

# **C&O Canal National Historical Park**

**Federal Advisory Commission**

**Briefing Statements**

**Latest Update – April 17, 2006**

**Title: Planning, Environment, and Public Comment (PEPC)**

**Description & Status:** The National Park Service has instituted a service-wide internet-based computer program (PEPC) to better track all project reviews, in accordance with the National Environmental Policy Act (NEPA), the National Historical Preservation Act (Section 106), the Endangered Species Act, and other laws. The C&O Canal NHP has begun using PEPC for all proposed projects within the park. These include park generated projects and projects proposed by outside concerns.

PEPC also provides for project publication and review by the public. The C&O Canal NHP is posting in a formal manner, all projects to the PEPC website. Currently, projects that qualify for categorical exclusions to NEPA are not specifically open for public comment; however they are being posted to PEPC and the public is encouraged to contact the park with any questions or comments. All environmental assessments and environmental impact statements will be open for prescribed public review period. PEPC allows for the public to submit comments for NPS consideration.

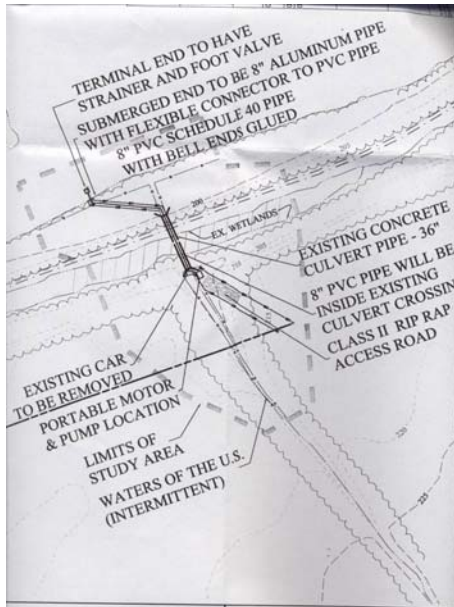
The C&O Canal NHP staff has been working throughout 2005 and 2006 to review and develop a protocol for implementation of the PEPC system within the compliance review process. The C&O Canal has had a long-standing compliance committee that has been responsible for the review of proposed projects within the park. The means for compliance review has evolved over the past twelve years and is now enhanced with the service wide computer program. Consultation with the National Capital Regional office (NCR), the Washington Support Office (WASO) and the National Park Service Director has been ongoing. The web address for PEPC is <http://parkplanning.nps.gov>. Viewers of this site can call up any park in the National Park Service.

**Title: Western Maryland Rail Trail Phase IV**

**Description & Status:** The Maryland Department of Natural Resources and the National Park Service are exploring the feasibility of expanding the Western Maryland Rail Trail west from Pearre Station to Little Orleans. Previously, the two agencies have worked together through a cooperative agreement for the construction and operation of the rail trail section that is located within C&O Canal NHP land.

On May 11, 2005, park staff opened the Indigo Tunnel for engineering inspections. Engineers for MDDNR, MDDNR staff and NPS staff walked through the tunnel. The tunnel, as evaluated by the engineers seems to be in sound condition with only a few areas of concern. With this information, MDDNR is pursuing funding to extend the rail trail. The Phase IV section would include the Indigo Tunnel. The next step in the process will be to conduct a public scoping meeting in 2006. The project will be entered into the PEPC system to assist in the project review development. An EA with required public involvement and review will be initiated when appropriate.

**Title: Tyler Abell Right-of-Way Request**



**Description & Status:** Mr. Tyler Abell of Montgomery County, MD has submitted an application for installation of an 8-inch pipe and diesel pump on park lands in an intermittent stream bed to facilitate withdrawing water from the Potomac River for agricultural purposes. The project would require the burying of the pipe in the bed of the stream. The pipe would cross beneath the canal prism and towpath via an existing culvert. An access ramp would be created to access the pump in a ravine. Mr. Abell has secured the required state and federal permits needed to withdraw water from the river.

Mr. Abell has contracted with McCarthy & Associated, Inc. to prepare an environmental assessment for the proposed project to NPS standards. A financial disclosure statement has been prepared and signed by Mr. Abell and the consultant as required by Directors Order 12.

Park staff has been in contact with Montgomery County, exploring further information regarding wells and potential water supply within the project area. An initial draft environmental assessment has been reviewed for content and written comments have been sent to the preparer, along with a copy of Director’s Order 12-NEPA guidelines. Upon revision, the project will be entered into the PEPC system and public review of the project will be solicited. Most recently park staff have recommended a site visit with county officials and the applicant.

**Title: Sempra Energy Resources/Catoctin Power LLC**

**Description & Status:** Sempra Energy Resources (SER) of San Diego, California, is proposing to locate a gas-fired electric generation facility in Frederick County, Maryland. This facility, if approved, is to be built on property owned by Eastalco, south of Frederick City. The project is known as Catoctin Power, LLC.

While SER is still pursuing treated effluent as their source of water for their plant operations, they are also evaluating a secondary source of water from the Potomac River as required by the state of Maryland. The river supply will involve the crossing of the C&O Canal NHP near Point of Rocks, Maryland. SER has identified that the Route 15 Bridge area is their primary location for a pump facility, supplying water from the Potomac River to their plant, with another location near Lock 28. SER had initially identified eight potential crossings. Most of these crossing were eliminated due to terrain, access issues, park resources, or logistics for site development. A public scoping meeting was conducted on November 3, 2005. The meeting was held at the community fire hall at Point of Rocks, Maryland. The proposed project was announced through a press release and was posted to PEPC. A 30-day public comment period was opened through December 5. The public was encouraged to provide initial comments and concerns regarding the proposed project. Public scoping feedback will enable the National Park Service and our consultants to develop an environmental document that will reflect the concerns of not only the

federal government but other jurisdictional agencies, park neighbors, and the general public. It is anticipated that an environmental assessment will be ready for public review in Spring 2006.

**Title: DCWASA Odor Control Project**



**Description & Status:** The DCWASA Odor Control Project involves the construction of four odor reduction buildings. Two of the buildings are located along the Clara Barton Parkway and will be in the view-shed of the C&O Canal. These sites are located at Little Falls Pump Station and near Interstate 495 Bridge over the Potomac River. The other two structures are located at Angler's Inn and Fletchers Cove along the C&O Canal. Both of these buildings will contain visitor restroom facilities as mitigation for inspectors from the air-filtering buildings.

DCWASA was asked for further design information regarding the Fletcher's Cove site by National Capital Planning Commission (NCPC) and the Commission of Fine Arts (CFA). Additionally, the design for the Angler's Inn site was slightly altered. DCWASA proposed to change the overhead and two service doors from the east side of the building to the west elevation. These changes were discussed with park staff. A finalized conceptual drawing will be forwarded to the Maryland Historical Trust for review. DCWASA is undertaking this project to reduce the perpetual odor problem throughout this area, caused by venting sewer gasses. During hot humid weather, the odor problem is a frequent complaint from visitors and park neighbors.

**Title: Interstate 81 Improvement Project**

**Description & Status: No change in project status.**

The Maryland State Highway Administration (MDSHA) has launched a study regarding improvements to the Interstate 81 (I-81) corridor in Maryland from the Pennsylvania border to West Virginia. Currently, there are dual bridges that carry the north-and south-bound lanes. Both bridges are two lanes in each direction. While there will be many components studied, the C&O Canal NHP will be affected at the I-81 crossing of the Potomac River. The project will widen the current four lanes to six lanes. Widening will be to the inside of the existing lanes.

I-81 crosses the park via a bridge widening to the inside of the current structures and additional pier construction necessary to accomplish the task. The project has abandoned proposals for toll booths on the highway. MDSHA staff have contacted the NPS for suggested mitigation measures to offset the new impacts to the park. Park staff listed several items within the project area for consideration. This included, but was not limited to, correction of water leak at Lock 44, stormwater drainage issues at the Cushwa Basin from Route 11, preservation of the historic lift bridge, and preservation of the stone bridge abutments at Falling Waters. This information was sent to the National Capital Regional Office for communications to MDSHA. Compliance with NEPA and Section 106 of National Historical Preservation Act will be accomplished by Federal Highways Administration.

**Title: WSSC Water Intake Improvements – Mile 17 of C&O Canal**



**Description & Status:** WSSC is currently undertaking a feasibility study to determine the best method to upgrade their water intake at their facility on River Road Montgomery County, MD. Their current intake is located along the river bank and is prone to large amounts of sediment and debris, most of which is generated by Watts Branch just upstream of the current intake. In February 2004, the Initiation Report was issued. This report outlined the various project goals and operational criteria needed for project development. WSSC is proposing to construct an in-river

submerged intake in a deeper river channel. Archeological investigations have been conducted within the project site. A draft environmental assessment has been reviewed by park staff. The project will use the PEPC website to provide the public an opportunity for comment on the project. Anticipated public review period is sometime in 2006.

**Title: Widewater Towpath Rehabilitation**



**Description & Status:** The contract was awarded in the fall of 2004. Work is nearly complete at this challenging site. The towpath resurfacing is also complete. Project is substantially complete and was intermittently opened to the public on April 7, 2006. A formal celebration of completion is planned for April 29, 2006 at 2:30 p.m.

## Title: Rehabilitate the Georgetown Visitor Center



This project rehabilitates the interior of the Georgetown Visitor Center and makes numerous exterior repairs. The design connects the ground and first floors of the visitor center with a new stair and chair lift making the first floor accessible. The ground floor will become the primary floor for canal boat ticket sales with its on-grade relationship to the towpath and adjacent canal boat. Additional amenities on the ground floor include one fully accessible unisex toilet, as well as a staff storage area with a mop sink and laundry area for cleaning period garments worn by

the staff. The first floor will be used for interpretative exhibits and a meeting room. The second floor will be upgraded with adequate office space, a shower and bathroom, separate women and men changing rooms. The rehabilitation will also replace the deteriorated HVAC system, correct non-compliant electrical and plumbing systems and provide a fire suppression sprinkler system. Construction began in November, 2005 and is scheduled to continue through summer 2006 with a July completion date. Visitor services have been relocated in a temporary facility behind the existing visitor's center until construction is completed.

## Title: Preservation of Level 3 Holding Basin and Lift Lock 4



**Description & Status:** NPS staff masons completed phase one of the holding basin wall and Lock 3 radius walls in the 2004/2005 winter season. This past winter, NPS masons again worked to repoint the remaining Level 3 walls and Lift Lock 4. This work has concluded in time for the boat to resume operation for the start of the 2006 interpretive boat season.

Work over the winter was extremely successful and the masonry portion was completed on time.

**Title: Repair & Rehabilitate Great Falls Visitor Center**



**Description & Status:**

The Environmental Assessment has completed its public review period and the Finding of No Significant Impacts (FONSI) has been issued.

Funding for this project is included in the FY06 appropriation. The project designs are nearing completion and will be ready for contracting this summer.

Project design and construction management is being undertaken between staff from Denver Service Center, National Capital Region, and C&O Canal NHP. Several on-site meetings have been held and additional teleconference meetings have been conducted.

Project planning for the Great Falls Tavern project is being coordinated with the Great Falls Entrance Road/Parking Lot project. It is critical that both projects are coordinated so that site grading, walkways, and comfort station relocation will match within both projects.

The current schedule has construction starting in July 2006.

**Title: Great Falls Entrance Road and Parking Areas.**



**Description & Status.** The Environmental Assessment has completed its Public Review period. A Finding of No Significant Impacts (FONSI) is complete.

The NPS has approached the Washington Aqueduct regarding feasibility and cost share for burying the overhead utility lines that connect the buildings at Great Falls with Falls Road/MacArthur Boulevard. If this idea is acceptable, the NPS will pursue the burying of the lines in conjunction with the roadway improvement work. Project planning work is being undertaken between staff from Denver Service Center, National Capital Region, Federal Highway Administration, and

C&O Canal NHP. Several on-site meetings have been held and additional teleconference meetings have been conducted. Project planning for the Great Falls Entrance Road and Parking Area project is being coordinated with the Great Tavern project. It is critical that both projects are communicated and coordinated so that site grading, walkways, and comfort station relocation will match within both projects. The design is currently at 70% development. Upon completion of the utility location verifications the design will proceed to 100 percent construction documents. A late fall/early winter 2006 construction date is anticipated.

## **Title: Great Falls Area Sewer Line Improvements**

### **Description & Status.**

This project will install approximately 1700 linear feet of new sewer line to repair existing root damaged terra-cotta lines and extend them to the maintenance facility. The maintenance is served by an antiquated septic absorption system. The goal of this work is to update the maintenance area waste lines to contemporary standards and to repair an existing deteriorated circa 1950's sewer line before the parking areas are repaired and repaved.

The project has been awarded and construction will begin in May, 2006. A 45 day construction period is anticipated.

## **Title: Georgetown Pedestrian Bridges**



**Description and Status:** The NPS has ownership of three pedestrian bridges that span the canal in Georgetown. These bridges are the Potomac Street Bridge, the 33<sup>rd</sup> Street Bridge, and the 34<sup>th</sup> Street Bridge, also known as the Mule Bridge. These bridges are located between the Wisconsin Avenue Bridge and the Key Bridge.

In conjunction with the District of Columbia Department of Transportation (DDOT) and Federal Highway Administration, repair work is being undertaken. Currently, only the Potomac and 34<sup>th</sup> Street bridges are open to the public. The 33<sup>rd</sup> Street Bridge was closed due to safety concerns. In correspondence with the District of Columbia, dating back to the 1940s, the District had agreed to maintain all the bridges. Cyclic maintenance has not been undertaken and now total replacement of the bridge decks for both the 33<sup>rd</sup> and Potomac Street bridges must be undertaken. The 34<sup>th</sup> Street Bridge received preservation treatment in the late 1980s by the NPS.

The contract has been awarded for this project. Work is in progress on the 33<sup>rd</sup> Street bridge. DDOT reports that once the weather breaks work will begin in earnest on the Potomac Street Bridge and the 34<sup>th</sup> Street Bridge.

**Title: Berm Road, Hancock, Maryland**



**Description & Status:** This project is located at the midpoint of a one-half mile rewatered section of the historic C&O Canal, just one block from Main Street, Hancock, Maryland. This portion of the canal was rewatered in 1994 and serves as a vital interpretive tool for the park, as well as a destination point for tourists traveling the I-68 / I-70 corridor. The berm of the canal serves as a local secondary roadway and carries school bus and other local traffic. The berm has failed due to saturation of the

soil. Geotechnical findings indicate water is leaking from the canal and saturating the underlying strata causing the berm to collapse. The collapsed berm has forced the National Park Service and the Washington County Highway Department to close the road to all traffic. Geotechnical borings were performed near the end of January 2004. During the fall of 2004, the site conditions were exacerbated by the multiple tropical storms that passed through the region. This resulted in an increase in scope of work necessitating the project be executed by contract rather than with NPS staff. NEPA and Section 106 of NHPA compliance is complete. Project design has been completed in-house by the park civil engineer and staff.

A pre-bid meeting is scheduled for April, 2006. Construction is expected to begin late May, 2006.

**Title: Save the Lockhouses**



**Description & Status:** In 2004, Chesapeake and Ohio Canal National Historical Park received a grant for lockhouse stabilization in the amount of \$150,000 through the Federal Save America's Treasures (SAT) grant program. SAT grants are administered by the National Park Service in partnership with the Endowment for the Arts, the National Endowment for the Humanities, the Institute of Museum and Library Services, and the President's Committee on the Arts and Humanities. Of the 452 applications that were received nationwide, 63 awards were



made – three of those to NPS sites. The Contract was awarded in 2005 and construction has been underway to stabilize numerous lockhouses along the canal. Completion is scheduled for spring 2006. The contractor will provide a schedule and final proposals for modifications at Lockhouse 22 and 46. Remaining Lockhouses 72, 22, 27 and 28 (termite Treatment Only). Completion should be this summer.

### **Title: Rehabilitate the Bollman Truss Bridge**



**Description & Status:** This project is rehabilitating the Bollman Bridge that crosses the canal at mile 99.65 in Williamsport. The extant bridge was constructed in 1879. The bridge is a combination of a wooden trestle bridge and an overhead steel truss bridge. Both bridge sections have wooden decks. The bridge is 105-feet long and 13.5-feet wide. The bridge carries daily traffic over the canal to the Allegheny Power plant and to the river access owned by the town of Williamsport. On weekends, the bridge carries traffic to sports fields located in the

town-owned River Bottom Park. The bridge was last inspected in October 2001 by the U.S. Department of Transportation, Federal Highway Administration, Federal Lands Highway Bridge Inspection and Management Program. The inspection team identified the following problems: cracked gusset plates for the lateral bracing, a deficient railing system, and severe rusting of the steel bearing devices. Scope of work for the rehabilitation for the Bollman Bridge includes the following: 1) structural repair and limited rebuilding, 2) replacement of wooden bridge deck, 3) repair/rebuilding of wooden bridge trestle, 4) preparation and repainting of steel superstructure, 5) repair bridge abutments, 6) replacement of pedestrian walkway with new code compliant walkway. The project is being executed by Eastern Federal Lands Highway Division. Construction and placement of a temporary bridge at Canal Street began in the fall of 2005. The Project should be substantially complete in May 2006.

### **Title: Williamsport Lift Bridge Rehabilitation**



**Description & Status:** The town of Williamsport and Congressman Roscoe Bartlett with the (MD-6<sup>th</sup>) has expressed interest in restoring the Williamsport Lift Bridge to a fully operational condition.

An Inspection and Feasibility Study was prepared in 1997 and recently updated. Park staff recently met with town officials and others to explain the NPS fund raising process as a means to accomplish this restoration work.

## Title: Cumberland Re-Watering Project



**Description & Status:** The Cumberland Re-watering project is nearing completion. This is a multi-phase project that will culminate 1.1 miles of re-watered canal prism. This phase consists of the pumping station, the turning basin and ¼ mile of canal prism. A celebration of the completion of this phase of work is scheduled for May 13, 2006.

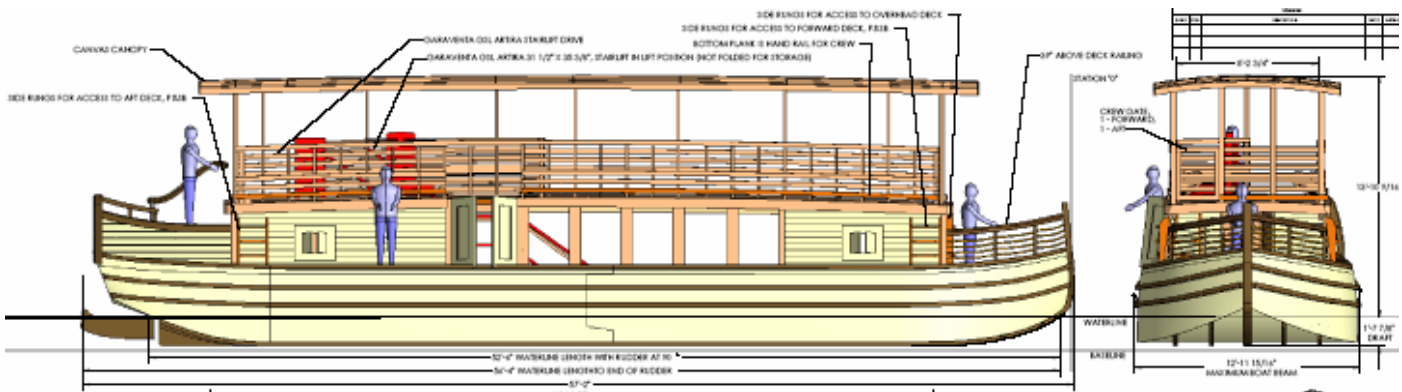
## Title: Burnside Property

**Description and Status:** On April 14<sup>th</sup>, Environmental Management Services completed cleaning and sanitization to the dwelling, outbuildings and grounds. Maintenance staff will replace/repair broken plumbing and make structure repairs.

## Title: Great Falls Canal Boat

**Description and status:** The *Canal Clipper* ceased to operate at the beginning of the 2003 season. Shortly after this, efforts began to raise funds for a new boat. These efforts have been pulled together by the Friends of the Historic Great Falls Tavern. They have recently received several significant donations that have helped them achieve the goal of raising sufficient funds to build the boat.

The Friends have signed a contract with Scarano Boatbuilding of Albany, New York to design and fabricate the new boat. The boat will have two decks, and will hold approximately 76 people. In addition, the boat will be fully accessible to people with disabilities. Mobility impaired people will be able to travel between decks through the use of a stair lift. Hearing impaired people who use hearing aids will be able to hear interpretive programs through an induction loop system that will pick up the signal from the public address system. The “head,” or restroom, will also be designed for use by mobility impaired individuals.



**Title: Cumberland Visitor Center Staffing**

**Description and status:** Since 2002 when staffing was reduced to a single park ranger, maintaining the seven day schedule of operation in Cumberland has relied on volunteers and the ability of the District Supervisor to commute from Williamsport to Cumberland. Gloria Updyke's transfer to Lowell NHP made this impossible, and the park announced that it would operate the Cumberland Visitor Center on a five day schedule at the end of the 2004 summer season.

Allegany County Tourism has agreed to staff the visitor center seven days a week. The park is working with them and Eastern National to create more usable brochure and sales space, replacing the existing shelving and relocating Eastern's sales area to the front of the lobby. Eastern National has funded these changes in FY 2006. Park staff are working with Allegany County Tourism and with the Canal Place Authority to produce a Cooperative Agreement.

This will enable the Cumberland Ranger to be more involved in formal and informal interpretive programs, and more involved in managing the interpretive operation. It will improve the security of the bookstore operation, and provide Allegany County Tourism a more highly visible location to contact the visiting public.

**Title: Eastern National**

**Description and Status:** Eastern National is now operating the bookstores in all five park visitor centers. Eastern has several grant programs they use for store improvements, publications, and research, as well as a park Interpretation Donation Account. In 2006 the park received \$2,635 for improvements to the stores at Williamsport and Cumberland, this in addition to the \$1,800 improvement grant for the store at Georgetown received in 2005. A 2005 grant of \$500 for pre-publication costs made possible the paperback reprint of Walter Sanderlin's "The Great National Project." This year the park received 4,293.36 from Eastern in its Interpretive Donation Account. This funding is used to support the interpretive and educational operations of the park.

Eastern National is the largest cooperating association serving national park sites. They operate retail outlets in 130 national park areas and other public trusts in 30 states and territories from Maine to the Caribbean and from the east coast to the Great Lakes. More information on Eastern National is available at their web site, [www.easternnational.org](http://www.easternnational.org).

**Title: Georgetown Visitor Center Exhibits**

**Description & Status:** The park has contracted with EDX of Seattle, Washington to design exhibits for the exhibit spaces for the newly refurbished Georgetown Visitor Center. Park staff have worked out themes and worked with EDX on several design elements for the exhibits. This exhibit design is a challenge due to the limited space and the complexity of the story being told. EDX has completed the Schematic Design and is working on the Concept Plan at this time. They are also working to facilitate an evaluation of parts of the Concept Plan that will help improve the interpretive quality of the exhibits.



**Title: Great Falls Tavern Exhibits**

**Description & Status:** The park has contracted with EDX of Seattle, Washington to design exhibits for the Great Falls Tavern. The park held a charrette with representatives of the Friends of Historic Great Falls Tavern, The Nature Conservancy, The C&O Canal Association, and the Potomac Conservancy, as well as park staff to determine the exhibit themes and to examine potential layouts for addressing these themes. This design is in the Schematic Design phase now.



Charles Edquist records input while Mary Travaglini and Warren Kasper look on at the charrette

**Title: Healthy Parks, Healthy Living**

**Description & Status:** The Park is awaiting approval for funding for its Healthy Parks, Healthy Living proposal. This project is designed to help people who live or work close to the eastern part of the park change their lifestyles becoming more physically active.

Participants would be encouraged to walk 185 miles (about 370,000 steps) on the towpath in 185 days, making the goal both attractive and attainable. This would also provide enough time to establish personal baselines and set progressive targets to attain, sustain, and build upon. As participants reach designated “mileposts of accomplishments” along the way they will be rewarded with attainment prizes provided by sponsors to recognize their success.

Participants will record their steps into an online log which will serve as both a tracking device and feedback tool. The web based program will record their progress and provide motivation and positive reinforcement by allowing participants to keep track of their health, fitness, and weight loss goals. The journal will tell them the date of their last visit, the total number of visits, the average number of days a week they exercise, an estimate of the total minutes spent on the towpath, and the approximate number of calories burned during the physical intervention.

The park will develop a series of downloadable interpretive media files for iPods and other MP3 players that could be used by participants to learn about the park’s nature and history as they walk along the trail. A typical ‘downloadable’ would include first person oral interviews with authentic early 20<sup>th</sup> century canallers describing their way of life on the historic waterway. Their recollections will be interspersed with excerpts of canal books and songs providing a well balanced overview of the park’s resources and the opportunity for visitors to connect with the park’s resources through a variety of senses.

The NPS implementation team would work to identify and enlist a variety of partners and dignitaries willing to participate and/or raise awareness of the program. One example would be various Georgetown business and citizens associations who have offered to inform their members of the program via both direct e-mail notices and newsletters.

Registration would be required for participants to get the benefits and recognition associated with the program. Registration would allow us to keep track of the number of people involved in the program. The park would match participants with exercise partners if they wished. Further measurement tools would be a pre-activity registration questionnaire developed to establish a baseline and a post-activity survey to determine whether park and individual goals and objectives were met. Registration would include membership in an on-line fitness journal club which provides technical information as well as encouragement through a variety of means.

**Title: Interpretation and Resource Management Reorganization**

**Description & Status:** The park is working to reduce overhead and field the most efficient organization it can. To accomplish this, we are working to combine the Divisions of Resources Management and Interpretation. These two divisions will be combined under a single division chief, saving the park over \$100,000.00 in personnel costs a year. In addition, the recent departure of Carla Beasley to the Chief of Interpretation position at Dinosaur National Monument has given the park the opportunity to move from three interpretive districts to two.

The Palisades District will run from Georgetown to the Monocacy Aqueduct, combining the previous Georgetown and Great Falls Districts. The Western Maryland District will be unchanged, extending from the Monocacy River to Cumberland. Kathy Kupper is currently acting as the Palisades District Interpretive Ranger, and Rod Sauter is now the Western Maryland District Interpretive Ranger.

**Title: New Canal Boat for Great Falls (Fundraising):**

**Description & Status:** In 2005, the park entered into a fundraising agreement recognizing the Friends of Historic Great Falls Tavern (Friends) as the official fundraising organization for a new canal boat in Great Falls. Park staff is providing support to their efforts by creating safe access to the *Canal Clipper*, helping design publications, creating press releases, assisting with the boat design and supporting the fundraising effort in as much as our resources and regulations allow. The total cost of the boat is \$533,000, of which \$448,000 has already been raised. With the exception of a \$22,500 Challenge Cost Share Grant from the NPS, the entire project is to be 100% funded through the fundraising efforts of the Friends of Historic Great Falls Tavern.

**Title: Volunteer Update**

**Description & Status:** In 2006, volunteers continued to play a key role in park. Volunteers have participated in 36 volunteer service projects so far, with 20 more volunteer projects already scheduled for the rest of the fiscal year. The number of volunteers that have participated in service projects to this date is 650, with 1,350 hours donated to the park. The C&O Canal Association, a citizens' group that actively supports the National Park Service mission, stepped up its volunteer program. Association members worked with the park's VIP coordinator to identify, plan and execute and number of maintenance projects that enhanced the interpretive and visual quality of the park. Association members have scheduled one project per month throughout the year. The park's Billy Goat Steward Program is gearing up to start in time for the busy hiking season. The park has recruited 12 more interested members that will attend training in April. The park continues to benefit from over 250 volunteers who donate their time on a consistent, regular basis serving in the visitor center, the bike patrol, and at headquarters.

**Title: Public Land Corps Funding**

**Description & Status:** The Park was awarded \$120,000 in Public Land Corps Funding for FY06. This funding will primarily be used to hire youth work crews such as the Student Conservation Association High School Urban Crews and the Citizens Conservation Corps of West Virginia. These crews will augment the maintenance staff by removing trees and vegetation from historical structures, rehabilitating eroded trails, and performing various visual quality projects like painting, campground maintenance, and trash pickup. The funding will also support a Student Conservation Association intern who will assist with the park VIP program.

**Title: Community Commons Management of Chick Farm**

**Description & Status:** The Park continues to work with Community Commons (CC) to determine the feasibility of CC remaining an active partner with the NPS at the Chick Farm. The park's and CC's objective is to open up the property for educational and interpretive programs. The initial one-year agreement to develop a feasibility study has been extended through August 2006. The agreement stipulates that a site/concept plan for the use of the farm will be jointly designed with the park. The feasibility study includes the development of a site concept plan, and

the completion of both an archeological investigation and cultural landscape treatment plan. A draft site concept plan has been completed and CC is working with a consultant to refine the concept plan. Once the site concept plan is approved the archeological investigation and cultural landscape treatment plan will be completed. The Chick Farm is located on the Frederick County side of the confluence of the Monocacy and Potomac rivers. It is a 138 acre parcel that is currently used for residential and agricultural use. CC is a Frederick County based 501©(3) non-profit membership organization dedicated to building a sustainable future for the Frederick region's social and natural resources through education, outreach, and partnership building.

**Title: Catoctin Aqueduct Feasibility Report and Fundraising**

**Description & Status:** The Catoctin Aqueduct spans Catoctin Creek and is located in Frederick County between Point of Rocks and Brunswick. It is one of 11 stone aqueducts on the canal. It's also the only aqueduct that has no current plan to rebuild it. In October 1973, after fifty years of repeated ravishment by storms and floods, the 139 year-old aqueduct collapsed into Catoctin Creek. Since 1978, a WWII-era steel frame Army Bailey Bridge has temporarily spanned Catoctin Creek to convey hiker/biker traffic over the creek. With park approval, the C&O Canal Fund of Frederick County has established a fund at the Community Foundation of Frederick County MD, Inc., to receive donations to fund a Feasibility Report on the preservation and restoration of the Catoctin Aqueduct. Funds have been received to cover the entire cost of the report. McMullan & Associates, Inc. Consulting Structural Engineers are expected to complete the report by April 30, 2006. On March 15, 2006, the project received concept approval from the NPS Development Advisory Board. A Memo of Intent between the Catoctin Aqueduct Restoration Fund, Inc. and the C&O Canal NHP received approval from the Department of Interior Solicitor's office and has been forwarded to the parties to the agreement for signature. The Memo of Intent confirms that the project is a regional priority and recognizes the Catoctin Aqueduct Restoration Fund, Inc. as the official fundraising organization for the restoration of the Catoctin Aqueduct

**Title: The Nature Conservancy Weed Warrior Program:**

**Description & Status:** Within the Potomac Gorge Site Conservation Plan are strategies addressing mitigation of threats to the natural resources of the Potomac Gorge. In partnership with the National Park Service, The Nature Conservancy (TNC) developed a "Weed Warrior" volunteer program to support efforts of the NPS Exotic Plant Management Team and park Natural Resources Management staff in controlling invasive plant species which threaten the unusual and rare plant communities of the Gorge. The all-volunteer participants, Weed Warriors, receive training by TNC in detection of (plant identification) and appropriate plant removal techniques in priority control areas. Such areas are those which are near rare plant communities which are vulnerable to plant invasion. There are currently about 10 Weed Warrior Volunteers who work in the Potomac Gorge area of the park. Many of the volunteers are park neighbors or live in local communities and have chosen areas which are usually under an acre in size. Due to the success of the program and the response of the public, the park will be seeking creative ways of ensuring continuation of the program after funding for the program expires in 2006. <http://nature.org/wherewework/northamerica/states/maryland/volunteer/art501.html>

**Title: White-Tailed Deer Issued in NPS North East Unit:**

**Description & Status:** NPS Biological Resources Management Division (BRD) in partnership with Cornell University's Human Dimensions Research Unit (HDRU) is collaborating on a study to determine how public participation and civic engagement methods fit within NPS wildlife management strategies. The NPS seeks to better understand and predict social responses to management actions. This study will focus on white-tailed deer issues of the North East and National Capital Region parks. The NPS would like to improve the ability to anticipate and respond to human dimensions, or human behavior, associated with resource management and to apply concepts and empirical findings to real-world, contemporary problems of management.

The C&O Canal NHP will participate in Phase IIIB, a mail-back survey administered to local residents living in communities near the NPS units studied in Phase IIIA, including the Potomac Gorge area the park. The survey will be designed to describe and understand the differences in values and assumptions for which a park is managed vs. those of stakeholders (with respect to management related to deer issues in NPS units). Based on insights from Phase I and II research, results of Phases IIIA and IIIB will be analyzed to suggest ways NPS staff might improve dialogue about deer issues with local community members. The survey will be administered in winter 2006.

White-tailed deer have generated a number of ongoing public issues whose biological dimensions have been studied extensively in NPS units throughout the northeastern U.S. However, the NPS would like to improve its ability to anticipate and respond to human dimensions of biological resource management issues, such as those associated with deer that originate in local communities. As part of a larger dissertation project, this study will utilize qualitative situation assessments and mail-back surveys of local community members to: (1) describe the differences in values for which a park is managed and those of stakeholders with respect to deer issues, and (2) suggest how NPS staff might utilize this understanding to design successful interactions with the public. The study will develop a framework and methodology to help NPS managers meet new policy directives related to public participation and will improve NPS ability to respond to other issues that, like deer, involve local communities in their emergence and evolution. <http://www.dnr.cornell.edu/research/deerinparks/index.asp>

**Title: Implementation of the Potomac Gorge Site Conservation Plan:**

**Description & Status:** The Potomac Gorge is one of the most biologically significant natural areas in the eastern United States and the entire National Park system, supporting more than 400 occurrences of 200 rare species and communities. Located in a densely populated urban landscape, the Potomac Gorge is also highly regarded for its exceptional recreational and scenic features. The Gorge encompasses public and private lands, including county lands, C&O Canal NHP and George Washington Memorial Parkway. In collaboration, the National Park Service and The Nature Conservancy produced and released in 2001, the *Potomac Gorge Site Conservation Plan* for preservation of the area's natural resources. The resulting Plan identified seven focal natural resources, six critical threats to their survival, and nearly 30 strategies to abate threats and restore ecological integrity. Implementation of the plan began in 2003 when the Nature Conservancy hired the Potomac Gorge Implementation Coordinator Stephanie Flack.



In year 2 of 3, many projects are underway and a number of the strategies are being carried out. The new Potomac Gorge Habitat Restoration Manager was hired and began implementing a work plan with NPS staff, volunteers, and partners. The FY05 December quarterly report reflects progress on three NPS-TNC Cooperative Conservation Initiative (CCI) awards:

- “Reducing Non-native Species Impacts on Potomac Gorge Rare Communities”: TNC provided volunteers to support NPS staff with invasive species control and rare groundwater invertebrate habitat restoration workdays. Exotic plant removal workdays held mobilized nearly 227 volunteer hours with the Potomac Gorge Weed Watcher/ Weed Warrior Program.
- “Restoring Globally Rare Groundwater Invertebrate Habitats”: The Habitat Restoration Manager began work to protect groundwater seeps and springs through project scoping site visits in Maryland and Virginia with Heritage and academic experts. Such projects include trail relocation.
- “Potomac Gorge Recreational Use Atlas”: To produce the new Potomac Gorge brochure, the Potomac Gorge Project Director began working with a contractor on content and design during this quarter. 100,000 copies were printed and distributed to partners in the Gorge.
- The Good Neighbor Handbook: A Guide for River-Friendly Living is available on TNC’s Website at <http://nature.org/goodneighbor>. The handbook is a means to distribute to the public best management practices for ecological protection which can be implement at home.
- A deer impacts study has begun in the Gold Mine Tract of the park (with companion study at GWMP at Great Falls Park, VA). The Smithsonian will study the invasive (non-native) plants to determine if deer play a part in the spread of these plants, and thus the degradation of native plant communities and habitat.
- A climbing study funded by GWMP will study the native and rare plant communities located in park climbing areas such, as Carderock, in order to document the communities, assess habitats impacted through climbing activities, assess climber impacts to rare plant communities and to develop and test protocols for assessing climbing impacts to cliff plant communities.

**Title: Integrated Pest Management:**

**Description & Status:** Non-indigenous plants and animals are the second greatest threat to native species in the National Park Service system, after habitat loss. The Exotic Plant Management Team (EPMT) program was developed to manage invasive plants on park lands. 17 Exotic Plant Management Teams (EPMT's) were established throughout the country. The teams were modeled after the coordinated rapid response approach used in wild land fire fighting. The success of the EPMT derives from its ability to adapt to local conditions and needs, using weed science expertise and partnerships. The National Capital Region has a team which works in all the NCR parks, including the C&O Canal. Using a slew of strategies, tools and techniques, the team has worked in specific areas of the park for over three years to remove and control a variety of exotic invasive plants including Japanese honey suckle, Japanese stiltgrass, Japanese Barberry, English Ivy, Mile-a-Minute, Tree of Heaven and Wisteria. To learn more visit: <http://www.nature.nps.gov/biology/invasivespecies/index.htm>

**Title: Urban Ecology Research Learning Alliance:**

**Description & Status:** The National Park Service (NPS) established Research Learning Centers through the Natural Resource Challenge. The Urban Ecology Research Learning Alliance

(UERLA) at the Center for Urban Ecology (CUE) facilitates research in all parks within the National Capital Region (NCR). UERLA's goal is to increase research on the natural and cultural resources in the NCR and to communicate new knowledge about NCR parks. As the primary outreach of NCR's Natural Resource Challenge, UERLA communicates about scientific research and Inventory and Monitoring (I&M) information to parks' staff and the public. UERLA's projects provide opportunities for education and interpretation of the region's natural resources. UERLA's interdisciplinary research projects have developed through partnerships with various researchers, agencies and institutions, as well as the Chesapeake Watershed Cooperative Ecosystem Studies Unit. Visit the website to learn more about the Urban Ecology Research Learning Alliance: <http://www.nps.gov/cue/programs/uerla/uerla.htm>

**Title: Social Science-Study of Trails:**

**Description & Status:** More than 4 million people live within the highly developed Washington metro region that directly borders the Potomac Gorge, which includes portions of C&O Canal NHP and the George Washington Memorial Parkway. Both parks receive intensive visitation (nearly two million visitors in 2000) and have similar resource protection problems with regard to visitors on foot, e.g., proliferation of visitor-created trails, off-trail trampling disturbance, trampling of vegetation, threats to rare species, and spread of invasive, non-native vegetation. The resource impacts were cited in several National Capital Region forums as a significant and worsening management problem. The issue was identified as a significant stressor for the Region through an Inventory and Monitoring Program scoping process with the region's natural resource managers in 2002. The issue is particularly acute at the Potomac Gorge due to its heavy visitation, extensive off-trail activity, and rare and sensitive plants and communities.

The NPS and The Nature Conservancy (TNC) (which co-owns and manages Bear Island) completed a collaborative Potomac Gorge Site Conservation Plan (Allen and Flack 2001). The planning team defined the focal natural resources in the Gorge, assessed their ecological health, determined the most critical threats to their survival, and identified conservation strategies. Incompatible recreational use and park infrastructure development were flagged as highly ranked threats to the Gorge's extraordinary biological resources, second only to the effects of surrounding land use and development.

A study was proposed to evaluate and mitigate impacts to vegetation and soils associated with park visitation. Research work will include a GPS inventory of existing visitor-created trails and disturbance sites, development and application of monitoring procedures to assess and characterize the nature and severity of visitor impacts, and the experimental application and evaluation of educational and site management actions to reduce off-trail trampling damage. The proposed research is unique in testing these questions and application in a frontcountry setting. Existing research of this type has almost entirely been applied to backcountry and wilderness settings. Social science research indicates that visitors to frontcountry (road-accessible) settings often prefer trail systems with minimal site development and surfacing. Intensive trail management can alter the nature of visitor experiences (e.g., asphalt surfacing or intensive use of fencing, trail borders or signs). Nevertheless, trail management actions applied to backcountry and wilderness settings may be ineffective or inappropriate for frontcountry settings. The results of this research are expected to shed additional light and provide further insights into the

management of frontcountry trail systems and to yield important implications and guidance for other frontcountry park settings within the region and elsewhere.

NPS NRPP has funded \$190K for the study to be carried out by Jeff Marion starting in 2006 through Fiscal Year 2009.

**Title: Morel Study: Sustaining Wild Mushrooms in C&O Canal NHP**

**Description & Status:** Morel harvesting has been a tradition of local residents since before C&O Canal NHP was established. C&O Canal NHP allows the collection of mushrooms for personal consumption. Recently harvesters have reported fewer morels available, which is one reason why researchers will be examining morel harvesting in C&O Canal NHP and Catoctin Mountain Park this season. Whether this is due to an environmental change, human harvesting or a high deer population is not known. “Morel harvesting has been important to the communities surrounding these parks for generations. It is also a prized activity for mushroom enthusiasts throughout the region.” said Dr. Marla Emery, of the USDA Forest Service’s Northeastern Research Station, who will be contributing to the research. “We hope to gain a better understanding of harvesters’ experiences and to help ensure that morels will be available for many more generations to come.”

Through the course of the 3-year social science research project, (funded by NPS), study methods are expected to include oral histories, interviews, and surveys. The study, started this year, will be conducted by researchers from the USDA Forest Service and Rutgers University and is part of an innovative NPS response to reports of declining morel populations that has both biophysical and social components. The goals of the NPS approach are to 1) determine if morel populations are declining, 2) document harvester experiences, practices and ecological knowledge, and 3) if necessary, develop a sustainable management plan for morels. The input of local residents and regional mushroom enthusiasts is extremely valuable to this study.

**Title: Research Permits and Reporting System:**

**Description & Status:** Park managers increasingly recognize that timely and reliable scientific information is essential for sound decisions and interpretive programming. NPS welcomes proposals for scientific studies designed to increase understanding of the human and ecological processes and resources in parks and proposals that seek to use the unique values of parks to develop scientific understanding for public benefit. A Scientific Research and Collecting Permit is required for most scientific activities pertaining to natural resources or social science studies in National Park System areas that involve fieldwork, specimen collection, and/or have the potential to disturb resources or visitors. When permits are required for scientific activities pertaining solely to cultural resources, including archeology, ethnography, history, cultural museum objects, cultural landscapes, and historic and prehistoric structures, other permit procedures apply.

The C&O Canal NHP has active ongoing science and research in a variety of disciplines. Currently there are 20 active research and collecting permits.

**Title: Geologist in Park (GIP)**

**Description & Status:** With assistance from the Urban Ecology Research Alliance, the park applied for and received a grant for a Geologist in Park GIP volunteer this summer. A Geologist was hired to work with the Interpretive Division to synthesize geology information in the form of reports and documents to create the following products: 1) a publication for the general public that summarizes the geology of CHOH, which will serve as a basic reference on the geologic resources of the park, 2) a synthesis of how building of the canal was tied to the geologic features of the site and collaborate with the interpretation team to incorporate the geologic context into the interpretive story of the building of the canal, 3) interpretive signs and various publications highlighting geologic features of previously identified sites. If time allows, the GIP will collaborate with the interpretation team at CHOH by giving presentations to large and small groups on the geology of the park.

**Title: Dams 4 & 5 Eelways:**

**Description & Status:** The USFWS National Fish Passage Program goal is to work with partners in restoring historical fish migration routes in American rivers. The USFWS and conservancy organizations have identified the Potomac River (and the Chesapeake Bay watershed) as critical habitat for eels and other fish. There are a number of dams within the Potomac River watershed which have been outfitted with fish passages (Little Falls Dam) and eelways (Millville Dam on the Shenandoah River). Dams 4 and 5, built by the Chesapeake and Ohio Canal Company in the 1830s, provided water for canal operations. The dams are currently in operation and produce hydroelectric power. However, dams such as these have been responsible for a reduction in eel populations throughout the Potomac River watershed by inhibiting migration of eels from the tidewater areas upstream. American Eels are currently under review for listing on the Federally Endangered Species list by USFWS. The Federal Energy Regulatory Commission (FERC) re-licensing of Dams 4 & 5 provided an opportunity to improve fish passage on the Potomac River. Through the re-licensing process, Allegany Power agreed to provide \$150,000 to the Government for construction of an upstream eelway, one per dam. The park in cooperation with the USFWS, Allegany Power, West Virginia and Maryland state agencies are coordinating the environmental compliance process, design, building and installation of eelways for the dams, a process which is expected to last about 4 years. The park's position is that NPS needs a general agreement for this project which outlines a scope of work, and is working with USFWS to create it. There is currently no Historic Structures Report for Dam #5, and the park believes one needs to be produced before starting design for the eelway for this historic structure. You may learn more about the National Fish Passage Program at <http://fisheries.fws.gov/FWSMA/fishpassage/>

**Title: Telecommunications-Protection of Park Viewshed and Park Resources:**

**Description & Background:** When the Federal Telecommunications Act of 1996 was passed the telecommunications industry was given an opportunity to seek permits to establish facilities in federal lands for the purpose of providing telecommunications (i.e. cellular telephone) service for paying customers. RM 52 Special Park Uses, Right-of-Way, Wireless Telecommunication Facilities, App 5, Exhibit 6 gives guidance to parks for such applications. Under the legal requirements of the Act, federal managers are required to consider allowing the placement of a facility on public lands such as national parks. The evaluation of such requests must occur within the context and guidance of other laws and policies and missions guiding that unit. The

Act and Director's Order 53A also require that managers consider the possible advantages of improved communications, particularly in terms of reporting and responding to emergencies.

To date, the C&O Canal NHP has not had an official permit request from the industry seeking establishment of such a facility within the park boundary. However, the park, to date, has participated in no less than 20 proposals adjacent to boundary on neighboring properties. These sites are located from Georgetown to Hancock, Maryland. Currently the park is engaged in the review process of a proposed tower near Anglers Inn on the north side of MacArthur Boulevard.

The park works closely with the Maryland State Historic Preservation Office compliance officers to coordinate reviews of permit applications submitted to the state and to the FCC. The process requires NEPA and NHPA compliance which is administered by the state. The park, through the state, has the opportunity to determine impacts to park resources, typically view sheds, and respond accordingly. The park participates in balloon tests to monitor for potential view shed impacts in particular to special cultural settings and significant natural vistas and addresses concerns for protection of park view sheds, which arise from visual inspections. Because the park is on the National Register and has contributing elements, the MD SHPO has been diligent in notification of applications and has responded generally in support of park recommendations to permit applicants.

The telecommunication industry is becoming more knowledgeable and sensitive to viewshed concerns and has devised a variety of methods for disguising facilities. The park has worked as closely as possible in order to minimize visual and resource impacts to the park with all 20 telecommunications facilities.

**NPS Position:** RM 52 Special Park Uses, Right-of-Way, Wireless Telecommunication Facilities, App 5, Exhibit 6 gives guidance to parks for telecommunication applications.