post-Partnership participation or the chemicals cleaned out of parks could help demonstrate the impact of the Partnership.

As the Partnership proceeds to implement environmental management systems in Intermountain Region parks, we recommend a baseline assessment of the park’s pre-EMS environmental performance to compare against the park’s environmental performance several years after the EMS is in place. The NPS does have environmental compliance audit reports that may serve as a baseline for future evaluations. Such an assessment should include quantitative as well as qualitative measures. This information is important to assess the value of the EMS for the parks and to make any necessary mid-course corrections. By anticipating now that the Partnership would like to perform an outcome evaluation within three to five years, the Partnership can structure its activities, identify necessary information collection efforts, and recruit the resources necessary to advance to this next level of performance.

A commitment to ongoing evaluation and assessment efforts is an important element in ensuring program improvement and the Partnership has taken an important first step by conducting this evaluation. EPA is currently developing a program evaluation framework that includes a step by step process to help users identify and collect the key pieces of information necessary to conduct an evaluation. In addition, the framework includes examples of completed evaluations to illustrate the various steps. When completed, the Partnership could use this framework in building off this initial effort and conducting ongoing evaluations in the future.

The framework focuses on supporting the conduct of process evaluations (such as this evaluation) and outcome evaluations that examine the degree to which program activities are successful in accomplishing identified goals and objectives. The Partnership will be able to use the framework to help organize the data collection it will need to conduct outcome evaluations in the future and determine the extent to which Partnership activities are contributing to environmental improvements in the Parks.

The framework is being designed to walk interested parties through each stage of an evaluation and includes a discussion on establishing goals and expectations for the evaluation, preparing data collection and analysis, assessing the information gleaned from the evaluation, reaching appropriate conclusions, and communicating the results of the evaluation to managers and other interested parties. In designing an outcome evaluation, the Partnership should identify a specific set of environmental objectives that it plans to achieve and identify specific targets to track progress toward these objectives. For example, could the Partnership identify specific water quality improvements or changes in the production and handling of solid waste that its actions can effect?

¹⁰ GAO, *ibid.*, p. 14.

The key steps for the Region 8/NPS Partnership are to establish specific goals, identify the data it will need to report on them, collect additional baseline data if necessary, and ensure that protocols and activities are in place to support data collection in the future.

5. FINDINGS AND RECOMMENDATIONS

Our review of the NPS Intermountain Region/EPA Region 8 Partnership indicates that it has succeeded on several levels, helping parks reach certain environmental objectives and make progress toward the goals articulated in the *Park Environments 2000* initiative. In addition, the results obtained from surveys and feedback from members of EPA Regional and Headquarters staff can be used to generate recommendations for the NPS/EPA Partnership and for developing other inter-agency partnerships. We summarize our major findings below and make recommendations for the Partnership's next phase of work.

Major Findings

- **One-Third of Participants Unaware of Partnership** - Despite a 44 percent recognition among respondents that two federal agencies were partnering to achieve better environmental results in national parks, 34 percent of respondents thought it was an NPS program and were unaware that there was a Partnership involved.
- **More Communication About Partnership Needed** – Although awareness of the opportunities that the Partnership provides is key to ensuring participation, we found insufficient knowledge regarding Partnership goals and activities among a variety of different audiences including parks, the NPS and EPA Regions, and Headquarters personnel.
- **Challenges to Environmental Progress Remain** – Insufficient financial resources, staff, and technical knowledge were cited as the most challenging aspects of implementing environmental programs.
- **Partnership Provided Benefits** – Respondents to our survey indicated that more than specific approaches or guidance, technical assistance programs provided the greatest benefit to achieving environmental program goals. More than 90 percent of respondents cited the environmental compliance audits and green purchasing programs as the most effective elements of Partnership assistance.
- **Preliminary Goals Have Been Met** – The service-oriented nature of the Partnership's initial goals, providing tools, training, and technical assistance to Intermountain Region parks, have been largely met.

Recommendations

- **Develop a Comprehensive Communications Strategy** - The Partnership needs to develop a comprehensive communications strategy that addresses its different audiences: parks, Regions, and Headquarters. For example, while EPA and NPS were proactive in contacting parks and recruiting them for the Partnership, a number of respondents still indicated that they were not aware of the Partnership. The rotational nature of employment in the NPS presents a challenge for ensuring awareness, momentum, and

progress towards the goals of the Partnership. However, if properly addressed, it also represents an opportunity. Employees leaving one park and entering another will bring their understanding of the Partnership's benefits with them. To overcome the challenges and seize the opportunity will require the Partnership to fine tune its approach and reexamine the timing and frequency of its outreach. NPS Headquarters' recent report to President Bush would have been an excellent vehicle for communicating the achievements of the Partnership and its ongoing efforts, thereby positioning the Partnership for greater visibility and the possibility of increased funding.

- **Brand the Partnership as a P-2 and Compliance Assistance Initiative** – It is important that the Partnership clarify the role of each partner and brand the Partnership as focused on P-2 and compliance assistance. For EPA technical assistance personnel to overcome a reluctance by certain NPS staff to partner with a regulatory agency, the Partnership, its materials, and all communications from participants must be clearly branded as emanating from the Partnership so that EPA's role, intentions, and assistance are clear. It is clear from the survey results that park respondents relied on the Partnership's assurances that information gathered, as part of EPA's technical assistance activities would not be used for enforcement purposes. Barring the discovery of health or environmental violations that are likely to constitute a serious or imminent threat, EPA has provided such assurances in the context of other programs such as the Performance Track Program and should continue to do so to increase the willingness of the regulated community to partner with a regulatory agency.

- **Enlist Broader Institutional Support for Scale-Up Effort** – The Partnership needs to actively seek broader institutional support within its respective agencies to support scale-up of its activities. Although the Partnership benefits from EPA and NPS Regional management support, interviews with EPA and NPS Headquarters and Regional personnel attest to the lack of formal support from Headquarters offices for partnering activities. Despite public endorsements for partnerships, there is no formal framework to fund, assess, support, and champion Partnership activities within either the EPA or the NPS.

With broader institutional support, the Partnership is more likely to succeed in its new effort to provide tools for parks to develop environmental management systems. By working with parks to develop systems to sustain environmental performance and comply with Executive Order 13148, the Partnership is evolving to meet the changing needs of its clients.

- **Map Partnership Goals to Performance Measures** – As the Partnership assists parks in implementing the EMS designed specifically for parks, it faces the challenge of documenting the impact of the EMS on levels of compliance, pollution prevention practices such as green purchasing, waste minimization, and all other environmental outcome measures pertinent to the parks. In charting its course for this next phase of work, the Partnership should develop a new set of goals that map Partnership efforts to environmental outcomes in the parks. Ideally, these goals should be:

- clear and well defined;
- agreed upon by the program managers and key stakeholders;
- focused on identifiable performance improvement; and
- realistic in terms of the time and resources available for the program.

It is important that the Partnership develop a more systematic approach to measuring progress. Measuring park progress against a baseline assessment can more directly indicate program success and can then be used to leverage more resources to support the Partnership.

- **Develop an Evaluation Strategy to Allow for Ongoing Assessment and Program Improvement** – The evaluation discussed in this report examined how the Partnership was working and how well program activities supported Partnership goals. An important next step will be to put in place the data collection necessary to conduct an evaluation in the future that focuses more on progress toward environmental outcomes. The Partnership should set specific goals and objectives, organize its data collection needs to support an assessment of progress toward these objectives, and collect any necessary additional baseline data against which progress can be measured.