

Write us at:
P.O. Box 300
New Vernon, NJ 07976



ACROSS THE WATERSHED

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Summer 2005

The Great Swamp Watershed Association

Vol. 25 No.3

GSWA Stream Team: A Real "Water World"

by the Science & Technology Committee

The 1995 Kevin Costner movie "Water World" was a work of fiction. The Great Swamp Watershed Association Stream Team, on the other hand, performs a real "water world" monitoring task that is of great importance to the people living in and around the Great Swamp watershed. Originally formed by the Watershed Association in 1998 to assist the Ten Towns Great Swamp Watershed Committee management, this group of dedicated volunteers monitors water flow rates and pollution levels in the five primary streams that

flow into the Great Swamp: Primrose Brook, Great Brook, Black Brook, Loantaka Brook, and the Passaic River. The Team also monitors the Passaic River outlet that passes through the Millington Gorge. Millions of New Jersey residents depend on the Passaic River for their drinking water.

The ecological health of the Great Swamp National

Wildlife Refuge (GSNWR) depends on the water flow and pollution levels of those feeder streams, characteristics that are heavily influenced by human activities within the watershed. Scientifically sound monitoring efforts are necessary to identify existing and developing problems, and by providing hard data to help mitigate those problems, they act to ensure the attractiveness and value of the surrounding region for its residents.

The Great Swamp watershed covers nearly 36,000 acres, and receives an average of 42 inches of rain each year. A bit of arithmetic reveals this to be approximately 40 billion gallons of water. To put this in visual terms, that volume amounts to a cube of water one

third of a mile on a side, weighing 167 million tons! Although impressive, if this average annual inundation were to occur in a 55-square-mile watershed totally undisturbed by human activity, there would be little cause for concern.

However, our presence and activities in the watershed have profoundly altered its hydrological and ecological balance. Approximately 9% of the watershed consists of impervious cover

continued on next page



An ISCO automated sampling unit, one of which is located at each of the five streams which flow into Great Swamp.

Adopt-A-Stream Program Continues To Gain Corporate Support



Russ Bruner, President & CEO, Maersk Inc. presents a check to Julia Somers, Executive Director, Great Swamp Watershed Association, for its Adopt-A-Stream program working to clean up Loantaka Brook.

Protecting Your Water

Scout Leaders Dig In

They work to construct the new biofiltration basin and wildlife habitat at Southern Boulevard School in Chatham Township

This Spring scout troops of Chatham Township and Chatham Borough planted the large retention basin adjacent to the Southern Boulevard School parking lot in Chatham Township. The scouts are planting native species to retrofit an old-fashioned mowed turf retention basin into a biofiltration basin and wildlife habitat learning center for the School District of the Chathams. The project was modeled after the Marsh Meadow biofiltration basin at the Frelinghuysen Arboretum.

Brownie Troop 399 works on the basin. Kris Shannon wields the shovel while Donna Patterson watches and Diana Baez comes up to help.



GSWA Stream Team: A Real “Water World”

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such as buildings, roads, and parking lots, a situation that tends to aggravate flood surges during heavy rainfalls (remember Hurricane Floyd, September 16, 1999!). In addition, the resulting stormwater runoff contains various pollutants, such as chemical fertilizers, pesticides, liquid and solid waste from vehicles, winter road salt, pet and farm animal waste. But residents of the watershed and downstream along the Passaic River need to utilize the available flow as a source for their drinking water. The latter necessity is made more complicated by the fact that two sewage treatment facilities are located along, and discharge into, the streams feeding the Great Swamp, thus making the problem more challenging.

Balancing these conflicting needs requires rational regional planning that must be based on objective scientific measurements, i.e. information such as Stream Team data.

Automated monitoring stations have been installed at the five major tributaries feeding into the Great Swamp. These stations continuously record the relative stream flow using a pressure sensitive probe securely mounted to the streambed. The actual water depth can be used to calculate the peak water flow, stormwater volume, and total annual water flow entering the Great Swamp. The stations can also be programmed to collect a water sample during the course of a storm, an important feature, because that is when pollutants are flushed from impervious surfaces and manicured lawns into the receiving streams in alarming amounts.

These samples are then sent to a laboratory for analysis. The resulting data is used to determine the concentrations and annual amounts of key water quality components such as phosphorus,

nitrogen, and sediment. Sampling at each station is also conducted manually during dry (baseflow) conditions for the same factors. Baseflow and stormflow samples are generally collected every three months. The streamflow data, recorded by the automated stations every 15 seconds, is downloaded from the computerized units every month.

In addition, rainfall gauges have been installed at the Passaic River and Black Brook monitoring stations. These gauges are connected to the automated samplers and rainfall data is also recorded every 15 seconds and downloaded along with the water height data each month. The information obtained through these monitoring efforts has enabled the Watershed Association to determine that Loantaka Brook is the most polluted stream in the watershed. By contrast, Primrose Brook and the upper portion of the Passaic River are relatively pristine.

The GSWA Stream Team is currently comprised of 15 active members. To discuss, coordinate, and analyze their findings, this group meets monthly at the Watershed Association headquarters with staff member Kelley Curran. The Stream Team results are an important measure of the health of the Federal Wildlife Refuge, and its findings are available to the US Fish & Wildlife Service, as well as to the Environmental Commissions of the ten towns included in the watershed.

Further details about the Stream Team monitoring activities and its accumulated data are available on the Watershed Association website <http://www.greatswamp.org>. The Stream Team is always on the lookout for dedicated helpers. Anyone who might be interested in contributing to the Stream Team effort as a volunteer should contact Kelley Curran at kcurran@greatswamp.org, or at 973-538-3500 x16.

Across the Watershed is a quarterly publication of the Great Swamp Watershed Association. The Watershed Association works to protect the ecological, historic, and cultural integrity of the Great Swamp and its watershed. The Association promotes the conservation and restoration of the watershed's natural resources and encourages land use that is compatible with these goals.

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Across the Watershed

Editing & Layout: John Malay

Contributors:

Hazel England
Ruth Kerkeslager
Eloise Salmon
The "Stream Team"

From the Desk of the Executive Director

Past issues of "Across the Watershed" reported on local bridge replacements in Bernards Township, Long Hill Township, and Harding Township. You may have wondered why bridge and road replacement is a topic of interest to the Watershed Association.

The Watershed Association strives to be one of the most credible and recognized environmental agencies in the area — to protect the water and preserve land to maintain the beauty and enhance the livability of our towns. This includes protection of the environment, history, and quality of life of the communities of the Great Swamp watershed, because every aspect of our community life has an impact on the water we drink. By protecting these historic bridges, we protect the environment and preserve the scenic, aesthetic and historic character of the area.

Two narrow bridges in the Great Swamp watershed are soon to be replaced by Morris County, the agency responsible for both municipal and county bridges. One bridge is in Harding Township on Dickson's Mill Road in the Silver Lake Historic District. It crosses a section of Great Brook (also known as both Silver Brook and Pine Brook), just upstream of the Great Swamp National Wildlife Refuge. The other bridge crosses the Passaic River between Long Hill and Bernards Townships and connects White Bridge and Lord Sterling Roads. It is considered historic by nature of its age and the increasing rarity of that bridge type. Both bridges are on narrow roads that are lightly used. Each bridge comfortably carries one car at a time across its span; neither bridge has any history of accidents.

Both bridges are proposed for replacement with new spans and would be measurably widened.

This type of bridge "improvement" has been typical and is based on the County's interpretation of design standards that must be followed for safety reasons and to qualify for State funding. At the same time, the County has worked hard over the years to balance these needs with the needs of the town. As a result of the Watershed Association's involvement in the bridge replacements, we may have identified a process whereby this critical balance can be achieved.

GSWA recently met with the New Jersey Department of Transportation regarding transportation and road issues. At the meeting, we raised our concerns about widening historic roads and bridges and were told that one approach might be "context sensitive design."

Context sensitive design (CSD) is a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility. CSD is an approach that considers the total context within which an improvement project will exist.

NJDOT went further and invited the Watershed Association to help make a video explaining CSD, modeled after our well-received stormwater management video, "Doing Water Right". That CSD video project is just getting under way. We've asked GSWA member Elliott Ruga, an Emmy Award-winning multimedia producer, to work with GSWA and the NJDOT to co-produce a thirty-minute video that will promote the concepts of CSD. Its statewide target is civil engineers, elected officials and others who design, approve, or fund public projects. The hope is that a better understanding of CSD principles will result in more thoughtful integration of the project with the location's historical and environmental characteristics, greater public acceptance of projects, consistent design themes across projects within the same area, and a better partnership between citizens and project developers.

What does this mean for the Dickson's Mill Road and the White Bridge Road bridges? It is too soon to know, but we hope it means we have an opportunity to replace these old bridges in using context sensitive design principles, thereby protecting the environment and preserving the scenic, aesthetic and historic character of the area, while maintaining safety and mobility.



Get Ready For Bike Fest 2005

by Eloise Salmon

Last September, hundreds of cyclists and cycling fans gathered for the Jockey Hollow Challenge, the first bicycle race held in the Jockey Hollow area of the Morristown National Historical Park in more than ten years. With photo finishes, beautiful weather, musical entertainment and great food, those in attendance were not disappointed.

This year, organizers plan to deliver enjoyment to a greater number of cycling enthusiasts by expanding the event into a two-day Bike Fest. Bike Fest will consist of three main events during the weekend of September 17 and 18: the Lewis Morris Challenge, the Jockey Hollow Challenge, and the Historic Morris Bike Tour.

Presented by the Morris County Park Commission and Marty's Reliable Cycle, the Lewis Morris Park Challenge is an off-road competition that will take place on Saturday, September 17. The fairly smooth but hilly course is just under 7 miles and contains several new sections of trail, thanks to the Morris County Trails

The Great Swamp Watershed Association Jockey Hollow Challenge is presented by Navigators Insurance. Other sponsors include Patriot Media, Recorder Community Newspapers, Sterling Properties, Wyeth, Toyota of Morristown, Honeywell, Shop Rite Supermarkets and Cipollini Carting and Recycling.

For those seeking to ride at a leisurely pace on Sunday, Bike Fest is offering the Historic Morris Bike Tour, courtesy of the Morris County Park Commission. The tour will visit some historic sites while allowing participants to enjoy the outdoors on their bicycles. Jockey Hollow will be the last stop on the tour, giving participants an opportunity to watch the Challenge and enjoy music, food, and other activities. Pre-registration is required by September 12th and cost is \$20.00 per person, lunch included. Contact Aric Gorton at 973-326-7616 for additional information or visit www.morrisparks.net.

Proceeds from all three events will benefit the Heritage Alliance for Tourism (HAT), a program of the Great Swamp Watershed



**Historic
Morris
Bike
Tour**



Conservancy. Riders can enter in one of three classes: Beginner (1 lap – 9:00 a.m.), Sport (3 laps – 10 a.m.), or Expert (4 laps – 10:15 a.m.) Registration begins at 7:00 a.m. and ends 20 minutes before each start time. Fees are \$25. Advance registration may also be done on-line at http://www.active.com/event_detail.cfm?event_id=1235359.

The Jockey Hollow Challenge will be held for the second time on Sunday, September 18. Four different races will be held (rain or shine) based on skill level and experience. Amateurs will ride 20 miles while professionals will ride 50 miles. Since the riders compete in a closed loop, spectators can monitor the progress of their favorite cyclist lap by lap.

Ray Cipollini, the race organizer from Velocity Sports Management, describes the course as “full of hills” and “extremely challenging for riders”. Those up to the task can register on-line at www.racelistings.com. Fees are \$35.

Association. HAT is a cooperative effort by businesses, historic commissions, local preservation organizations and government officials to create a grassroots movement in this part of New Jersey for heritage tourism within the Great Swamp Watershed.

Bike Fest promises a fun and enjoyable experience for all, so dust off that bicycle and pedal your way to Bike Fest! For additional information about the events or ways that you can become involved, please contact Patricia Clew at pclew@greatswamp.org or at (973) 538-3500 ext.21.

Eloise Salmon is an intern at the Watershed Association this summer. She attends Princeton University where she majors in economics. She lives in Roxbury, NJ.

Development & Membership

Fish & Wildlife Service Announces GSWA will be “Cooperative Agreement Partner”

On June 24, 2005, the Ten Towns Committee celebrated its 10th Anniversary. The event showcased the many accomplishments of the Ten Towns Great Swamp Committee and included displays from the Great Swamp Watershed Association and other regional organizations that are helping to protect and preserve our watershed.

The Great Swamp National Wildlife Refuge (GSNWR) used this event to announce the selection of its US Fish and Wildlife Service “Cooperative Agreement partners.” We are thrilled to report that the Great Swamp Watershed Association’s proposed project entitled “Restoration of the Great Swamp Conservation Area” was selected for funding by US Fish and Wildlife.

The purpose of the project is to restore six acres of the 50-acre Conservation Area, stressing invasive plant species control, enhancement of vernal pools, stream bank stabilization, and replacement of habitat and access lost due to degradation by invasive species and deer browsing. This project is part of the 5-year restoration plan for the area.

The mission of the US Fish & Wildlife Service is to work with others to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people. The Service is committed to building partnerships that encourage conservation and preserve our natural and cultural resources, to bringing innovative approaches to solving land and water management issues, and to working with partners to resolve complex ecological issues toward a common goal.

The US Fish & Wildlife’s GSNWR Watershed Natural Resource Restoration Assistance Project (NRRAP Project) provides support through partnerships and cost-sharing with the local non-profit organizations or local governments (i.e., counties, townships, boroughs, environmental or planning commissions, or other units of local government) within the Great Swamp watershed on projects that encourage acquisition, restoration, rehabilitation, or enhancement of wetlands within the watershed, outside the property boundary and management jurisdiction of the GSNWR.

The Great Swamp Watershed Association is deeply grateful to the USFWS and to Bill Koch, GSNWR Refuge Manager; Mike Horne, GSNWR Watershed Biologist; and Clay Stern, NJ Field Office Environmental Contaminants Specialist for making possible our inclusion in this unique project.



Recipients of the USFWS NRRAP Grants were notified at the Ten Towns Great Swamp Committee's 10th Anniversary Celebration. Pictured left to right: Clay Stern, USFWS; Philip Rosenbach, President, Harding Land Trust; Madelyn Devine, Harding Land Trust; Cathy Schrein, Somerset County Park Service; Harry Gerken, Executive Director, Ten Towns Committee; William “Bill” O’Connor, Mayor, Chatham Township; Ruth Kerkeslager, Development Director, GSWA; Dr. Michael Horne, USFWS; Bill Koch, USFWS, Refuge Manager.

Hyde and Watson Foundation Funds Computer and Office Equipment

The Great Swamp Watershed Association has received a generous grant from the Hyde and Watson Foundation for the purchase of computer hardware and software and office equipment. The Watershed Association plans to use these funds to upgrade and enhance our donor database and for software and hardware replacements and upgrades.

Most of our equipment and computing needs could not be met without the assistance of the Hyde and Watson Foundation. Their generosity allows us to continue to focus on projects and initiatives to protect drinking water and preserve land to maintain the natural beauty and enhance the livability of our towns.

We deeply appreciate the Hyde and Watson Foundation’s ongoing interest in and support of our organization.

Watershed Association Meets the Challenge!

See page 10

Swamp Watch -- Environmental Hot

Bernards Township

Somerset County Buys 61-acre Ross Farm

In May, Somerset County Freeholders announced plans to acquire the historic Ross Farm. The Farm is located within the Great Swamp watershed and is adjacent to existing county-owned Lord Stirling parkland as well as a municipal park. The house on the property, known as the Boudinot-Southard Mansion, is thought to date to the late 18th century when the property was owned by Elias Boudinot. Boudinot and his family moved to the property during the Revolutionary War. In 1785, Boudinot sold the property to Henry Southard, whose son, Samuel Southard, was born there. Southard was governor of New Jersey and a United States Senator. Plans for the property have not been finalized, but may include using the mansion as a museum to house an existing collection of Revolutionary War artifacts.

Verizon Plans Demolitions and Evicts 2 Nonprofits

As part of its acquisition of the former AT&T properties along North Maple Avenue and Madisonville Road, Verizon is requiring all buildings to be vacated, including two nonprofit tenants of the circa 1870 Corbett House, the Passaic River Coalition and the Colonial Symphony. Verizon has announced its intention to demolish approximately 11 of the houses.

Residents in the area have voiced concerns that the vacant residential properties could be rezoned to business use, which would permit potential for expansion of the mammoth facility.

Ann Parsekian

Planning Board Drafts a Historic Preservation Element To the Master Plan

After a special work session, the Planning Board directed its planner, David Banisch of Banisch Associates, to draft language for an historic preservation addition to the township Master Plan. The element, if adopted by the township, would lay the ground work for an Historic Preservation Committee or Commission, an inventory of historic structures in town, as well as provide the basis for an ordinance mandating a waiting period before buildings on the inventory could be demolished. A number of historic structures in the township have been torn down in recent years to make room for residential development.

John Malay

Morristown & Morris Township

Morris Township Wastewater Management Plan

Morris Township continues to work on preparation of a "credible and substantially complete" Wastewater Management Plan for the NJDEP. Every municipality in New Jersey has been mandated for years to complete and regularly update a WMP.

Recent correspondence between the Township and NJDEP shows the Township inching closer to submission of a complete Plan, but substantial deficiencies remain. These include among others: adoption by the Township of three environmental ordinances; stormwater, riparian buffer (aka stream buffer), and threatened and endangered species ordinances; a discussion between NJDEP and Morris Township about whether the threatened and endangered species ordinance applies to part or all of the Township; an ongoing debate among NJDEP, Morris Township and Randolph as to whether the Township should be sewerage part of Randolph; disagreement between NJDEP and the Township about how much of St. Mary's Abbey's property is to be included in the sewer service area; and the need for supporting documentation showing that the Township's Intermunicipal sewer service agreement with Morris Plains will not permit excess gallonage be transferred to an unintended use.

When the Plan is deemed complete by NJDEP, a public hearing will be conducted.

Julia Somers

Harding Township

Ridge at Sand Spring

The Harding Township Planning Board agreed that a maximum of five lots of various sizes may be built on the 27-acre Lyall property. The Board also agreed on the potential location of the private road to serve those lots. Now issues such as stormwater management and conservation easements are being reviewed by the Board.

Dickson's Mill Road bridge

Morris County's Engineering Department, the Harding Township Committee, its engineer Apgar Associates and the Harding Township Historical Commission are working together to design an acceptable replacement to this bridge. The Watershed Association has also submitted comments (see related story on page 3.)

Julia Somers

Chatham Township

St. Hubert's Expansion Plans Under Revision

St. Hubert's Giralda has temporarily withdrawn its building expansion application before the Board of Adjustment. The footprints from the proposed new buildings would have resulted in 3.6 additional acres of impervious cover on the 16 acre property on Woodland Road. After hearing suggestions from the Board of Adjustment and Great Swamp Watershed Association's legal and engineering professionals, St. Hubert's decided to make some changes to their application and will likely come forward with a new application in the Fall. The NJ Department of Environmental Protection (NJDEP) has required a conservation easement on a portion of the property as a condition for granting a waiver to encroach on wetlands. The DEP approved a wetlands transition area waiver/averaging plan for just under half an acre.

Bulldozing Off Course at Sterling Properties

Something went wrong in the tree preservation process at Sterling Properties' 28-acre townhouse complex at Shunpike and Green Village Roads. More trees were cut down than approved by the Planning Board. Sources say the builder did not exactly follow the plans finalized between Sterling and the Planning Board. Yet it seems that the tree plan wasn't very precise. Apparently trees on the plans to be saved didn't match real trees on the site. Also, some of the trees that were saved weren't protected adequately and will probably die.

The good news is that there is still an undisturbed conservation easement along the northern property line and a wetlands area near Shunpike Road was also left intact. GSWA worked for years to reduce the scope of this development and its impact on the swamp.

"Best" Conservation Plan Element Approved

At an Open Public Meeting on June 20, the Planning Board approved a final draft of the new Conservation Plan Element for the Township Master Plan. All Planning Board members present for the meeting voted in favor of the strategic environmental conservation plan and all members of the public who spoke were in favor of the plan. The opportunity to insert a new element into the Master Plan comes as part of the required reexamination of the plan every six years. The plan was written by the Environmental Commission and Township Planner Frank Banish. Julia Somers praised the Plan as the best Conservation Plan Element she has ever seen.

The Conservation Plan Element provides long range goals for preserving the natural resources of the township, where 26% of the land area is in the Great Swamp National Wildlife Refuge. The plan defines specific conservation objectives and gives strategies for how the Planning Board, Township Committee, Board of Adjustment, Environmental Commission, Tree Protection Committee, Open Space Committee and ordinary citizens can better preserve the township's natural assets.

The Conservation Plan Element is available on Chatham Township Website at www.chathamtownship.org. The Six Objectives are as follows: (if there is room)

Objectives

1. Establish lawful mechanisms for the protection of the environmentally critical areas, as identified in the Township's Natural Resource Inventory.
2. Promote enjoyment of and education about the environment in order to encourage environmental stewardship among residents, children and visitors.
3. Ensure greater protection of surface water resources, including the Great Swamp, which covers one third of Township land, through regulatory and educational measures.

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Event Calendar

What's Happening In the Great Swamp Watershed

Following is a highly selective listing of events and activities offered to the public by private and county agencies that have facilities within and near the Great Swamp watershed. Many of these organizations offer far more activities than those listed, including day and weekend trips to other areas. Call for complete information.

In addition to programs and activities, many of the agencies are also staffed by naturalists and maintain extensive hiking trails, nature-center displays and exhibits, and book sales. For many listings, advance registration is required; for all, it is advised. To register, to receive additional information, or for directions, call the telephone numbers given below.

Ongoing

September 26 through October 12, *Special Eyes on the Environment (SEE)*. 9:00 a.m.-5:00 p.m. See nature through the eyes of special young adults attending the Lord Stirling School. The students exhibit black and white photographs that show their special connection with nature. Somerset County Environmental Education Center. 908-766-2489.

August

2, *Baby & Me Hike*. 9:30 a.m. Schiff Natural Lands Trust, Mendham Twp. Free. Call the Great Swamp Outdoor Education Center to register. 973-635-6629.

9, *Baby & Me Hike*. 9:30 a.m. Jockey Hollow, Harding Twp. Free. Call the Great Swamp Outdoor Ed. Center to register. 973-635-6629.

13, *Fantastic Flora Swamp Walk*. 10 a.m. Learn all about the wildflowers, shrubs and trees along the Great Swamp trails! Free. Great Swamp Outdoor Education Center. 973-635-6629.

13, *Trail Work Day at Morristown National Historical Park*. 9 a.m. Become one of the park's dedicated volunteers and help maintain its over 25 miles of hiking trails. Tools provided. Wear work clothes including gloves and boots. Please bring your own drinking water. Jockey Hollow Visitor Center. Registration required. To register and for directions and more information, call Ranger Gregory Smith at 908-766-6841.

16, *Baby & Me Hike*. 9:30 a.m. Hedden Park, Dover. Free. Call the Great Swamp Outdoor Ed. Center to register. 973-635-6629.

19, *Moonlight Nature Hike*. 7-9 p.m.: Great Swamp National Wildlife Refuge, Pleasant Plains Road, Long Hill Township. \$8 per GSWA member, \$10 per non-member, children under 5 free. Pre-registration required (www.greatswamp.org). Contact Hazel England at 973-538-3500 x20 (hazele@greatswamp.org) for more information.

20, *Creatures of the Swamp – Pond Dip for Families*. 10 a.m. – 12 p.m. Come and find out who the creatures of the swamp are, and what lives in the ponds and streams of the Great Swamp National Wildlife Refuge. This program is particularly suitable for families with children. Make sure they wear clothes and footwear that can get wet! Great Swamp National Wildlife Refuge. \$8 per GSWA member, \$10 per non-member, children under 5 free. Pre-registration required (www.greatswamp.org). Contact Hazel England at 973-538-3500 x20 (hazele@greatswamp.org).

21, *Morning Swamp Stroll*. 8 a.m. Free. Great Swamp Outdoor Education Center. 973-635-6629.

23, *Baby & Me Hike*. 9:30 a.m. Scherman Hoffman, Bernards Twp. Free. Call the Great Swamp Outdoor Education Center to register. 973-635-6629.

28, *Secret Places of the Watershed: A Natural History Hike*. 5 p.m.-7 p.m. The Great Swamp Watershed Association owns 50 acres in Harding Township that we maintain as a Conservation Management Area. We will take an early evening stroll along the boardwalk trails, listening for birds and watching out for native plants in bloom. \$8 per GSWA member, \$10 per non-member, children under 5 free. Pre-registration required (www.greatswamp.org). Contact Hazel England at 973-538-3500 x20 (hazele@greatswamp.org) for more information.

30, *Baby & Me Hike*. 9:30 a.m. Patriots' Path, Mendham Twp. Free. Call the Great Swamp Outdoor Education Center to register. 973-635-6629.

September

6, *Baby & Me Hike*. 9:30 a.m. Lewis Morris, Morris Twp. Free. Call the Great Swamp Outdoor Education Center to register. 973-635-6629.

10, *Butterflies*. 2 p.m.: A slide show talk and presentation with butterfly expert, Rick Mikula, including LIVE butterflies! \$3. Great Swamp Outdoor Education Center. 973-635-6629.

10, *Raptor Rapture - Raptor Trust Staff*. 2:00 p.m. Learn about those beautiful and mysterious birds we call raptors. Discover the similarities and differences between hawks and owls, and explore the biology and ecology of these unique predatory birds. Get to know the common resident species of New Jersey and meet some of the state's less common visitors. Suggested donation \$4 per person. Somerset County Environmental Education Center. 908-766-2489.

10, *Trail Work Day at Morristown National Historical Park*. 9 a.m. See entry for August 13th.

12, *Toddler Trek: Pond Life*. 10 a.m. Toddlers ages 2 & 3 will walk to our pond and see the critters that live in the water! \$5. Great Swamp Outdoor Education Center. 973-635-6629.

13, *Baby & Me Hike*. 9:30 a.m. Schiff Natural Lands Trust, Mendham Twp. Free. Call the Great Swamp Outdoor Ed. Center to register. 973-635-6629.

17-18, BIKE FEST. See article on page of this issue.

17, *Moonlight Nature Hike*. Call for time. Loantaka Brook Reservation, Morristown. \$8 per GSWA member, \$10 per non-member, children under 5 free. Pre-registration required (www.greatswamp.org). Contact Hazel England at 973-538-3500 x20 (hazele@greatswamp.org) for more information.

18, *LENAPE DAY*. 1 p.m. to 4 p.m.: An event for the whole family with native games, crafts, face painting, foods and more! \$2. Great Swamp Outdoor Education Center. 973-635-6629.

20, *Baby & Me Hike*. 9:30 a.m. Kay Center, Chester Twp. Free. Call the Great Swamp Outdoor Education Center to register. 973-635-6629.

23, *New Jersey Historic Garden Foundation Symposium/ Flower Show*. 1-3 p.m. Flower show and symposium organized by the volunteers who maintain the Cross Estate Gardens. Cross Estate. 973-539-2016.

24, *Birding Basics for Beginners*. 10 a.m. – 12 p.m. Many birding hikes already assume a fair amount of knowledge on the part of the participant.... Not with this program! We will cover the birding basics, with a focus on using field guides, learning what to watch for to identify

birds, where and when to bird for success. You will leave knowing at least 10 birds by sight and sound, and a new appreciation for figuring out what bird species and characteristics. This program is especially suitable for adults of all ages. Bring your binoculars and field guides if you have them. Great Swamp National Wildlife Refuge, Long Hill Road Boardwalk. \$8 per GSWA member, \$10 per non-member. Pre-registration required (www.greatswamp.org). Contact Hazel England at 973-538-3500 x20 (hazele@greatswamp.org) for more information.

25, *Fungus Fest*, presented by New Jersey Mycological Association. 11:00 a.m. - 4:00 p.m. Join in guided mushroom walks, bring mushrooms to be identified, watch live cooking demonstrations, and attend slide shows and lectures. Learn how to cultivate mushrooms, speak to experts on dyeing and papermaking with mushrooms, and much more. Bring the kids along to have adventures of their own in the children's corner. Suggested Donation: \$3 Under 16: \$1. Somerset County Environmental Education Center. 908-766-2489.

26, *Preschool Walk: Pond Life*. 10 a.m.: Preschoolers ages 4 & 5 will walk to our pond and see the critters that live in the water and make a craft! \$10. Great Swamp Outdoor Education Center. 973-635-6629.

27, *Baby and Me Hike*. 9:30 a.m. Dismal Harmony, Mendham. Free. Call the Great Swamp Outdoor Education Center to register. 973-635-6629.

28, *Wednesday Wanderings*. 10 a.m. to 12 p.m.: Experience the wonders of the Morris County Parks through this adult hiking series (18 & up) meeting every other Wednesday! Tourne Park, Boonton Twp. Moderate-level hike: (3 to 4 miles, hilly, moderate pace). \$2. Call the Great Swamp Outdoor Education Center to register. 973-635-6629.

October

1, *Washington Association of New Jersey Fall Symposium*. Fall symposium of the Washington Association of New Jersey (WANJ) featuring recently published works related to New Jersey and the American Revolution. For more information call WANJ at 973-292-1874.

2, *The Lord Stirling 1770s Festival*. 10:30am - 4:30pm: Colonial history lives at the Somerset County Park Commission's annual 1770s Festival when Lord Stirling's grand manor house and estate come to life in Lord Stirling Park in Basking Ridge, NJ. Colonial craftspeople ply their trades and a Revolutionary War military detachment camp on the former estate lawns and conduct maneuvers. Nearly 50 people attired in replicas of 1770s clothing participate in the festival demonstrating their trades and crafts (no crafts are sold). These crafts people make articles such as buttons, rifles, brooms, furniture, lace, stained glass, redware pottery, and powder horns. Other trades and crafts include a blacksmith, tinsmith, wool spinning, decoy carving, and colonial herbs. Children of all ages enjoy the hayrides, clay crafts using Stirling clay, stenciling, and toy making. Visitors may try on colonial costumes and have their photograph taken while restrained to the Somerset Gaoler's wooden stock. \$4.00. Somerset County Environmental Education Center. 908-766-2489.

2, *Animal Stories*. 1 p.m.: Join a naturalist for a walk along the trails and enjoy stories about animals at several stops along the way. \$3. Great Swamp Outdoor Education Center. 973-635-6629.

2, *Herb Society of America – Fall Harvest Sale*. 12 p.m. – 4 p.m.: Volunteers from the Herb Society of America, Northern New Jersey Unit will display the fruits of their labor in the Wick Garden. Herb related items will be available for sale. Proceeds from the sale benefit the Wick Garden. Jockey Hollow, Wick Garden area.

3, *Toddler Trek: Rainbow of Color*. 10 a.m. and 11:15 a.m.: Toddlers ages 2 & 3 learn about the changing leaves through an hour-long walk and story. \$5. Great Swamp Outdoor Education Center. 973-635-6629.

8, *Trail Work Day at Morristown National Historical Park*. 9 a.m. See entry for August 13th.

13, 10 a.m.: Children from ages 8-12 will explore the outdoors and learn about the food chain, habitats all during a nice walk around the swamp. Games will be played throughout the walk. \$3. Great Swamp Outdoor Education Center. 973-635-6629.

21-23, *The Nature of Halloween*. Staggered start times from 6:00 p.m. - 8:00 p.m. Calling all ghosts, pirates, and scarecrows to a fun and informative Halloween stroll on the boardwalk at the Environmental Education Center. Led by a guide, children and their parents will walk shadowy paths to meet and learn about misunderstood, but very important animals, such as a sly fox, a splendid skunk, and buzzy bee. Come dressed in costume for added fun! Limited to ages 3-6 with parent. \$4 per person. Tickets must be purchased in advance. They are not available at door on the night of the program. Somerset County Environmental Education Center. 908-766-2489.

24, *Preschool Walk: Leaves are Leaving*. 2 p.m. Kids ages 4 and 5 take a walk through the woods to learn about the changing leaves and make a fun nature craft! \$10. Great Swamp Outdoor Education Center. 973-635-6629.

Chatham Township continued

4. Protect groundwater resources.
5. Conserve energy and improve air quality.
6. Preserve open space, vistas and scenic character and quality of life.

ShopRite Handling Stormwater RunOff

The owner of the Shop Rite mall at Shunpike and Southern Boulevard appeared before the planning board this Spring with plans to repave and reconfigure the parking lot to gain 24 more parking spaces.

The positive result for the watershed is that the applicant agreed to install two Stormceptors behind the mall. The stormceptors are designed to improve stormwater quality in the cement flume behind the Chatham Hill Apartments.

Unfortunately, a shady tree canopy over the middle of the parking lot is not in the plans. The applicant and most of the Planning Board are convinced that it is not practical for the few current trees to remain on islands in the lot. The owner and members of the Board cited the damage the current trees on island strips sustain during snow removal and salting. The Chatham Township Tree Committee had submitted a letter to the members of the Planning Board asking them to require "tree diamonds." The approved plan requires no trees in the middle but has an increased number of perimeter trees of the varieties suggested by the Tree Committee.

Kathy Abbott

The Boardwalk Fund “Challenge Grant” Is A Resounding Success: Thanks To You!

In our last newsletter, GSWA member Steven Gruber issued a “challenge grant” to help GSWA raise the funds necessary to complete restoration of 450 feet of boardwalk at our Great Swamp Conservation Management Area in Harding Township. We need to improve, stabilize and widen the existing boardwalks across the marshy areas of the Conservation Management Area to make the trails accessible to more people for a longer part of the year. This project is part of our 5-year restoration plan for the area and the money raised through this effort counts as a critical “partner contribution” in the Watershed Association’s grant application to the U.S. Fish and Wildlife Service for more extensive restoration assistance.

Thanks to the following individuals who stepped forward to meet Steve’s challenge:

Mr. and Mrs. Kenneth Abbott
Mr. and Mrs. Douglas Arbesfeld
Mr. and Mrs. Robert Blanchard
Mr. Thomas W. Burnett
Mr. and Mrs. Richard Clew
Mr. and Mrs. Robert A. Coultas
Mr. and Mrs. Peter Deeks
Mr. and Mrs. Robert Essner
Mr. Eugene Fox
Mr. Steven Gruber
Ms. Joan Hughes
Mr. and Mrs. Ellwood Kerkeslager
Mr. and Mrs. Ken Kirsten
Mr. and Mrs. John McNamara
Mr. and Mrs. David Prosser
Mr. and Mrs. Frank Stillinger
Ms. Joan Thuebel
Mr. Tim Tweed
Mr. Ray Vacca
Mr. and Mrs. Blaine Wilson
Ms. Ruth Zowader & Mr. Philip M. Anderson III

We appreciate the support of all who helped us reach our goal!

Texas Eastern to Disturb Great Swamp in Utilities Corridor

On May 23, 2005, Texas Eastern, a unit of Duke Energy Gas Transmission, notified Chatham Township that is applying for NJ DEP permits to allow maintenance activities in wetlands. The activities will include mowing and clearing, excavation for inspection, and stream bank stabilization in eroded areas.

Do The Swamp Thing 2005 Showcases The Watershed

This past May seven different organizations, including the Great Swamp Watershed Association, the US Fish & Wildlife Service, the Friends of the Great Swamp, the NJ Audubon Society, the National Park Service as well as the Morris and Somerset County Park Commissions, coordinated their efforts for the fourth “Do the Swamp Thing” series of environmental events.

These special programs included the kick-off event on April 24th at the Morris County Outdoor Education Center on Southern Boulevard in Chatham Township that featured a host of family-friendly activities, educational exhibits, presentations, games and walks, live animals, as well as a Swamp Wildlife Art Exhibit done by the students at the Southern Boulevard School.

Later in the month we had the NJ Audubon’s “World Series of Birding”, the 25th Annual Wildlife Art & Carving Show at the Somerset County Environmental Education Center in Basking Ridge and an exploration of the “unknown” part of Washington’s army (the role of women and children who assisted soldiers with the daily chores of camp life) held at the Jockey Hollow Soldier Huts.

History, nature and fun -- all are part of “Do the Swamp Thing.”

“Do the Swamp Thing” is organized by Great Swamp Watershed Association and sponsored by Kings Super Markets Inc., PSEG, and Recorder Community Newspapers. This year’s celebration included a four-page advertising supplement in many of Recorder’s local papers, a weekly ad highlighting a wide variety of family activities and publicity about the event on Kings grocery bags.

News From the Top of the Hill

Sharon McCann has replaced Lee Goyeneche as Finance Director. Sharon is from Flanders, NJ and has a BA in Economics from Rutgers University and an MBA in Accounting from Fairleigh Dickinson University.

We have three interns this summer: Peri Rosenstein from Far Hills and Eloise Salmon from Roxbury are both students at Princeton University. Eloise will be a junior next term and Peri will be a sophomore. Our summer interns from Princeton are once again made possible by a grant from the Princeton University Class of 1969 Fund.

In addition we have a student from Villa Walsh Academy, Emily Nguyen. Emily is helping monitor news items in the local papers and taking on other functions around the office.

Welcome all!

Great Swamp Watershed Association Hosts 2005 Volunteer Awards Dinner

As a non-profit organization with limited funding the Great Swamp Watershed Association depends heavily on volunteers to help out with tasks ranging from clerical help, to event staffing, to trained environmental observers.



Freeholder Jack Schrier accepts his Abigail Fair Good Government Award from Ms. Fair and GSWA Executive Director Julia Somers.

Once a year the organization thanks those dedicated individuals by hosting a barbecue dinner. This year the event was held at the GSWA headquarters on Tempe Wick Road in Harding. Over 50 people showed up and were treated to grilled chicken, home-made pasta salads and green salads, home-baked desserts, as well as wine and beer, donated by our trustees.

Abigail Fair Good Government Award

Jack Schrier, a long time resident and Township Committee member in Mendham Township, is presently the Director of the Morris County Board of Freeholders. He has always been interested in conservation and environmental issues and was a member of the Highlands Task Force. Despite well-financed and vigorous opposition, the Task Force recommended the establishment of the Highlands Council and passage of the New Jersey Highlands Water Protection and Planning Act. Jack is now a member and Vice Chairman of the Highlands Council, which is presently developing a Master Plan for this critical region of the state. Receipt of the Abigail Fair Good Government Award recognizes the courageous leadership Jack has shown in advocating passage of the legislation, establishment of the Council, and his participation in and commitment to its success.

Volunteer Awards

Steve Gruber, a Watershed resident since the early 1970's, retired in 1999 from life as an analytical chemist for Schering Plough. Steve has become one of our stalwarts in the on-going restoration efforts at the GSWA Conservation Management Area in Harding. Steve has helped staff and other volunteers with invasive species removal,

native species planting, path construction and clean-up. It is tough and muddy work, but Steve has shown himself to be a champ!

In April Steve offered the GSWA a \$2,500 challenge grant to leverage funds for boardwalk improvements at the 50-acre Conservation Management Area. We are pleased to announce that those in attendance at the awards completed the challenge grant just as Steve was receiving his award!

Elliot Ruga, a resident of Morristown, is a long-time member of the Watershed Association, and an ardent cyclist and supporter of the environment. He is also a two-time Emmy Award winning producer. With this background, Elliot has taken on a number of substantial volunteer efforts for the Watershed Association, bringing both his impressive production skills and his support of the Watershed Association causes.

He produced a very effective 2-minute video and helped in the production of "CD Business Cards" to highlight the Watershed Organization and its accomplishments. These materials have been used in a number of ways, including presentations to the public and to potential donors. He is currently working on another volunteer project, this time in the design and installation of two interpretive panels -- fiberglass signs with embedded digital images -- which will be placed at the entrance to our conservation management area in Harding Township. These signs will educate and inform the public about the natural history of the site and some of the main ecological issues facing the area.

Lynn Siebert, in the words of GSWA Trustee Tim Tweed "exemplifies volunteerism at its very best". She has been the president for many years of the Burnham Park Association, a group that monitors land use activity throughout western Morris County. Lynn has also been active for 8 years with the "Jockey Hollow Coalition", an informal group working to preserve the Jockey Hollow section of the Morristown National Historical Park from the effects of nearby overdevelopment and encroachment.



Volunteer Elliot Ruga is thanked by GSWA Development Director Ruth Kerkeslager and Executive Director Julia Somers.

Protecting Your Land

Work on Conservation Site Continues To Move Forward

There is much to report at the GSWA's 50 acre Conservation Management Area, in Harding Township. We are excited to be in receipt of a \$27,000 grant from the U.S. Fish and Wildlife Service. This innovative grant which offers expertise along with funds, will be used in part to fence a portion of the property against deer - perhaps as much as 20 acres. We feel that before any other enhancements are made at the property, deer must be excluded. Their overwhelming presence amplifies the effects of invasive species and slows regeneration by native species once invasives are removed.

Other improvements to the site such as the addition of interpretive panels and a kiosk at the trail head will make the site more visitor friendly. Our Boardwalk Challenge grant will be leveraged with our U.S.F & W Service grant to make improvements to the boardwalk which will allow access to wetter portions of the site. We are fortunate to be working with the Ken Lockwood chapter of Trout Unlimited to design a plan for enhancements to Silver Brook, to reduce erosion of the banks, and replant native species to reduce sedimentation into the brook.

We have had a couple of really productive workdays at the site over the last months, and thank the employees of Sanofi-Aventis and Goldman Sachs for all their hard work. If the corporation you work

for would like to organize a group of volunteers to help at the site, please contact us.

We are also interested in gathering volunteers for regular workdays, especially those with some carpentry, or power tool skills. Call Hazel England at (973) 538 3500 x.20 to volunteer.



Hope Behrens, a Team Captain from the Goldman Sachs work day, helps install commemorative trail ID signs.

Contact us at 973.538.3500 or visit our web site at www.greatswamp.org

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Non-Profit Organization
Permit #2
New Vernon, NJ 07976

Great Swamp Watershed Association
Post Office Box 300
New Vernon, NJ 07976