

Big Cypress National Preserve Greening Workshop and Charrette March 26-27, 2002

Final Report



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Acknowledgements

This workshop/charrette was a true collaboration – it could not have happened without the hard work and creative ideas of many people. Among those who were most actively involved:

At Big Cypress:

Carol Clark and Terry Saunders with support from John Donahue, Superintendent
Tom Thacher and David Hamm for on-site computer support

At NPS Headquarters

Shawn Norton, Office of the Director NPS

At the U.S. Environmental Protection Agency

Julie Shannon, Pollution Prevention Division

At the National Recreation and Parks Association

Karen Miller

Speakers from the National Park Service

Wendy Berhman, NPS Concessions Program Center
Warren Brown, NPS Park Planning and Special Studies
Kent Bullard, Channel Islands NP
Sonya Capek, Pacific West Region
Marc Koenings, Gateway NRA
Ed Walls, Pt. Reyes NS

Other experts consulted

Brian Feeney, Gateway NRA
Don Durbin, Dinosaur NM
Kathleen Conner, Ft. Lauderdale
Charlie Loeb, formerly, Denali NP
Michael Schene, Intermountain Region
Kevin Brandt, C&O Canal NHP
Lou Delorme, NPS WASO Park Operations and Education
Patrick Shea, Zion NP
Aimee Vincent, Presidio
James Crockett, Denver Service Center

Contractors

Gail A. Lindsey, FAIA, Design Harmony, Inc.
Joel Ann Todd, Environmental Consultant
Mike Shor, Green Seal

**Big Cypress National Preserve
Greening Workshop and Charrette
March 26-27, 2002
Marco Island, Florida**

BACKGROUND

The National Park Service, U.S. Environmental Protection Agency, and National Recreation and Parks Association collaborated in sponsoring this workshop and charrette at Big Cypress National Preserve. It was the pilot test of the workshop and charrette design; based on the lessons learned at Big Cypress, the workshop and charrette will be revised and offered at other Centers of Environmental Innovation around the country. Big Cypress National Preserve is one of 20 Centers of Environmental Innovation. These Centers will be models for increasing knowledge of the best environmental, sustainable, and conservation practices and products.

SUMMARY OF THEMES

Several themes were emerged from the discussion. These include:

- Big Cypress enjoys support for sustainable plans and practices at the highest levels – Superintendent John Donahue, Carol Clark, Terry Saunders, and others are “true believers.” Additionally, throughout the charrette, support was evident from all levels of preserve employees. Successful implementation of sustainable plans and practices needs support not only at the “highest levels” but at all levels.
- A preserve-wide “green team” could help keep momentum high and continue to monitor implementation of green strategies. Participants in the workshop and charrette are potential candidates for the green team and this report is a starting point or preliminary roadmap for their work. Setting specific targets and goals combined with defining “champions” and “green teams” is critical for success.
- Enthusiasm for greening activities is high among most areas of responsibility represented at the workshop and charrette; however, staff need access to more information, tools, and, in some cases, training to help them select the best greening strategies. Colleagues at other parks are excellent sources for the types of information needed and can act as mentors, giving hands-on/practical advice on “what works” in park settings.
- The importance of interpretation is recognized by all, but resources might not be available to pursue all of the ideas generated by charrette participants. With support from management, other divisions, and outside partners creative ways of developing and implementing these interpretive efforts should be explored to communicate the Big Cypress greening story to visitors and employees. The major positive sustainable impact parks and preserves can have is on the numerous visitors “taking home and putting into practice what they have learned at the parks and preserves.”
- Greening of procurement and purchasing is a preserve-wide effort; the procurement group can work with other divisions in evaluating, selecting, finding, and purchasing green alternatives and in developing greener contracts and leases. Sharing this and other green

information park-wide in a consistent manner is of utmost importance to the success of these efforts.

In summary, Big Cypress is in a position to exercise leadership as a Center for Environmental Innovation and, over time, to provide expertise and assistance to other parks and to educate its many visitors.

CHARRETTE PROCESS

The event included a one-day workshop and one-day hands-on charrette. The Agenda is presented in Appendix A. It was preceded by an optional half-day tour of the Preserve. The event drew 43 participants, including 12 from Big Cypress and experts from around the country (a complete list of participants is included in Appendix B). Speakers and participating experts included some of the leaders on sustainability within the National Park Service.

Monday, March 25, 2002



Terry Saunders led a tour of the Preserve on Monday afternoon. The tour included the site of a planned Visitor Contact Center, the maintenance area, the existing Visitor Center, staff housing, and other features. Terry also took the group on a swamp buggy tour of the new trails that were under construction for off-road vehicles (ORVs). The tour highlighted some of the Preserve's successes, including a new recycled water car wash, and its continuing challenges, such as the restoration of existing ORV trails. The tour was very helpful in introducing

participants to Big Cypress. All agreed that the tour should become an integral part of the event, rather than an optional one.

Tuesday, March 26, 2002

John Donahue, Superintendent of Big Cypress, Karen Miller, National Recreation and Parks Association, and Shawn Norton, National Park Service, welcomed the group. In his welcome, John emphasized that the NPS mission is to be “demonstrators, not regulators,” and to spread the message of sustainability to the more than 280 million people who visit parks each year. Shawn described three goals for the workshop and charrette: first, to help the sponsors improve the design of the event through this pilot; second, to help participants to take this new information back to their parks; and third, to help Big Cypress during the charrette.

Following introductions of participants, the group watched a video, *Growing Smart/ Building Green*, that showed the Chesapeake Bay Foundation's new headquarters building, the Philip Merrill Environmental Center. The video sparked lively discussion of strategies that were and were not appropriate for NPS facilities. Participants also noted that the video did not provide an overview of “lessons learned” and suggestions of how things might be done differently in future projects.

John Donahue presented an overview of Big Cypress and its current challenges. In addition to stressing the critical importance of water in the area, he focused on the issue of off-road vehicles and the Off-Road Vehicle Management Plan that is in final stages of development. There are currently 23,000 miles of tracks in the Preserve that have been made by ORVs. These tracks have damaged or destroyed significant portions of the fragile ecosystems that comprise the Preserve. Big Cypress is putting in 400 miles of primary trails plus a few smaller ones needed to reach camps and ORV use will be restricted to these trails. The trails will be at or below grade to enable water to flow unimpeded. Following John's presentation, Terry Saunders discussed the Preserve's response to its environmental audit and other environmental initiatives. These included a new car wash that uses recycled water and specific green strategies to be used in the new Visitor Contact Center buildings to increase energy efficiency, use recycled materials, etc. Terry also showed the group the Preserve's *Design Guidelines* that incorporate green strategies and a notebook that contains all of the plans needed for environmental compliance. He offered to send copies to members of the group.



Marc Koenings, Superintendent at Gateway, talked about the importance of the NPS mission and message in the “bigger picture.” He discussed three key issues: global climate change, water, and toxic materials, noting, for example, that if we simply increased the efficiency of the total vehicle fleet by 10 mpg, we could eliminate our dependence on imported oil. Marc stressed the importance of education and getting people involved in these issues. As an example, he described Stanley Selengut's development in the Virgin

Islands in which visitors become immediately aware of their energy and water use, and become involved in conservation.

For the remainder of the day, experts presented key principles and practical examples in eight topic areas: planning for sustainability, transportation, facilities design and construction, operations and maintenance, concessions, interpretation and education, and procurement. Copies of their presentations are included in Appendix C. Highlights include the following:

- **Planning.** Gail Lindsey outlined the principles of connecting to the bigger picture outside the park, including sustainability in all planning efforts from General Management Plans to Annual Performance Plans, and obtaining interdivisional buy-in. She also described Denali National Park's recently completed Sustainability Plan. Warren Brown described opportunities for linking sustainability to all of the



various plans that are required within the NPS, stressing the importance of the linkage to the budget in the Strategic Plan and the Annual Performance Plans. Warren discussed innovative efforts at Gettysburg NMP, Mt. Ranier NP, Mohave NP, Denali NP, and the Cain River Creole NHP.

- **Transportation.** Marc Koenings outlined the principles of establishing effective transportation systems and routes, identifying and implementing alternative transportation modes and fuels, and educating staff, visitors, and other parks about successes. This requires an internal analysis of fleet needs and external analysis of connections to the community and visitors. He discussed examples at Gateway NRA, Zion NP, Assateague Island NS, and Alcatraz .
- **Facilities Planning and Construction.** Gail Lindsey discussed the principles of establishing a green process for planning and construction, using the LEED Green Building Rating tool, and educating other parks and visitors about green strategies. She described innovative facilities such as the Visitor Center at Tom’s Cove in Assateague Island NS, the Visitor Center at Zion NP, and the Thoreau Center at Golden Gate NRA.
- **Operations and Maintenance.** Kent Bullard described the opportunities for reducing costs, providing a safer workplace for staff, reducing regulatory burdens, reducing liability issues, and reducing staff workload through greening O&M. He suggested that the first step was to look at what products and processes were currently in use and to identify what changes could be made. Kent also stressed that “a series of small successes can win the war.” He offered many specific examples and resources, including Dinosaur NM recycling or reusing everything from the auto shop, Mt. Ranier using soy based hydraulic oils, and others. Ed Walls added the need to evaluate and critique new products and processes. He also described Yosemite NP’s efforts to go “all green.”
- **Concessions.** Gail Lindsey introduced this session by stressing the importance of including concessioners in planning for sustainability and creating partnerships with concessioners to demonstrate sustainable practices to visitors. Wendy Berhman then described new contracting requirements for concessioners that will affect the 660 concessions contracts in 130 parks. These new requirements include an Environmental Management Plan in each contract. Wendy also described the new Concessions Environmental Audit Program that is just getting underway.
- **Interpretation and Education.** Joel Ann Todd summarized principles and examples of interpretive programs on sustainability. She noted that these programs can be designed to add to the visitor experience, explain a change that the park has made (such as the ORV trails at Big Cypress), enhance the park’s “story” and mission, and educate visitors on sustainability and actions they can take home. She also described various different methods that can be used in interpretive programs. Examples included the Zion NP Visitor Center and the Statue of Liberty concessions operation. The group also described opportunities, such as the Junior Ranger program, environmental education programs, and others.



- ***Green Procurement, Contracts, and Leasing.*** Julie Shannon presented the opportunities and drivers for green purchasing, including the Federal government's enormous influence on markets with its \$250 billion per year in purchasing. She also discussed definitions of "environmentally preferable" products and services and Federal government pilot programs to promote green purchasing. Julie also presented some specific tools. Mike Shor distributed an *Environmentally Preferable Purchasing Resource Notebook* to each participant. The notebook contained lists of environmentally preferable products, contract language, and product guides that could be used by procurement personnel. Finally, Sonya Capek described the Pacific West Region's efforts in green purchasing, including a policy statement, Green Janitorial Products and Practices Guide, Best Management Practices Guide, EPP Guide, and EPP Training.
- ***Environmental Management Systems (EMS).*** Margie Meares and Terry McElrath agreed to present a brief session on EMS in response to requests for information on this topic. An EMS is an umbrella that covers all of the topics included in the workshop and provides a process for tracking plans and progress, and encouraging continual improvement. They described the approach used by the Blue Ridge Parkway to identify and prioritize environmental tasks in the EMS. First, all environmental impacts are identified, then actions and targets are designed to address them. Roles and responsibilities are assigned and then specific plans and operating procedures are developed. Document control is an important component so that staff can easily find policies and procedures.

At the end of the day, the group was split into work groups to address these seven basic topics (there was no separate group on EMS). The groups on planning and transportation were combined. There was insufficient time to begin this task, but groups selected a spokesperson and notetaker.

Wednesday, March 27, 2002

The group met on Wednesday morning to hear their assignment. Each group was to discuss and summarize the following:

- Baseline conditions – what are the existing practices, facilities, infrastructure, staffing levels, etc.?
- Vision – what is the overall target that the group would like to achieve in the future?
- Short-term, mid-term, and long-term goals – what specific goals and actions does the group propose to reach the vision?
- Champions – who will take responsibility for each goal and action?
- Measures of success – how will we know if the activities have been successful? How is that success defined?

At lunchtime, each group presented its "baseline." At the end of the day, each group presented its vision, goals, and champions. Several themes emerged:

- The need for green teams to keep the momentum going.
- The importance of communicating results of the workshop and charrette to other staff.

- The importance of including an interpretive and educational element for new green initiatives to ensure that visitors are reached by the message.
- A desire to be a leader and model for other parks, including other national parks as well as state and local parks.

More detailed results follow.