

Upper Delaware Scenic and Recreational River FY-06 State of the Park Report

Each year we report regarding our issues and challenges. In 2004 and 2005, we faced down two floods the likes of which haven't been seen here in over 50 years. This year, however, our challenges and issues rose to new heights. We experienced devastating record flooding, a potentially overwhelming resource threat and urgent development pressure, while continuing to work with our partners to manage our resource.

Flood(s)

National Weather Service data indicate that *six to over 15 inches of rain* fell in the upper Delaware River watershed between June 24-26, 2006, saturating the ground and producing bank full and minor flooding conditions by early Tuesday, June 27. On June 27 and early June 28, additional two to over six inches of rain fell in the upper Delaware basin. The high rate of runoff, combined with the already bank full conditions, produced record flooding. The flood crests on the main stem Delaware River occurred on June 28 and 29.

This flood came on the heels of two other near-record floods within the preceding 22 months; Ivan on September 18, 2004 and the 'April Fools' flood in 2005. Damage suffered by those two floods was exacerbated by the record June 2006 event.

Virtually all UPDE staff responded to the incident, which extended through the July 4th weekend. Several communities were flooded, shutting down roads and curtailing both emergency and business services. The Governors of both New York and Pennsylvania declared a state of emergency.

After seeing to the safety of river users by recommending they not use the river and closing Roebling Bridge to assure the safety of motorists and visitors, staff began the recovery process.

Three of four NPS-owned office sites (two of them historic structures) were inundated. Damage to all three included furnace damage or destruction, water and sewer system inundation and damage, electrical system destruction and security and fire suppression system destruction. Loss of equipment, trash and recycling systems, "porta-johns", bulletin boards and signs occurred park wide. River accesses, available to UPDE visitors by agreement, were virtually destroyed; those that survived were severely damaged or buried in mud and debris.

Impacts on historic structures included:

- loss of all mechanical systems and structural damage to the Zane Grey House where the walkways and driveway were also damaged;
- loss of temporary rip rap material, the construction access road, and preparatory work completed in 2005 resulting from previous floods damage and further damage to the ice breakers at the Roebling Bridge. A tree struck the sidewalls of the structure, causing damage to the flume wall; and
- further damage to the foundation of the Corwin Farm barn and associated retaining walls caused partial failure of the retaining wall and a need for emergency repair of the barn wall.



Roebling Bridge: Water overtopped piers, lapping the bridge deck



Zane Grey House surrounded by flood water. Normal river channel is in far background

During the flood, the park curator and Interpretive Supervisor removed and carried Zane Grey Museum objects either to the second floor or to other park owned buildings not threatened by the flood. A professional salvage contractor was brought in to pack and remove the artifacts to

curatorial storage at Steamtown. The contractor also brought in a tractor trailer-sized generator system to operate dehumidifiers in the building for nearly a month. This cost \$110,000. The park received emergency funding to make repairs to the Zane Grey House and will be able to move employees back into the facility by the end of October 2006. The park curator is assembling a team to return, inventory and reinstall display and other collection items in November 2006.

Funding was received to begin repair of the three structures. The Dry Stone Conservancy will repair the walls at Corwin Farm in October, 2006.

The Interpretive operation was severely impacted by the June flood. The Division operates from the Zane Grey House in Lackawaxen, Pennsylvania. The interpretive staff was moved to the North District Office in Milanville, PA. The Zane Grey Museum remained closed through the primary visitor season, so the focus of the division changed to off-site programs, festivals, more frequent river safety patrols, and an extended season at the Narrowsburg Information Center. Compared with FY05, visitation to Zane Grey dropped 1,500 while the people attending formal programs increased by 1,100, contacts at festivals were up by 200, and visitation to the Narrowsburg Center was up 240.



Corwin Barn, entrance road and Retaining Wall: Completely submerged

Park staff is focusing on input for ERFO funds through Federal Highways to attempt to gain some funding toward replacement of the stone retaining wall at Roebling Bridge which was destroyed during the April 2005 flood, and assaulted again in 2006. Repair to the structure total nearly \$800,000.

Funding was received to restore the Corwin Farm retaining wall and barn foundation wall (one contiguous wall). Repairs cost \$103,000.

NYRI

New York Regional Interconnect, Inc. (NYRI) (previously known as “Pegasus”) unveiled plans to build a \$1.6 billion dollar high voltage direct current power line to connect upstate New York and Canada to the New York City metropolitan area. NYRI proposed two corridors: the preferred route follows an existing pipe line, physically entering the Upper Delaware Corridor in four places for a total of about four miles, but visually impacting both sides of the river for several miles. NYRI’s alternative route would follow the railroad right of way for the entire 73.4 miles of the designated Upper Delaware Scenic and Recreational River. NYRI also announced its intention to apply through the New York State Public Service Commission, while requesting the Department of Energy to designate a constrained area to include the Upper Delaware corridor via the Energy Policy Act of 2005 licensing process, enabling them to attempt to gain approval through a Federal Process if unsuccessful with the state application.

UPDE responded on April 14, 2006 by writing the Department of Energy to convey a Wild and Scenic Rivers Section 7 determination that the power line would have a direct and adverse impact on the Upper Delaware Scenic and Recreational River and significantly and negatively impact the resource values which caused the river to be designated into the National Wild and Scenic Rivers System.



Demonstration outside of NYRI Public Meeting in Callicoon, NY. Photo courtesy of the Sullivan County Democrat

The NYRI proposal galvanized people and local governments along the 200-mile-long proposed routes. Fifty-five different opposing organizations, local government entities and coalitions oppose the NYRI proposals; New York State went so far at to pass legislation prohibiting the use of condemnation of property for private projects; the county governments have formed a coalition (CARI) and received funding from the New York State Legislature for legal and other support. Many people, organizations and local governments have turned to UPDE and

our primary partner, the Upper Delaware Council (UDC), for help and leadership. The UDC is working with CARI and citizens groups. UPDE participates, coordinates with, and supports these partners, while maintaining the separation of state and federal government called for in this situation. UPDE, the NPS and the Department of the Interior have prescribed roles in the licensing application processes. UPDE has been working extensively with the Regional DOI Solicitor's office to prepare responses at appropriate stages in the state and federal application processes. Responding to this threat has been enormously time consuming.

Mongaup Visitor Center

Work with Denver Service Center continues. Alternative sites have been pursued at the request of the New York State Department of Environmental Conservation (DEC), and a new contract to develop an Environmental Assessment is under way; while UPDE staff continues to cooperate with area congressional representatives, DEC and other state and federal agencies, the Upper Delaware Council, Sullivan County, and the town of Lumberland, New York, to pursue shared funding for the Visitor Center. This project will become active again in early 2007, when the new contractor begins work.

Technology

Telephone and computer network and circuit equipment was upgraded and moved beyond the reach of any but the most extreme flood conditions. Larger LCD monitors improve data display and data entry. All computers have been configured to accept automatic updates from the Washington Office. In addition, UPDE now has obtained software enabling backup of user files to the local server. The TELNET system is being used reliably and regularly.

Conversion of the park's communications system from analog to digital narrow band is nearly complete. Funding was obtained to secure and equip the Lackawaxen tower site with a backup generator.

Programs

Personal Services – The interpretive division presented formal programs at youth groups, scout camps, libraries, river access sites, and the Zane Grey Museum, and provided safety programs at four river access sites and during roving canoe patrols Thursday through Sunday throughout the summer. Twenty-nine on-site community programs were presented to 536 visitors and 82 off-site community programs were given to 2,248 people.

Staff attended various festivals, including Kid's Fest, Festival of Wood, Meadow Party, Pumpkin Fest, and Earth Day at the Harvest Festival with contacts totaling 1,010 people. Together with the Resource Management staff, Interpretation attended PP&L (electricity company) Open House, with 127 contacts.

Outreach Educational Programs included The Lenape, D&H Canal, Water Safety and Water Snapshot education programs; Damascus, Wallenpaupack, Hancock and Eldred In-service Training for teachers; D&H School Days; Invasive Plant programs for local citizens; and working with NASA on a core educational group. We presented 72 on-site curriculum-based education programs to 2,860 students and 27 off-site were programs to 1,305 students. The D&H Canal Days off- and on-site programs involved 9 schools and 715 1st, 2nd, 3rd, and 4th grade students. Traveling trunks on the Lenape Indians, Birds of Prey, Animal Tracks, Puppets and Wildlife were loaned out 8 times and seen by 904 students.

The Zane Grey House was open Friday through Sunday, Memorial Day through June 25. Sixty-seven museum tours were presented to 461 of 745 visitors to the house. 130 visitors attended the Zane Grey Birthday Celebration, presented in partnership with Zane Grey's West Society. Sixteen special tours and programs were presented to 139 visitors during the Zane Grey's West Society's convention. A new Zane Grey t-shirt was designed and produced for sale at the Eastern National outlet. Eastern National sales for both events totaled \$1,837. Donations collected in 2006 were \$2,485. *Zane Grey Days*, planned for mid-July was cancelled due to the June flood.

The *Narrowsburg Information Center* was open Friday through Sunday, Memorial Day through Labor Day and weekends through fall foliage season for 2,321 visitors. *Narrowsburg Eagle Festival* and the *River Festival* attracted 706 visitors. The one-day events generated \$1,367 at our Eastern National outlet.

Non-personal services –exhibits for the Zane Grey Museum interior, main lobby and exhibit area were produced. Original artwork and photographs in the museum were professionally framed with archival materials; panels were hung to display the exhibits and protect the museum walls. 100% of the park web page was converted to the CMS system. The River Management Plan is now available on the web and a flood page was created to provide information during high water events. New site bulletins advertising interpretive programs and traveling trunks were designed. 49,414 visitors utilized the self-guiding exhibits at the Roebing Bridge and Toll House. Two TIS radio stations provide seasonally updated orientation and safety information at the northern and southern termini. A short range TIS unit in Lackawaxen, PA provides a five-minute interpretive message about the Delaware and Hudson Canal and Roebing Bridge.

Volunteers – 123 Volunteers contributed 8,864 hours, including three individuals, six interns, the National Canoe Safety Patrol, and the Eagle Institute. The cost of volunteer housing, meals, recognition awards, supplies, training, transportation, and uniforms was \$4,020 plus \$8,473 from ONPS. VIP hours are up 29% over last year, and we have achieved our highest accumulated total.

The protection staff conducted cold Water/ice Rescue training for UPDE Staff and public safety agencies and a two-day NYS/PA Sanctioned Hunter Safety course to approximately 50 hunters.

Our Biologist conducted four Japanese Knotweed programs to 105 participants, continued the “Water Snapshot” program with three schools and a 4H group totaling 120 students, conducted a teachers training session for the Wayne Highlands School and a Summer Learning Camp for teachers.

Partnerships

When an issue affecting the river or river valley arises, local people, governments and organizations look to the National Park Service to provide environmental, conservation, recreation management, and historic preservation leadership. By design, UPDE must support and participate in partnership activities For UPDE that means two states, five counties, 15 townships and several villages and towns, and 10 organizations many of which meet evenings and weekends.

Visioning–Grant Applications and Completion report; committee meetings; and supporting several planning education events cosponsored by the Visioning Committee.

Water trail–Drafted Water Trail Plan, meetings, reviewed (and coordinated reviews) draft brochure and map, website development, detailed DRBC river recreation maps and later drafts of plan.

Zane Grey’s West Society–Helped plan, coordinate and produce, conducted programs and prepared handouts on projects history and future funding needs a convention visit by Zane Grey West Society which made extra donations to UPDE, including funds to buy roofing materials for the Cottage Kitchen;

D&H Canal Transportation Heritage Council–Meetings and consultation with members on a request basis; e.g., the Wayne County Historical Society’s historic structure report and plans for Lock 31 property.

Upper Delaware Heritage Alliance–The executive committee continues to meet occasionally.

Upper Delaware Council–meetings and events

Upper Delaware Scenic Byway–meetings, visitor center meetings and planning session

Sullivan County Charter Review Commission meetings

Sojourn – Substantial support chairperson i.e., budget and tracking; UPDE day planner for the first two day; with the livery to arrange boats, transportation, camping and meals; other sojourn meals with area businesses; arranged programs, tours and presentations and an evening Kick-off Event at Zane Grey.

DRBC Flows UPDE participated in flows management negotiations with the DRBC and their governmental partners. The new General representing the U.S. Army Corps of Engineers (the federal representative to DRBC) convened a Summit bringing all the federal agencies involved with the Delaware River together to improve communications, which has led to UPDE expanding its partnerships with other federal agencies.

GIS

Our GIS Coordinator (shared with DEWA) developed a viewshed analysis with the University of Rhode Island to demonstrate visual impacts of the NYRI transmission project, including project planning and outline, data development, analysis of results, and map making. She provided GIS support to the Scenic Byway Committee to contract and develop three-dimensional visualization and help demonstrate the visual impacts posed by the proposed NYRI power line. She completed the administrative boundary and support data layer information for the Scenic Byway web site, developed GIS Atlas maps and data for the Upper Delaware Region. She continued work on the Upper Delaware Urban Growth Model and the NASA Globe education curriculum development project (aimed at high school students), including the collection of county data sets being used to help drive the Sleuth model, participated in regional meetings with cooperators and teacher training, and in land cover field verification studies with students. She also worked with The Nature Conservancy for the UPDE Vegetation/Fire Fuel mapping project and the East Stroudsburg University/NPS Mammal Study project. Other tasks included GPS training classes, monthly user group meetings, and general technical support to park staff.

Resource Management

Vital Signs

Vital Signs identified and prioritized with Eastern Rivers and Mountains Network (ERMN) in 2005 were further refined in 2006. UPDE has reviewed and provided feedback to the ERMN network coordinator and data manager on the ERMN Phase 2 Report. Our Inventory and Monitoring Vegetation Mapping project continued with extensive field verification. UPDE will assist in developing a vital signs monitoring plan in 2007.

Specific Natural Resource Data Sets In 2006 UPDE participated in and supported ground-truthing and field verification efforts for vegetation mapping aerial photography that was flown in spring of 2004. The draft alliance level vegetation classification key has been developed for UPDE. Five of 12 outstanding data sets for UPDE have been acquired for the basic natural resource inventories identified for all parks.

A Fish Inventory by the Academy of Natural Science and a Mammal Inventory by East Stroudsburg University were begun season.

Containing Exotic Plant Species

The June Flood had a tremendous impact on the riparian area of the river, including many of the Japanese knotweed stands. The target containment area on the river bank near the Zane Grey House, restored with Riverbank wild rye in 2004, continues to remain Japanese knotweed free. The knotweed stands treated by the Exotic Plant Management Team near the Milanville Resource Management Office are being effectively controlled. Additional knotweed treatment was essentially prohibited this growing season due to the untimely flood, during which all standing knotweed was completely knocked to the ground and uprooted in many locations.

An Eastern Washington University professor began research on "Effects of Hydrologic Alternation on Polygonum Cuspidatum Invasion in Riparian Ecosystems", the intermediate product of which will be a model to predict Japanese Knotweed invasion success based on flow regime.



Damascus Boy Scout Troop 122 Assists in Eradicating Invasive Water Chestnut

2006 was the fifth year for water chestnut removal from the Delaware River watershed. A survey of the mainstem of the river did not produce any growing populations in the three known locations where we removed it in the past.

A tremendous effort was put into removing the plant from a private pond with an outlet to the Delaware River in Narrowsburg, NY.

Park staff presented four programs to the public during 2006 and provided educational information on invasive plant species in community open house settings. UPDE continues to support the Japanese Knotweed Initiative, and provided technical support to community demonstration project sites during 2006.

Threatened and Endangered Species

UPDE will continue to work with the USGS principal investigator on a PMIS project to determine host fish species for the Federally Endangered dwarf wedge mussels by determining which fish species require management attention to expand and stabilize dwarf wedge mussel populations in the Upper Delaware mainstem and to determine if hosts used by mainstem river mussels differ from hosts used by mussels that inhabit a small cold water tributary of the middle Delaware. Another project to determine minimum flows required for dwarf wedge mussels in the Upper Delaware River is in the process of data analysis and report preparation.

We will also continue to work with the principal investigator and field staff involved in an ongoing PMIS-funded project to determine the most important habitats for bald eagles on the Delaware River. Satellite and radio transmitters have been placed on a number of captured birds, and their movement and habitat use is being documented. This information will be used to develop a bald eagle management plan, aid recovery efforts and enhance interpretation.



Invasive (non-native) Animals

UPDE continued to cooperate with state agencies and local land owners to identify and monitor Hemlock Woolly Adelgid (HWA) infestations within the river valley. NY DEC feels that the front for new infestations of HWA has moved well beyond the Delaware River Watershed, further into central New York. They are no longer supporting the releasing of "Pt" beetles in this area. UPDE staff continues to keep an eye on park property for infestations that may occur and we have continued to educate the public about HWA.

Water Quality

The Scenic Rivers Monitoring Program gathered complementary information through a combined NPS/USGS Upper Delaware study. Water quality data was collected at 7 Delaware River main stem and 6 tributary sampling sites on a bi-weekly basis from May through September.

The June 28, 2006 flood of record was so severe in the watershed above the Upper Delaware that the sewage treatment plant for the Village of Deposit, NY, was heavily damaged and went off-line. New York State required heavy chlorination of material discharged into the river while the plant was being repaired. Numerous other municipal sewage plants were also flooded. It has been a wet year, and there have been several heavy rain and high water events since the June flood. UPDE and Delaware Water Gap National

Recreation Area (DEWA) have done extra testing during these events and twice found high levels of fecal coliform at different sampling locations, prompting advisories to the public and livery operators.

The entire 74-mile Upper Delaware Scenic & Recreational River continues to exceed state and Delaware River Basin Commission (DRBC) standards for "exceptional Basin Waters" despite the intermittent presence of coliform bacteria. UPDE continues to work with DEWA and DRBC to coordinate water sampling and pursue the following water quality goals: a) protect park visitors and resources; b) find the source of discharges and determine the residual impact of high water events; c) proactively identify point source dischargers before the permitting process begins; and d) work with DEWA and DRBC to determine sampling strategies, especially with respect to high water events.

Water Quantity

The USGS Decision Support Framework for Water Management in the Upper Delaware River draft report is being discussed and evaluated.

We will continue to attend meetings of the Subcommittee on Ecological Flows (SEF), support the 3-year DRBC/NYCDEP/NYSDEC experimental flows program, and advocate for better flow regimes for the river's resources.

Resource Sharing

We worked a full year with DEWA as our Support Personnel Office and many changes have taken place, most for the good. The HSPD-12 background check requirements created time problems in making final hires. We will change our vacancy announcement timeline to accommodate the additional time requirement.

We provided budget and finance operation assistance and administrative training to ROVA and purchasing and contracting services to DEWA. Additional contracting and purchasing activity for both UPDE and DEWA was necessitated by the June Flood and many last minute awards were made. Flood related purchases for UPDE alone were approximately \$309,000 in the last 3 months of the year.

The Administrative Officer coordinated and/or participated as an instructor in six Introduction to Park Management classes, one Train-the-Trainers for Fee Supervisors and IPPM Instructors class and one 2-day budget session for the FY2007 Mid-Level Managers Development Program class.

The Administrative Officer was detailed from August to December 2006 to Manhattan Sites as the Northeast Region's Administrative Technical Advisor.

UPDE's Executive Assistant continues to serve as the NER Records Management coordinator. In FY-06, she represented the region in a work session of the Servicewide Records Management Program Council, where training and goals for the next year were established; she developed and presented records training to staffs of Women's Rights and Fort Stanwix, as well as Steamtown; prepared comments for the RMPC for the Management Policies revision; participated in the RMPC monthly conference calls; participated in the RMPS/NARA committee to schedule NPS electronic records, and continued synthesizing records management guidance from the Director's orders and associated documents. To date, approximately 900 pages of guidance have been gleaned from 90 directives. The RMPC will use this information to develop disposition guidance for NPS records in the future. Guidance to NER parks is provided as requested.

Protection Division staff responded to DEWA Millbrook Days, fire details in Oregon and Montana, and Security 1 Detail (Fire Camp) in the Pacific N.W., provided armorer and fire arms qualifications at STEA and ROVA, and assisted WEFA with various protection and safety related issues.

Protection

As is the case with all facets of our operations, Protection must work closely with our protection and emergency response partners to provide the best service to our visitors. To that end, protection rangers

patrolled with various law enforcement partners from New York and Pennsylvania. UPDE responded to 6 water related rescues involving other responders and to numerous water-related incidents during the year. We had seven visitor accidents with only 3 requiring ambulance transport. There was one swimming-related death this season.

The Chief of Protection chaired the River Safety committee meeting. Among items discussed were mandatory wear of Personal Floatation Devices, UPDE staffing issues, and safety posters and information. Commercial Use Authorization (CUA) plans, updates and status are always raised during these meetings. UPDE currently manages 82 CUA agreements: 17 Liveries, 57 Guides, 6 Camps and 2 SCUBA Diving.

Work with Human Resources, NER and WASO staff continues to coordinate security cards and keys for staff under HSPD-12.

Maintenance

The CAC (Condition Assessment Comprehensive) building inspections were conducted by the contractor on May 8-10. 220 deferred maintenance items, 175 re-accruing maintenance items, and three safety items were identified. 248 equipment items were verified and 38 new equipment items were found. In two weeks we will have the results to view, we can accept or reject or amend the findings. The deficiencies will be estimated by the contractor in CESS and transferred to the assets in FMSS.

Recovery and repair of UPDE facilities as a result of the July 2006 flood has been discussed previously. In addition to that work, the five Maintenance people—including the facilities manager and secretary, assured that the following projects were completed in FY-06:

- The painting contract for the Zane Grey House
- Roebing Bridge deck resurfacing
- The generator installation at the Zane Grey House
- Upgraded Lackawaxen Repeater Tower #4 electrical service and installed an Automatic Generator
- Preparations for Eagle Fest in Narrowsburg NY January 14.
- Repaired frozen pipes at the Zane Grey house and replaced a Zone pump on the heating system. A leaky water pipe caused ceiling damage in the Zane Grey house kitchen; new piping was installed.
- Constructed a temporary roof on the Zane Grey Summer Cottage and porch. The building was mothballed to prevent further deterioration.
- Assisted in preparations for the Zane Grey Birthday event on January 28.
- Sent clippings from three trees at the Corwin property to Olmsted for grafting; due to limited space in the nursery they are only taking our trees in bad shape.
- Removed a tree from Roebing Bridge icebreaker with the assistance of Protection staff and equipment
- Reconstructed an outhouse to hide two 100 gallon propane tanks at the Zane Grey House.
- Supported the D & H Canal School days
- Two staff members worked with the Olmsted Arborist training crew to remove about 75 trees along the retaining walls of the D & H Canal towpath; about 50% of the trees that need to be removed
- Supported the 200th Birthday celebration for John Roebing the weekend of 10-11 June. The entire area was mowed and trimmed for the weekend.
- Prepared the Zane Grey Landscape and building for the Zane Grey West Society convention. Maintenance also assisted members around the landscape during the day-long festivities and aided in presenting the "Dolly's Garden path" interpretive program.