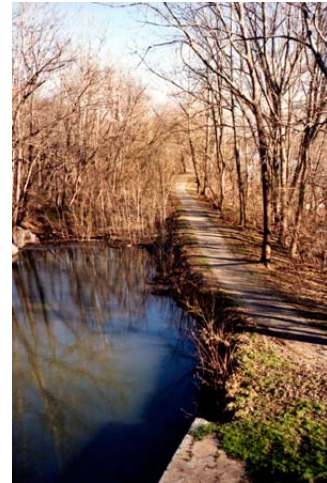


# C&O Canal National Historic Park Greening Charrette December 2-4, 2003 Hagerstown, Maryland Executive Summary

The C&O Canal National Historic Park, one of the National Park Service Centers of Environmental Innovation, comprises 184.5 miles, running along the Potomac River from Washington, DC to Cumberland, Maryland. The park contains more than 1,400 historic structures and is home to approximately 1,200 species of native plants, with more than 150 listed as rare, threatened, or endangered in Maryland and Washington, DC. There are six Visitor Centers to serve the park's visitors, estimated at more than 4 million visitor days each year. Key management issues for the park include more frequent and severe flooding from the Potomac River, an infrastructure containing numerous historically significant buildings requiring large capital expenditures to restore, and increasing visitation that has stressed existing park resources.



This charrette was the fifth in a series co-sponsored by the National Park Service and the U.S. Environmental Protection Agency. Participants included the Acting Superintendent, division managers, and staff from C&O as well as personnel from neighboring parks, stakeholders and partners, and experts from around the country. The objective of the charrette was to develop a Strategic Plan for Greening the C&O Canal in categories that included 1) planning and transportation, 2) facilities design and O&M, 3) procurement of goods and services, and 4) interpretation and education.



The event began with a half-day tour of the park, designed to introduce participants to issues at C&O. The first full day of the charrette began with welcomes from Kevin Brandt, Acting Superintendent, and Shawn Norton, National Park Service Environmental Leadership Coordinator. Following introductions of participants, Shawn returned to set the stage for the charrette, reminding the group that the National Park Service was an early leader in sustainability, with its 1993 *Guiding Principles of Sustainable Design*. A video introduced the group to the park and its resources, and a second video showed the impacts of flooding on the park. Park staff then discussed some of the major issues at the park. To conclude the morning presentations, Gail Lindsey, FAIA, introduced the sustainability topics that would be the focus of the workshop: environmental leadership

and planning, transportation, facilities, operations and maintenance, concessions, interpretation and education, and procurement.



Following lunch, three experts presented more detailed examples and strategies on three topics of particular interest to the park: facilities and historic preservation, interpretation, and procurement. Jean Carroon, an architect from Goody, Clancy and Associates, presented information on facilities with a focus on buildings since they are responsible for as much as 30% of the emissions that cause global warming. She introduced the US Green Building Council’s LEED Rating System and stressed the importance of education and interpretation of sustainable strategies. Lynne Murdoch gave an overview of what makes an effective interpretive program and described

specific examples. Finally, Julie Shannon stressed the importance of green procurement and introduced the participants to tools and resources.

Participants then broke into four work groups to discuss planning and transportation, facilities and O&M, procurement, and interpretation and education. The groups created a vision for their topic, discussed the current status and established a baseline, and began to identify opportunities and barriers that could affect their ability to achieve their vision. The work groups returned the final day to establish short-term, mid-term, and long-term goals for their topic, and to select their highest priorities in the short term. The groups also assigned a “champion” for each priority action and estimated the cost.



At the end of the charrette, groups presented their results for Acting Superintendent Brandt. He supported the groups’ recommendations and committed to moving forward on the ideas.

<b>Priority Short-Term Actions</b>	
<b>Actions</b>	<b>Champions</b>
Establish a Greening Group	John Noel
Develop a sustainable transportation plan	Kevin Brandt
Mitigate existing transportation infrastructure impacts	Bob Hartman Tina Orcutt
Revisit Long Range Interpretation Plan themes and modify to incorporate sustainability if needed	Rob Danno Tina Orcutt
Design greening demonstration project at Lockhouse 8, in	Mike Seibert

collaboration with the Potomac Conservancy	Matt
Conduct resource audits of maintenance facilities	Bob Hartman
Recycle demolition waste	Mike Seibert
Improve human “nutrient” waste management	Bob Hartman
Make a formal commitment to greening park procurement policy	Kevin Brandt
Conduct training for staff on green purchasing	Jeannie
Add environment to compliance screening form so compliance committee becomes check-point for greening evaluation	Lynne Wigfield Dianne Ingram
Develop sustainability messages for the park	Bill Justice John Noel
Educate staff about sustainability message(s)	Bill Justice
Develop strategies to deliver messages	Bill Justice John Noel
Revisit Long Range Interpretation Plan themes and modify to incorporate sustainability if needed	Bill Justice

At the conclusion of the charrette, Kevin thanked the staff and partners who organized and participated in the charrette as well as Shawn and Julie for their support, and Gail and Joel for their work. He said that he was impressed by what had been accomplished. He noted that good ideas for the GMP were developed and he committed to focusing on what could be done to reach the 4 million people who visit the park. He concluded by saying that this is a good step in “getting the green back in the green and gray” – that this is “what we are all about.”



The final report presents a more detailed description of the charrette and the results of the discussions. A follow-up evaluation will be conducted to assess the progress toward priority goals and to identify barriers and successes.

# C&O Canal National Historic Park Greening Charrette December 2-4, 2003 Hagerstown, Maryland Final Report

## Background

The C&O Canal National Historic Park comprises 184.5 miles, running along the Potomac River from Washington, DC to Cumberland, Maryland. The Canal was built between 1828 and 1850, and operated until 1924. The park contains more than 1,400 historic structures that include 74 lift locks, lock houses, a tow path that extends the entire length of the park, and nearly 20,000 acres of natural habitat. It is home to approximately 1,200 species of native plants, with more than 150 listed as rare, threatened, or endangered in Maryland and Washington, DC, one of the highest concentrations of state-listed rare plants in the eastern United States. Several are also globally rare. There are six Visitor Centers to serve the park's visitors, estimated at more than 4 million visitor days each year. In addition to its historic features, the park serves as a major recreational experience for hikers, cyclists, canoers, and kayakers and also provides access to the Potomac River for fishing and boating.



Key management issues for the park include more frequent and severe flooding from the Potomac River, an infrastructure containing numerous historically significant buildings requiring large capital expenditures to restore, and increasing visitation that has stressed existing park resources. Floods, including the most recent flooding from Hurricane Isabel, can cause extensive damage to park structures. The park is developing more sustainable approaches as it repairs this damage. For example, foot bridges are built to withstand flood waters; side railings can be removed from the bridge at Great Falls and the Cabin John foot bridge swings out of the way of flood waters and debris.

The park is one of the National Park Service's Centers of Environmental Innovation. Managers and staff emphasize the opportunity they have to convey sustainability messages to the large number of visitors who enjoy the park each year.



This charrette was the fifth in a series co-sponsored by the National Park Service and the U.S. Environmental Protection Agency. Participants included the Acting Superintendent, division managers, and staff from C&O as well as personnel from neighboring parks, stakeholders and partners, and experts from around the country. The objective of the charrette was to develop a Strategic Plan for Greening the C&O Canal in categories that included 1) planning and transportation, 2) facilities design and O&M, 3) procurement of goods and services, and 4) interpretation and education.

## Charrette Overview

The event began with a half-day tour of the park, designed to introduce participants to issues at C&O. The tour began at park headquarters in Hagerstown, Maryland. The group stopped at the Visitor Center at Williamsport for an overview of the park and its concerns. A large map illustrated the challenges of managing a park that stretches almost 190 miles in length, with a width often less than a mile. Staff and services must be placed along the park at major access and use points. The group could understand the impact of flooding from the signs on the Visitor Center walls indicating high water marks from major floods. The tour also included one of the dams and associated structures, and a lock and lockhouse.



The first full day of the charrette began with welcomes from Kevin Brandt, Acting Superintendent, and Shawn Norton, National Park Service Environmental Leadership Coordinator. Kevin emphasized his support for this effort saying that if we want to “think globally and act locally, we are the locals” – the people who purchase items for the park, maintain the structures, interact with visitors, etc. He views this as a great opportunity, since the visitors come to the park with minds that are open and receptive to sustainability messages, and he wants to do more to incorporate sustainability into the park’s story. Finally, he encouraged the group to have fun and be creative during the charrette – “to imagine a greener, brighter future.”

Shawn welcomed the group and outlined the overall purpose of the charrette series: to develop specific action plans for participating parks, to help the Park Service learn how to be more effective leaders in environmental stewardship, to encourage parks serve as community leaders, and to demonstrate sustainability.

Following introductions of participants, Shawn returned to set the stage for the charrette. He reminded the group that the National Park Service was an early leader in sustainability, with its 1993 *Guiding Principles of Sustainable Design*. He noted, however, that the effort did not “take off” until recent years. Stimulated by greening goals in Executive Orders, the Department of Interior Greening Plan, and inclusion of sustainability as one of seven themes in *Rethinking the National Parks for the 21<sup>st</sup> Century*, the Park Service is now very active in sustainability, with the charrette series as one of its important activities.

A video introduced the group to the park and its resources, and a second video showed the impacts of flooding on the park. Bob Hartman discussed some of the major issues at the park while Tina Orcutt described maintaining historic structures in the park and increasing pressure for access to the river as important issues. Tina also described the historic leasing program, several partnership programs, and natural resource concerns. Dan Copenhagen described some projects that were intended to make repairs after flooding more sustainable. Bill Justice discussed the importance of reaching beyond the park’s boundaries if it wants to improve the health of the Chesapeake Bay. He also described several ongoing programs and partnerships.



To conclude the morning presentations, Gail Lindsey, FAIA, introduced the sustainability topics that would be the focus of the workshop: environmental leadership and planning, transportation, facilities, operations and maintenance, concessions, interpretation and education, and procurement. Following lunch, three experts presented more detailed examples and strategies on facilities and historic preservation, interpretation, and procurement. Jean Carroon’s presentation on facilities focused on buildings since they cause 30% of global warming.



She introduced the LEED Rating System and stressed the importance of education and interpretation of sustainable strategies. Lynne Murdoch gave an overview of what makes an effective interpretive program and described specific examples from Channel Islands National Seashore, Acadia National Park, Glacier Bay, Gateway National Recreation Area, and Assateague National Seashore. She also discussed potential partners, such as the National Zoo Association, associations of science teachers, the National Council for Science and the Environment, and National Public Radio. Finally, Julie Shannon stressed the importance of green procurement, since the U.S. Government is the largest consumer in the United States, and presented several tools and information resources. She also gave the group advice: start small, look at what others have done, tell vendors

and contractors what you want, and tell everyone what you have accomplished. Julie also introduced participants to the green procurement CD that was distributed in their charrette packets.



Participants then broke into four work groups to discuss planning and transportation, facilities and O&M, procurement, and interpretation and education. The groups created a vision for their topic, discussed the current status and established a baseline, and began to identify opportunities and barriers that could affect their ability to achieve their vision. The work groups returned the final day to establish short-term, mid-term, and long-term

goals for their topic, and to select their highest priorities in the short term. The groups also assigned a “champion” for each priority action and estimated the cost.

At the conclusion of the charrette, groups presented their results and the Acting Superintendent reacted to the top priorities. Kevin supported the groups’ recommendations and committed to moving forward on the ideas. A follow-up evaluation will be conducted to assess the progress toward priority goals and to identify barriers and successes.



## Highlights of Discussion

### Environmental Leadership and Planning



Team: Shawn Norton, Stephanie Flack, Tina Orcutt, Diane Ingram, Bill Spinrad, Rob Danno

Vision: incorporate natural and cultural resource sustainability objectives into all aspects of park planning and management, setting a model for other parks, federal agencies, and the public through parks, federal agencies, and the public through education and interpretation of these activities.



### Current Status/Baseline Conditions

1. GMP – updating process due to begin in 2004
2. Resource Management Plan – from 1997, identifies impacts and inventories but is outdated
3. Site Conservation Plan – for lower 15 miles, acquisitions
4. Commercial Services Plan – does not exist
5. Development Concept Plan – outdated from 1970s or 1980s)
6. Compliance Program – is active
7. Land Protection Plan – 2003
8. Fire Management Plan – starts this year
9. Long Range Interpretive Plan – underway
10. County Plans – various plans exist



### Short-Term Goals

1. Educate the public before the GMP process begins to ensure effective participation and understanding of park goals.
2. Create opportunities for park staff to experience park resource connections.
  - a. Champion: Superintendent
  - b. Partners: The Nature Conservancy
  - c. Funding: \$
  - d. Timing: 1 year

### Mid-Term Goals

1. Incorporate green/sustainability language into GMP (review and revise mission statement to incorporate sustainability concept).
  - a. Champion: Superintendent
  - b. Partners: stakeholders
  - c. Funding: \$\$
  - d. Timing: 2-5 years





## Transportation

Team: Environmental Leadership and Planning Group also discussed Transportation

### Vision:

1. all external people desiring the C&O Canal NHP experience will be exposed to the significance of the park and can plan their trip in a way that enables them to model their behavior and make environmentally-sensitive choices for transportation, activities, and learning.
2. park, county, state, regional, and federal transportation-related policies, practices, and infrastructure development and maintenance will have *no adverse impact* on the natural and cultural resources of the park, and greener retrofits and maintenance practices will be used for existing transportation infrastructure (roads, trail network, vehicle fleet, etc.).



### Current Status/Baseline Conditions

1. No Transportation Plan exists.
2. Carrying capacity is exceeded in some areas due to transportation design.
3. Social trail development is increasing.
4. Most access to the park is by car.
5. Users include walkers, bikers, canoers and boaters mainly – the park is a main access point for the Potomac River.
6. CSX rail line is a barrier and dangerous railroad crossings exist.
7. Parking overflow is a problem in some seasons and some places.
8. Access is uncontrolled except at Great Falls; there is some control through permitting of concessioners.
9. Big Slackwater detour is dangerous and needs a solution.
10. Local landowners do not use designated access points and create “social trails”.
11. New roads might affect park; there is a Route 15 Task Force (Scenic Byway).
12. Bicycle and trail planning is conducted with the counties, state (Rails to Trails program, etc.).
13. There is no baseline for emissions from transportation sources.
14. Upcoming legislation contains projects for C&O.
15. Very little public transportation to the park exists – how can those without cars use the park?



## Short-Term Goals

1. Mitigate existing transportation infrastructure impacts.
  - a. Champions: Bob Hartman, Tina Orcutt
  - b. Partners: Federal Highway Administration, Corps of Engineers
  - c. Funding: \$\$\$
  - d. Timing: 1-5 years
  - 1a. Seek TEA (Transportation Equity Act) demonstration project to mitigate roads impacts on Potomac Gorge.  
Champion: Stephanie Flack  
Partner: The Nature Conservancy  
Funding: \$  
Timing: 1 year
2. Map social trails.
  - a. Champion: Marie Sauter
  - b. Partner: Hagerstown Community College, trail groups, users
  - c. Funding: \$
  - d. Timing: 1 year
3. Address safety/resource issues at high priority railroad crossings.
  - a. Champion: Rob Danno, Tina Orcutt
  - b. Partners: CSX RR, FRA, MDSHA
  - c. Funding: ?\$
  - d. Timing 1 year
  - e. Note: Kevin reported that work is underway on this issue
4. Get more involved in regional transportation planning.
  - a. Champion: Kevin Brandt
  - b. Partners: counties, region, states, C&O Canal Association
  - c. Funding: \$
  - d. Timing: 1 year



5. Investigate future TEA-3 funding opportunities and green existing TEA-21 pipeline projects.
  - a. Champion: Tina Orcutt
  - b. Partners: The Nature Conservancy
  - c. Funding: \$
  - d. Timing: 1 year

## Mid-Term Goals

1. Educate adjacent landowners and park neighbors.
  - a. Champions: Bill Spinrad
  - b. Partners: The Nature Conservancy, the Potomac Conservancy, Conservation Fund, landowners
  - c. Funding: \$ Timing: 2 years
2. Identify park user demographics and assess conflicts and future trends.
  - a. Champions: Rob Danno, Bill Justice
  - b. Partners: social scientist, Leave No Trace, stakeholders, AARP
  - c. Funding: \$\$ Timing: 2 years
3. Develop a Transportation Plan.
  - a. Champion: Kevin Brandt
  - b. Partner: Department of Transportation
  - c. Funding: \$\$\$ Timing: 2-5 years
4. Research opportunities to transport underrepresented groups.
  - a. Champion: Bill Justice
  - b. Partners: Chesapeake Bay Trust, Discovery Creek
  - c. Funding: \$ Timing: 2 years
5. Develop “trip planner”.
  - a. Champion: Bill Justice
  - b. Partners: universities, National Geographic
  - c. Funding: \$\$ Timing: 5 years
6. Re-establish link at Big Slackwater in more sustainable manner.
  - a. Champion: Bob Hartman
  - b. Partners: C&O Canal Association, Washington County
  - c. Funding: \$\$\$ Timing: 5 years
  - d. Note: Kevin reported that work is underway to address this issue.



## Facilities and Operations/Maintenance

Team: Jean Carroon, Dan Copenhaver, Mike Seibert, Matt, Dominick, Bob Hartmann, Lynne Wigfield, Marcia, Cindy Ecker, Ralph Young, Gail Lindsey

Vision: leave less trace (be an example for others), we all live downstream, let's get the GREEN back in the “green and gray”

### Current Status/Baseline Conditions

1. Not currently using LEED for facilities.







2. Re-use materials to the extent possible.
3. All portable toilet “nutrients” are taken away as waste; need to look at ways to use these nutrients more wisely and also look at composting toilets.
4. Waste from mules is also an issue.

### Opportunities

1. Photovoltaics on maintenance building, partnering with BP.
2. Composting.
3. Many small towns along the park’s length might be interested in participating as partners.

### Barriers

1. Cultural landscape.
2. Flooding – for example, many sites that could use composting toilets are in the flood plain and toilets must be removable during flood events.
3. Energy use/ pumping/ moving waste.
4. Facility appeal.

### Short-Term Goals

1. Create a Greening Group.
  - a. Champion: John Noel, coordinator
  - b. Purpose
    - i. Coordination through 2-3 meetings per year
    - ii. Share information, provide updates, discuss barriers and successes
    - iii. Keep people on task
  - c. Evaluate progress of greening activities at 6 months and 1 year
2. Design and implement a greening demonstration project at Lockhouse 8.
  - a. Champions: Mike and Matt
  - b. Partners: Identify potential partners: BP, NREL/DOE, CB Program Office
  - c. Timing: 6 months (1 Year Decision)
    1. Research and analysis of alternative energy sources (small hydro?)
    2. Develop final proposal with park input and review
    3. Connect with interpretation and education group to tell the story



- d. Barriers: National Historic Compliance Act, cost, security and protection issues, technology feasibility, maintenance
- 3. Conduct resource audits of maintenance facilities.

- a. Champion: Bob Hartman and staff
- b. Partners: administration office (utility bills), Allegheny Power (energy programs – audits/infrared), schools and universities (University of Maryland, University of Virginia, George Mason, Hagerstown Community College, Frederick Community College, Shepherdstown, Frostburg, Penn State, Catholic University)



- c. Timing: 6 months
  1. Create and test a checklist for facilities based on LEED EB
  2. Collect data (energy and water bills, use and cost)
  3. Inventory buildings (materials, waste, etc.)
  4. Identify and contact partners

- d. Barriers: staff time/availability, expertise
- 4. Recycle demolition waste.

- a. Champion: Mike and intern (Buddy)
- b. Partners: Matt, Maryland Department of Environment, county solid waste contacts

- c. Timing: 6 months
  1. Develop menu of questions – what materials should be targeted?
  2. Develop lists by district of demonstration materials for recycling
  3. Share information internally and externally, and document the project



- d. Barriers: legal (endorsements), infrastructure

- e. Opportunities: lessons learned, local waste haulers

- 5. Improve human “nutrient” waste management.

- a. Champion: Bob Hartman and staff
- b. Partners: Maryland Environmental Services, Maryland

Department of Environment, Department of Natural Resources, Chris Finlay (NPS), Harvey Hoch

c. Timing

6 months

1. Establish baseline (including waste volumes) and purpose/need statements
2. Identify and prioritize sites

1 year

1. Conduct research and determine feasibility – what works? Can we do it?
2. Check potential partnerships (issue – main sewage system problem)
3. Check possibility of greening current contracts with vendors

Mid-Term Goals

1. Consider alternative energy (hydro, solar, green power) research and implementation on Lockhouse 8 and maintenance facilities.
2. Develop demonstrations projects for Old Towne and Pleasantville facilities (hydro, solar?).
3. Complete survey of four main maintenance facilities.
4. Make sure contracts have green provisions.
5. Integrate green buildings and green O&M into the GMP and Business Plan.
6. Collect and share information internally and externally – examples include the Georgetown Visitor Center (recycling, reuse of historic building, copper roof is recyclable, hot water on demand instead of tank, no paper towels, energy efficient systems) and Great Falls Tavern Visitor Center (energy efficient HVAC and windows, flood protection, reuse of historic building) – these activities need to be interpreted.



Long-Term Goals

1. Develop green demonstration project for the Palisades maintenance shop.
2. Become an energy-independent park.
3. Retrofit the Hancock shop using green strategies.
4. Collect and share information internally and externally.



## Procurement

Team: Julie Shannon, Dave Castle, Dave Hixon, Larry Umberger, Laurie Robinson, Jeannie, Paulette Lassiter

Vision: Through training, motivation, and successes, greening will be considered in all contracts and purchases at C&O.



### Current Status/Baseline Conditions

1. The park is already buying green products and is recycling. These include cleaning products, compact fluorescents, hand cleaners, ZEP products, vegetable oil for hydraulic fluid, recycling oil and batteries, citrus cleaners and degreasers, recycling of greasy rags and shop cloths, recycling of antifreeze, and switching over to "green" antifreeze.
2. Most green purchasing is for small purchases; more needs to be done on larger purchases such as vehicles and building materials.
3. Purchasing is decentralized and much is by credit card.



### Opportunities

1. Check upcoming contracts – those that are already in the PMIS should be reviewed to identify greening opportunities and costs.
2. Check cleaning contract for Headquarters building to see if green products and practices are required.
3. Share success stories with other park staff.

### Barriers

1. Funding, if green products cost more.
2. Limited access to alternative fuels, recycling, and other products and services in more remote sections of the park.
3. Lack of knowledge – need training and tools.

### Short-Term Goals

1. Make a formal commitment to greening park procurement policy.
  - a. Champions: Kevin Brandt and division chiefs
  - b. Funding: no cost to \$ low cost
  - c. Barriers: none
2. Conduct training for staff on green purchasing (include train-the-trainer).
  - a. Champion: Jeannie

- b. Partners: possible partners include NPS/Pacific West Region, EPA, GSA – be sure concessioners are invited to training
- c. Funding: \$ low cost, mainly staff time
- d. Barriers: none
- 2a. Communicate green purchasing activities in *The Tiller*.  
 Champion: Laurie Robinson  
 Partners: park staff, especially in maintenance  
 Funding: no cost to low cost/
- 2b. Send staff member to GSA Conference on Alternative Fuel Vehicles  
 Champion: ?  
 Funding: \$\$  
 Barriers: funding
- 3. Add environment to compliance screening form so that compliance committee becomes check-point for greening evaluation.
  - a. Champions: Lynne Wigfield , Dianne Ingram
  - b. Funding: no cost to \$ low cost



Mid-Term Goals and Actions

- 1. Keep training up to date and continuous.
- 2. Look for funding for composting toilets and pilot test them in a few locations.
  - a. Champion: ?
  - b. Partners: EPA or counties
  - c. Barriers: flooding, compliance issues
- 3. Routinely feature green purchasing activities in *The Tiller*.
- 4. Test alternative fuel vehicles.
  - a. Champion: superintendent will need to establish this as a priority
  - b. Partners: vehicle manufacturers?
  - c. Funding: \$\$\$
- 5. Upgrade and retrofit equipment to use biobased (vegetable) oil instead of petroleum products (not engine oil).
  - a. Champion: ?
  - b. Funding: \$\$\$



- c. Barriers: labor intensive, loss of use of vehicles during transition

Long-Term Goals

- 1. Showcase results and successes of major projects that are greened and interpret them to the public and use in staff training to continue motivation.

## Interpretation and Education

Team: Bill Justice, John Noel, Kirk Huserik, Rod Sauter, Kathy Kupper, Carla Beasley, Joel Ann Todd

Vision: Through education and interpretation opportunities created by park staff and partners, people\* will understand their impact on the park, the local and the global environment, and will choose to change their behaviors to be more sustainable in the park and beyond the park's boundaries.

\* "People" includes all those who are reached by the park's messages.



### Current Status/Baseline Conditions

1. Long Range Interpretation Plan is underway.
2. Existing educational programs include Bridging the Watershed and the Western Maryland Initiative.
3. A project is underway to renovate Lockhouse 8 as an educational facility, in collaboration with the Potomac Conservancy.
4. The Trash Free Park program is interpreted by park staff, concessions staff, and bike patrols.
5. Bicycles, donated by Ford, have been placed on the Mall and bike tours are being conducted by interpretive staff.
6. Several grants have been received for special interpretive efforts, including an Alternative Transportation Interpreter and an REI/Leave No Trace grant.
7. Conservation Clean Up days are held several times per year.
8. A wide range of interpretive programs now occur, including canal boat rides, walking tours, geology hikes, and many others, some conducted by park staff and some conducted by partners.
9. Many partners are involved in the park, including the Potomac Conservancy, Community Commons, Canoe Cruisers Association, school districts, etc.





## Opportunities

1. The 50<sup>th</sup> anniversary of the Douglas Walk will occur in 2004.
2. The Leave No Trace program is underway.
3. Several flood repair projects have taken steps to be more sustainable and have stories to tell.
4. The Canaller provides an opportunity to reach park staff with sustainability messages.
5. Visitors are becoming more culturally diverse and interpretive programs need to respond to this.
6. Concessions and IBPs can model alternatives.
7. Allegheny Energy power plant could be interpreted, related to hydro power vs. other sources of energy.



## Short-Term Goals

1. Develop sustainability messages for the park.
  - a. Champions: Bill Justice, John Noel
  - b. Partners: all (concessions, permit holders, NGOs, etc.)
  - c. Funding: \$ (support for one or more meetings)
  - d. Opportunities: develop partner buy-in, community engagement
  - e. Barriers: superintendency uncertain
  - f. Timing: roll-out at Douglas Walk
2. Educate staff about sustainability message(s).
  - a. Champion: Bill Justice (with John Noel, Kevin Brandt, division chiefs, partner leadership)
  - b. Partners: all
  - c. Funding: \$ for development (staff time) and could be \$ to \$\$\$ for delivery, depending on media used
  - d. Opportunities: build and strengthen partnerships, community engagement, get feedback to evaluate effectiveness
  - e. Barriers: individual resistance to overall message and program, time commitment, superintendency uncertain
3. Develop strategies to deliver messages.
  - a. Champions: Bill Justice and John Noel
  - b. Partners: staff and selected partners
  - c. Funding: \$ to \$\$\$, depending on strategies – minimal funding for design
  - d. Opportunities: build/strengthen partnerships, grants and cooperative funding, conduct formative evaluation to evaluate effectiveness before full-scale implementation
  - e. Barriers: cost of implementation, superintendency uncertain

4. Revisit Long Range Interpretation Plan themes and modify to incorporate sustainability if needed.
  - a. Champion: Bill Justice
  - b. Partners: select partners, if needed
  - c. Funding: minimal
  - d. Opportunities: broaden themes, build sustainability into sub-themes, influence future interpretation programs,
  - e. Barriers: superintendency uncertain



### Mid-Term Goals

1. Implement delivery strategies.
2. Continue staff education.
  - a. Integrate into existing mechanisms
  - b. Examine additional possibilities
3. “Green” interpretive media.
4. Pursue grants and other funding for interpretive media and staff (including alternative transportation interpreter).
5. Include funds for interpretation and education in all grant proposals for sustainable projects.
6. Re-examine current interpretive and educational programs and messages to identify opportunities for incorporating sustainability messages.
7. Recruit new partners.
8. Develop and implement a Greening Award.
9. Use the existing contract for a video to develop and produce a sustainability video.
10. Complete the Long Range Interpretation Plan.
11. Complete individual service plans on sustainability programs.
12. Produce a “Greening of the C&O Canal National Historic Park” Report and distribute to NPS and public.
13. Host events to publicize pilot program successes.
14. Develop interpretive site plan for Lockhouse 8 in collaboration with the Potomac Conservancy.
15. Look at opportunities



to interpret agricultural operations (first, need to change the agricultural SUPs (?) to include more sustainable practices such as organic farming, no/lo till, low nitrogen fertilizer, controlled irrigation, etc.).

16. Explore willingness of concessioners to fund interpretive staff positions for their operations and pilot test.

## Closing



At the conclusion of the charrette, Kevin thanked the staff and partners who organized and participated in the charrette as well as Shawn and Julie for their support, and Gail and Joel for their work. He said that he was impressed by what had been accomplished. He noted that good ideas for the GMP were developed and he committed to focusing on what could be done to reach the 4 million people who visit the park. He concluded by saying that this is a good step in “getting the green back in the green and gray” – that this is “what we are all about.”

Several themes emerged during the discussions at the charrette:

1. Interpretation and education are crucial – C&O Canal NHP has more than 4 million visitor days each year and is able to reach Supreme Court Justices, Cabinet members, and members of Congress as well as the public.
2. Sustainability, historic preservation, and resource conservation are consistent and important park goals.
3. Partnerships, which have been key to the park’s programs, will be equally important in developing and implementing sustainability programs, projects, and education.