

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



ACROSS THE WATERSHED

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Summer 2003

The Great Swamp Watershed Association

Vol. 23 No.3

Honoring Volunteers

At this year's bi-annual Volunteer Recognition party, volunteers extraordinaire Kathy Abbott, Larry Chase, and Gina Snell were honored. Richard Tighe was also presented with the 2003 Abbie Fair Good Government Award.



"Keep 'em coming!" Board of Trustees member Dan Harding mans the grill. He was kept busy feeding some 50 dinner guests.

Since volunteers are the backbone of the Watershed Association, they are all treated to dinner and entertainment and a few of them are honored.

About 50 people attended this year's dinner at the home of Michele and Buff Blanchard. Although there was hail, rain, and thunder throughout the day, the sky cleared about a half-hour before the party began and it was a beautiful evening. After a delicious dinner provided by the board of trustees and members of the Outreach and Education committee, the crowd divided into three teams to play "Watershed Jeopardy." Hosted by John Malay, the winning team won by \$1 and had their pick of a variety of "Swamp Stuff."

Please join us in thanking Kathy Abbott who was honored for coordinating and editing "Swampwatch," which appears in the quarterly newsletter and has been instrumental in training and setting up presentations to schools of our watershed model; Larry Chase who has spent countless hours developing grant proposals and researching grant opportunities for the Watershed Association; and Gina Snell who has been a dedicated volunteer membership director for the last ten years. They have each provided an invaluable service to the Great Swamp Watershed Association and we are extremely grateful.

Richard Tighe Receives Abbie Fair Good Government Award

On May 30, 2003, Abbie Fair, Director of ANJEC (Association of New Jersey Environmental Commissions) and Julia Somers, Executive Director of Great Swamp Watershed Association, presented Richard Tighe of Morristown, with the 2003 Abbie Fair Good Government Award. According to Somers, the Abbie Fair Good Government Award is given to an elected official who has high ideals and puts "good government" into action.

Abbie Fair presented the award to Dick Tighe and said, "In a time when politics often has a bad name, it's so important to recognize and applaud individuals who are committed to public service and good government. Dick has worked tirelessly and without fanfare to take action to protect the environment and support regional planning."

Julia Somers was quoted as saying, "We give this award in recognition of Abbie's multiple terms on the Chatham Township Committee and in recognition of her ability to work effectively and promote sound land use decisions and planning in Chatham Township. It is also in recognition of her efforts to protect the

environment of the Great Swamp National Wildlife Refuge. 88% of Chatham Township is in the Great Swamp watershed. Wise and courageous leadership and support for the State Plan made Dick a natural to receive this award.

Dick Tighe is a Councilman in Morristown and was chair of the Morristown Planning Board. He guided Morristown to become the first Regional Center so designated in the State Development Plan. As Councilman, he has helped guide Morristown in its current resurgence and promoted the goals and policies of the State Plan."



(left to right) Abbie Fair, Dick Tighe and Watershed Association Executive Director Julia Somers

'Do The Swamp Thing' Wraps Up Third Year

On April 26 at the Somerset County Environmental Education Center, a month-long celebration of the many and varied recreational and educational resources in the Great Swamp watershed began. Although there were many human dignitaries at the opening, Georgette, the Peregrine falcon stole the show.

Coordinated by Great Swamp Watershed Association, this year's celebration highlighted family activities and raised awareness of the importance of environmental and historic conservation. On hand April 26 were State Senator Thomas Kean, Jr., Bob Blanchard, Chairman of the Watershed Association, Assemblyman Jon M. Bramnick, and Assemblyman Eric Munoz in addition to many local elected officials and representatives of participating environmental organizations.

Georgette, the Peregrine falcon had been rescued by the Raptor Trust. According to Len Soucy of the Raptor Trust, Georgette and her sister began life last June at the top of the George Washington Bridge, where the New York State Endangered Species Program had established a nesting box. Somehow both birds fell from the nest and landed on the upper roadway of the bridge, where they were found. Although her sister was dead, Georgette was still alive, but just barely. She had suffered multiple serious injuries including a severe concussion. Rescued by the Raptor Trust, Georgette has been nursed back to health, but will never be able to fly again. She has, however, learned how to be polite in public and serves as an ambassador for the Raptor Trust.



From April 26 through May 24, "Do the Swamp Thing 2003" was sponsored by Great Swamp Watershed Association, Kings Super Markets, Inc., PSEG, and Recorder Community Newspapers. Special events were held at Refuge Headquarters in Long Hill, Morris County Outdoor Education Center in Chatham, Morristown National Historical Park, New Jersey Audubon Society Scherman-Hoffman Sanctuaries in Bernardville, and Somerset County Environmental Education Center and Lord Stirling Park in Basking Ridge.

In addition, three winners were picked from Special Drawing entries received from Kings Super Markets and on the Watershed

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Maersk Sealand Supports "Adopt-a-Stream"

By Diana Lemberg

One of the Great Swamp's new neighbors in Madison has announced its support for the Great Swamp Watershed Association's "Adopt-a-Stream Program" to improve the quality of local streams. Maersk Sealand recently moved into the Giralda Farms complex, close to the Loantaka Brook, the most polluted of the five major streams in the Great Swamp Watershed region. Loantaka Brook runs through parts of Morristown, Morris Township, Harding, Chatham and Madison before flowing into the Passaic River. "Maersk's sponsorship will help Adopt-a-Stream to identify and measure the level of pollutants in the Loantaka Brook," said Bonnie Gannon, Development Director of the Watershed Association.

Healthy wetlands perform a number of critical functions. They nourish bio-diversity and cleanse and replenish drinking water supplies. High levels of pollutants, however, interfere with these natural processes. Excess nitrogen and phosphorus in a stream disrupt the cycle of plant growth and decay, throwing its ecosystem out of balance. While

Loantaka, especially, has been degraded by pollution, all of the streams of the Great Swamp — one of New Jersey's few remaining freshwater wetlands and drinking water source for nearly 1.2 million households in the region — are threatened.

"Maersk was very enthusiastic to jump on board the Adopt-a-Stream Project. They've been good corporate citizens," said Gannon. Maersk joins fellow Giralda Farms-based companies Atlantic Mutual, Wyeth, and Schering-Plough to sponsor the Adopt-a-Stream project, and are part of the Watershed Association Corporate Council.

"The Watershed Association is a membership-based organization, but we also rely on corporate support for big projects like Adopt-a-Stream," Gannon continued. "Identifying pollutants in Loantaka is only the first step in accomplishing Adopt-a-Stream's goals. Long-term, the program aims to reduce pollution levels in all five streams in the watershed, and to continually monitor them."

Diana Lemberg is a summer intern. She is a junior at Princeton University.



Tom Andersen, President of Maersk SeaLand presents a check to Executive Director Julia Somers.

From the Desk of Julia Somers, Executive Director:

It is with very mixed emotions that I write about the end of the permitting process for Rose Pond at Chatham LLC.

In 1996, a series of applications began in Chatham Township to develop the property that in the office we refer to as the “Tublitz” property. Ramon Tublitz, who now lives out of state, was the owner of this beautiful L-shaped, 30-acre piece of land located on Shunpike next to DrugFair and the Madison Golf Course on Green Village Road. He sold it to the developer, Sterling Properties, best known in this region for the massive developments on North Passaic Avenue between Florham Park and Chatham Borough, in the floodplain of the Passaic River.

In 1996, Sterling Properties proposed to develop a 122-unit townhouse development. At the time, the land was zoned to allow “garden apartments,” so the application came before the Zoning Board of Adjustment since it needed a “use variance” from the Township’s zoning. The property, which includes a pond, made when the stream was dammed to create a swimming hole, has extensive steep slopes and wonderful, mature trees. It is sandy, part of the Loantaka Moraine which was the edge of Glacial Lake Passaic, and part of it was used as a sand mine by local builders decades ago.

In 1996, that first application to build townhouses would have obliterated every tree on the property and entirely regraded every steep slope to accommodate all the town houses. A municipal movement, eventually successful, began about this time to restrict development on steep slopes. This was followed by a new height ordinance, restricting the height of homes (existing grade all around to the eve of the house) with a primary goal of ensuring fire fighting capability for house fires. Both of these ordinances had a major impact on the ability to develop the Tublitz property. Also during this application, and particularly critical for protection of the Great Swamp National Wildlife Refuge, in 1997 Chatham Township became the first watershed municipality to adopt a “no-net increase” in stormwater runoff ordinance, both for volume and for runoff quality.

That first application to build 122 townhouses failed. It was followed by a second to build 96 townhouses which also failed because of the appeals of the Watershed Association and of neighboring property owners. Over this period, the Township undertook an extensive revision of the Master Plan, which resulted in the rezoning of the property for townhouses, rather than garden apartments. When the developer eventually returned with an application to build 56 townhouses it went before the Planning Board instead of the Board of Adjustment. No “use variance” was necessary.

Certainly 56 townhouses was better than 122, some of the steep slopes would now remain intact, a few of the most valuable trees would be protected, no height variances would be needed, and the new project (with a lot of essential direction from the Township’s Stormwater Engineer, Michael Bennett) would meet the stormwater ordinance. Neither will the project be gated and segregated from the rest of the community. But the restoration of the stream on the property remained a sticking point for the Watershed Association.

Over the last seven years, countless meetings have been attended by Watershed Association representatives, our attorney and environmental engineer. We can take considerable credit for the incremental improvements in the project. Township approvals have been granted (with the lone dissenting voice being that of Township Committeewoman Abbie Fair.) Now only NJDEP permits for wetlands loss, stream encroachment permitting and dam safety remained and GSWA submitted extensive written comments on those permits, meeting twice with NJDEP.

On June 4 NJDEP gave Sterling Properties the permits it needs to begin development of Rose Valley. Our arguments for stream protection met with some success at NJDEP. However, overall our opinion has not changed on this project. While it has improved considerably since 1996, the property is wrongly zoned, the project should not have been approved, and ideally the Township should have purchased it for open space. In fact, with this approval, the Township’s approval for Oak Knoll School’s athletic fields on Green Village Road, and the construction of the 29 age-restricted townhouses on the old Heyl Roses site that has begun, this part of the Township is about to massively change forever – not for the better.



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

Editor: Missy Small

Layout: John Malay

Contributors:

Diana Lemberg

John Malay

Karen Patterson

Missy Small

Stream Team Analyzes “the Data”

By Karen Patterson

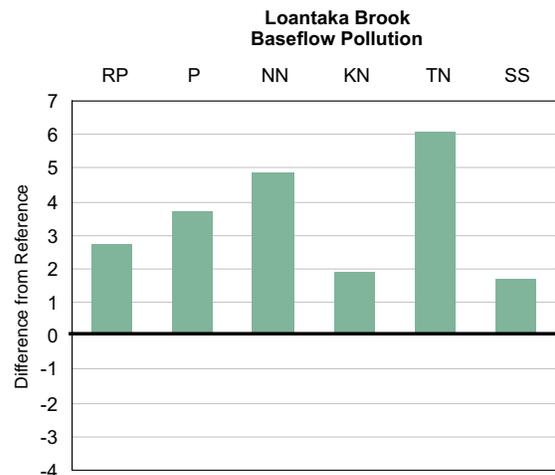
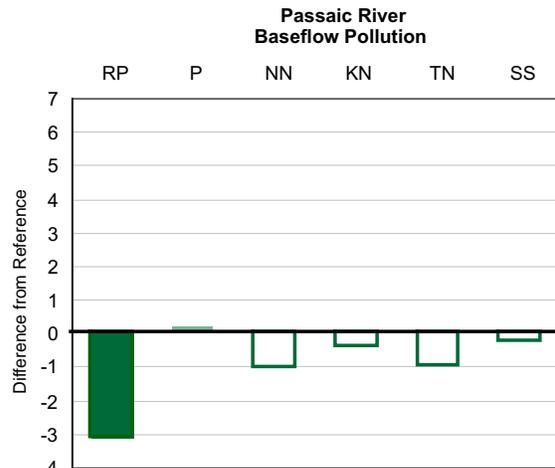
The Great Swamp Watershed Association Stream Team continues to thrive, with 12 very active members who attend monthly meetings at the Watershed office and of course get their feet wet (if their waders happen to have holes in them...) monitoring the streams on a regular basis. While monitoring water quality (through the collection of water samples that are then sent out to a lab for analysis) and quantity (through the measurement of water flow under various rainfall conditions), as well as maintaining the monitoring equipment, remains a central part of what the volunteers do, our members have also become more involved in interpreting the water quality monitoring results (“the Data”) we receive back from the lab.

Since 1998, and in conjunction with the Ten Towns Great Swamp Watershed Management Committee, Stream Team volunteers have been monitoring the five main tributaries of the Great Swamp: the Black, Loantaka, Great and Primrose Brooks, and the Upper Passaic River for volume of water, nutrients (phosphorus and nitrogen) and sediments flowing into the Great Swamp National Wildlife Refuge (see <http://www.greatswamp.org/Newsletter/newsletterSpring2002.pdf> for more background on the problems with nutrients and sediment).

In June of last year, the Ten Towns Committee developed and released water quality standards for each of the five streams (see <http://www.greatswamp.org/Newsletter/newsletterfall2002.pdf> for the full article on development of the standards). These standards, or references as the Stream Team prefers to call them, represent the target goal for water quality for each individual stream. Because the health of the five streams in the watershed varies widely (e.g., two have sewage treatment plants that discharge effluent to them), it is important to recognize that they probably will never all reach the same level of quality as the more pristine Passaic River and Primrose Brook (both trout production streams). Thus each stream has its own target or reference for phosphorus, nitrogen and sediment.

The Stream Team members have been working to come up with an effective way to interpret the data collected to date and communicate that information effectively to Watershed Association members, appointed and elected officials, and the public. With the expertise and help of Stream Team member Dr. Robin Timmons in particular, we have begun to develop graphs that will show how each stream is doing over time, and in comparison to the references for each stream. This set of graphs shows the average concentration of pollutants in the base flow (found under dry weather conditions) for the Passaic River and Loantaka Brook and how much that average differs from the reference. The baseflow graphs for the other three streams, and the graphs for average concentration of storm flow (found under conditions of rainfall or melting snow and ice) will be posted on the Watershed Association web site shortly. In these graphs, negative is good, and positive is bad!

We are in the process of revamping the water quality monitoring portion of the Watershed Association web site (www.greatswamp.org). We have already added sub-watershed maps for each of the five streams. Narrative descriptions of each of the sub-watersheds are coming soon, along with descriptions of each of the volunteer tasks being carried out, minutes from monthly meetings, and of course, more data!



Stream Pollution 1999 - 2002

The graphs show standardized differences from the 2002 references developed for each stream by F.X. Browne, Inc. for Ten Towns.

Positive differences (in black) indicate concentrations worse than the reference.

Negative differences (in green) indicate concentrations better than the reference.

Absolute differences greater than 0.80 are large, 0.50 moderate and 0.20 small.

Shaded bars indicate statistically significant, single-sample t-test ($p < .05$)

RP = Reactive Phosphorus; P = Phosphorus; NN = Nitrates + Nitrites
KN = Kjeldahl Nitrogen; TN = Total Nitrogen; SS = Suspended Solids

Spring Brings Membership Drive

Every spring the flowers bloom, trees grow new leaves, the weather gets warm, we celebrate our local resources with “Do the Swamp Thing,” and the Great Swamp Watershed Association holds a membership drive in order to continue its environmental programs.

According to Robert Blanchard, Board Chair, “With the support of our 2,500 members we have preserved more than 106 acres as permanent open space; developed a conservation area in Harding Township in which local natural habitats are explored and tested; published and implemented an comprehensive greenway and open space plan helping communities identify critical land to be preserved; provide educational support to members of local governments, Planning and Zoning Boards, as well as Environmental Commissions, produce and distribute educational videos, provide continuing environmental education to area teachers; and take a working watershed model into area schools and teach school children what a watershed is, how people impact the environment, and how each of us can make a difference.

The Watershed Association has established a comprehensive water quality and quantity monitoring program to help protect our drinking water. Stream monitoring stations have been installed in each of the five tributaries to the Great Swamp. Devices at each

station monitor the flow of water into the swamp and collect water samples during rainstorms, which are then tested for pollutants. We have also created the first Adopt-A-Stream program, utilizing corporate support to identify and measure the level of pollutants in Loantaka Brook (the most polluted of the five streams flowing into Great Swamp), and identify strategies to reduce pollution. As funding allows, the program will be expanded to restore Loantaka Brook to healthier conditions and include the other streams in the watershed.”

Julia Somers, Executive Director said, “Although our work is dedicated to protecting the environment, educating the public, and preserving our quality of life, it’s people that really make the difference. The Watershed Association relies strongly on membership dues and contributions for financial support. Our members span ten towns and two counties, but are only a tiny fraction of the population. We need a strong response to this campaign in order to continue to help preserve open space, protect animal habitats, and serve as environmental advocates before local planning and zoning boards.

Please become one of the people who make a difference and encourage your friends, family, and neighbors to join today.”

Giving Keeps the Watershed Association Afloat

The Watershed Association has, historically, received a huge percentage (72%) of its income from contributions. According to Bonnie Gannon, Development Director, “we have always relied heavily on individual giving and grants to support our work, but over the past few years funding from grants has been declining, which leaves us ever more reliant on individual contributions.”

“Although individual giving remains steady, the economic climate has been uncertain and we have to be prepared for all financial scenarios,” Gannon continued, “that’s why we’ve begun to focus on our endowment fund; it’s a way to secure the future of the Watershed Association.” The development committee is asking members and friends to make a 3-year pledge today to the Watershed Association Endowment Fund to enable us to create a sound financial foundation. To make a contribution or pledge, contact Bonnie Gannon at 973-966-1900 x 18, or at bgannon@greatswamp.org.

Watch Those Easements *By John Malay*

Towns throughout the Watershed (and elsewhere) are working actively to purchase open space for purposes of recreation and preservation. They protect additional land by accepting conservation easements, which prevent disturbance or development while leaving the actual property ownership in the hands of a private party.

However, once land is protected, it needs to be monitored. Town residents who want to see on-going preservation of protected lands need to urge their local governments and non-profit groups to set up land stewardship programs. Land stewards perform regular inspections of protected properties in order to ensure that the terms of the preservation are kept.

This is especially true of land protected by an easement. Many times, subsequent owners of the property will be unfamiliar with the original intent and terms of the easement (which is recorded as a modification to the deed for the property) and need to be educated and informed.

The Land Trust Alliance (www.lta.org/) has many tools and suggestions for monitoring conservation easements and other encumbered land, e.g. land bought with Green Acres money or from an Open Space Trust Fund. It is often up to local residents to get their towns to start a monitoring program. Acquiring land makes headlines, maintaining land costs taxpayers money.

A good place to start is with your local Environmental Commission. If your town has a Shade Tree Committee or Open Space advisory group you can contact them as well. Local officials in municipal engineering and planning offices may be able to help by providing maps and site plans. You should coordinate any effort with your town attorney in order to cover legal aspects of stewardship. You will need permission both from the landowner as well as the holder of the easement before you can inspect a property.

The results are worth the effort. Land that is preserved and looked after will provide benefits for generations to come.

Swamp Watch — Local Environmental

Bernards Township

Primary Results

Bernards Township Planning Board member John Malay, together with Incumbent Carolyn Kelly, won the recent primary for township committee. Both are expected to win the general election in November. John is well known to Watershed Association members as the Association's Technical Coordinator as well as Project Director for the Conservation Property in Harding Township. He and Carolyn, who ran as Independent Republicans, were both involved in writing the new township Master Plan which incorporates innovative planning ideas to preserve community character and manage growth. Losing candidates in the primary were current Mayor William Holmes and former planning board member James McTernan.

Millington Quarry Redevelopment Plans

In accordance with Bernards Township's quarrying ordinance, Millington Quarry representatives have submitted a new reclamation plan to the township planning board. According to the plan, the mining operation is anticipated to end in about eight years. At that time, the mining pit will begin to fill with rainwater over a period of 27 years to create a lake for the rest of the property which will be developed for 41 new homes. Within the last 18 months, the Quarry has already submitted applications for four subdivisions totaling 27 lots. So far approvals have been given for 12 lots. The most recent application for six new homes on two cul-de-sacs would require demolition of three small mid-19th century houses which are part of the historic neighborhood that emerged by the old railroad crossing in Lyons.

Ann Parsekian

Bernardsville

At the intersection of Hardscrabble Road and Chestnut Avenue is a beautiful pond on the Category One stream Indian Grave Brook created by a historic dam. About three years ago, restoration of this pond, which is privately owned, was completed including dredging, installation of an underwater aeration system to promote pond health, creation and restoration of wetlands, and landscaping of the area around the large pond. A great deal of care was taken with this restoration, which could serve as a model for pond restoration in the watershed.

Since restoration was completed, the pond has experienced new sediment entering it from upstream; some of this is natural, but some is caused by under-regulated streamside construction. However, over the past year a tremendous amount of what appears to be golden construction sand has been washing into the pond and has entirely filled parts of it. One potential source of this sand appears to be the new playing field built behind the Elementary and Middle Schools on Seney Drive in the Borough. Other potential sources of the material are also being researched, as is a long-term solution to the tragic damage that has occurred, and is an ongoing problem for the stream and the pond. Category One waters are the nation's most pristine and support the broadest variety of flora and fauna; they deserve the highest levels of protection and are not permitted to be degraded at all.

Julia Somers

Long Hill Township

The Great Swamp Greenhouse presented its revised plans to the Long Hill Township Board of Adjustment on May 20th. Tom Murphy, the applicant's engineer, was questioned closely about both the history and relative permeability of what they referred to as a dirt farm road on the drawings. Although the applicants claim to have reduced the impervious coverage to equal that approved in 1996, questions remain on the calculations, and the applicants still have no stormwater management facilities planned or in place to prevent runoff and pollution into the adjacent Great Swamp Refuge. The proposed plans represent a large increase in the availability of year-round customer parking. The next hearing will be held on September 2nd with expert testimony being presented by the Watershed Association. Stormwater management, water use, and water availability for fire protection are likely to be key issues.

Some readers may remember the Morris Property in Meyersville from more than a year ago. The planning board had denied the application for subdividing their lot to build a large house behind the existing house in a flag-lot configuration, and had cited many unresolved stormwater issues. The applicant appealed the decision and the court ruled against the denial and remanded it back to the board for a new hearing to approve with reasonable conditions. A Planning Board subcommittee is holding non-binding preliminary discussions with the applicant and the new proposal (which must be approved in some fashion) will be coming before the board within the next few months.

On the horizon, we need to keep a close watch on the Copper Springs Swim and Tennis Club in Meyersville. Under new ownership, the facility is under scrutiny by Long Hill's zoning and enforcement officer for possible expansions and construction that have not been reviewed by the appropriate township boards. Stormwater from the facility drains into a tributary of Black Brook.

Len Hamilton

Morris Township

As of this writing, the St. Mary's Abbey proposed site plan for a Continuing Care Retirement Community (CCRC) is being reviewed by the Township's Technical Coordinating Committee. When that Committee "deems the application complete," it will be added to the Planning Board's agenda. Since the most recent Planning Board meeting was cancelled due to lack of applications, we assume the application will begin hearings immediately.

At its most recent meeting, the Environmental Commission heard testimony from Dr. Stephen Souza who has been hired by the Township to review the environmental issues raised by the application. Dr. Souza indicated that there were no "big red flags" raised by the information he has reviewed to date, but there is much information still missing that he needs on issues such as stormwater management, surface water quality and the presence of threatened and endangered species on the site.

The application includes not only the CCRC but also the addition of a number of playing fields, parking and a field house at the Sugar Loaf Road entrance to the Abbey property. This part of the Abbey property is on the historic Guerin Farm, next to the Jockey Hollow Section of the Morristown National Historical Park. The Guerin Farm was occupied by George Washington's troops during the Revolutionary War.

In our "spot zoning" lawsuit against Morris Township and St. Mary's Abbey, we expect an early October trial date before Superior Court Assignment Judge, Theodore Bozonelis. Preparation for trial continues.

Morris Township is working to complete its Wastewater Management Plan (WMP). Recent letters to NJDEP indicate the goal is to finish the work before the end of this year. At that time, public hearing(s) will be held on the environmental protection ordinances that must be adopted by the Township as part of its WMP, and on the WMP itself, which should project out 20 years the development and sewer capacity needed by the Township and the surrounding areas served by Township sewage treatment plants.

Julia Somers

Morristown

The Watershed Association continues to monitor the application by Temple B'Nai Or to significantly expand its facility on Overlook Road. The Association is focusing on the wetlands, stormwater and drainage issues pertinent to the application, although traffic and other issues are of great concern to neighboring homeowners. The Watershed Association recently alerted the Board of Adjustment to the possibility of wetlands and wetlands transition areas close to the B'Nai Or property. These areas have not been delineated on the site plans, but may impact the design of the proposed stormwater management facility and other aspects of the application. Much of the proposed drainage and parking improvements could be within the jurisdiction of the NJDEP.

The Morristown Environmental Commission has nearly completed its first-ever Environmental Resources Inventory (ERI). The ERI shows the location and extent of wetlands, steep slopes, floodplains, groundwater recharge areas, and critical soils in Morristown, and lists the wildlife and vegetation within the town. The ERI will serve as the foundation for the development of ordinances to protect the environmental resources identified. The Commission is currently working with the Planning Board on the first of these ordinances, for the protection of steep slopes. Morristown, as a regional center, is already heavily developed; thus its remaining undeveloped land areas with steep slopes, wetlands or other environmental sensitive features is coming under increasing development pressure. As a result, there is an urgent need to create and pass protective ordinances to protect these environmentally sensitive areas.

The Environmental Commission is also about to embark on the creation of Morristown's first-ever Open Space and Recreation Plan. With funds from an ANJEC Smart Growth Planning Grant and an allocation from the town, the Environmental Commission will work with the Planning Board and a consultant to identify and map all existing open space, assess future open space and recreation needs, and identify now-vacant parcels for acquisition as protected open space. A major goal of the Open Space and Recreation Plan will be to identify and create linkages between pockets of open space to create "greenways" for both people and wildlife to enjoy and benefit from.

Karen Patterson

Chatham Township

Sunset Lake Pollution a Classic Case of Storm Sewer Misuse

Before ecological consciousness became widespread in the 1970s, storm sewers were tacitly acceptable places to pour used motor oil, paint, and other toxic chemicals. Though most people now know that water in storm sewers flows directly into local waterways, and thus that storm sewers are not for litter and pollutants, in April someone poured two cans of oil-based deck sealant down a storm sewer in Madison. The sealant ended up as a toxic film floating on Sunset Lake in Chatham, near the Hickory Tree shopping mall.

Residents called the Chatham Township Police, who found that the source of the contaminant was an upstream storm sewer pipe from Madison. Madison Police found that the polluting chemical matched two emptied cans of deck sealant which were left on a catch basin grate on Garfield Ave, Madison. The Environmental Crimes Unit of the Morris County Prosecutor's Office, the Madison police, and the County Sheriff's Department are investigating. The NJ Department of Environmental Protection supervised the cleanup of the pond.

Fairmount Country Club Begins Pro-Environment Measures

The 96-acre Fairmount Country Club has taken two steps recently to care for its natural resources.

In April, the club presented to the Chatham Township Planning Board a mapping of its streams and flood plains as part of its application for an expansion of its clubhouse and parking lot. Two tributaries of Black Brook run through the golf course. Though the Planning Board waived the development application requirement for a full site plan that legally includes an Environmental Impact Statement and mapping of wetlands, trees and aquifer recharge areas, the club's stream mapping is a major step in inventorying and safeguarding the township's natural resources.

Several years ago, when the club received approval for building plans without submitting a legally-required full property site plan, club management had promised that at its next request for development it would perform the required site plan for its entire golf course property.

Also in April, the club announced to the Planning Board that it is initiating a six-step integrated pest management lawn program through the Audubon Society. The intention is to protect golfers and wildlife from toxic chemicals.

Planning Board Approves Oak Knoll Playing Fields

On June 2nd, the Planning Board gave final approval for the Oak Knoll school of Summit to build playing fields on 13.4 acres off Green Village Road near Shunpike Road. The approval was conditioned on Oak Knoll submitting an approvable stormwater management plan.

In May, Township Engineer Michael Bennett and the Environmental Commission had expressed to the Planning Board their concern with the vagueness of Oak Knoll's plan for maintenance and monitoring of its storm water detention basin outflows and its "stormceptor." Since the school will remove over 800 trees and fill in wetlands, the school has had to fulfill the Township's "no net increase in storm water runoff" ordinance through a variety of artificial storm water management techniques.

At its May 19th meeting, the Planning Board again asked Oak Knoll for a conservation easement that would provide a link in the township's planned hiking/biking greenway, but school representatives declined to provide this public legacy. The land is zoned for private housing lots.

The school plans to break ground for the fields this summer and begin use in Fall 2004.

Kathy Abbott

Mendham Township

The Morris Area Girl Scouts Council's (MAGSC) application to construct a new girl scout camp on the site of the old camp continues before the Mendham Township Board of Adjustment. As of this writing, the Board has granted MAGSC a use variance to increase the number of girls who may camp at any one time on a daily basis to 300 plus staff of 50, and to 170 plus staff overnight. These numbers are for year-round use. The site plan for the campsite is presently being reviewed by the Board.

At the most recent Board of Adjustment meeting, MAGSC informed the Board and the public that it is now proposing to use only composting toilets for the camp, and will build the small troop houses without showers. Showers are proposed to remain in the large troop house (40 girls plus adults) and in the pool house. The Watershed Association welcomes the move to composting toilets, but would like to review the plans when they are committed to paper. At this time, many details still must be added to the plans, including conservation easements. We also remain concerned about the lack of any water supply/consumption data at this time. MAGSC's representative indicated this information will not be available until the end of the summer. Nor will the groundwater quality testing results, which are needed for the application to NJDEP to amend Mendham Township's Wastewater Management Plan.

The Board discussed approving the improved access road and the new swimming pool ahead of the remainder of the project.

Julia Somers

Madison

Madison Developing Open Space Plan

Madison Borough has retained the Morris Land Conservancy to assist in development of an Open Space and Recreation Plan. The Committee, chaired by Council member Astri Baillie, includes Council members Donald Bowen and Mary Anna Holden, as well as members of the Board of Education, Environmental Commission, Shade Tree Management Board, Madison Matters, The Madison Parks Advisory Committee, The Garden Club, and the Historical Preservation Commission, as well as Borough residents. A public forum on the planning process will be held on June 26.

Judy Kroll

Rolling Knolls Superfund Site

by Diana Lemberg

On April 30, 2003, the Environmental Protection Agency (EPA) added the Rolling Knolls landfill to its National Priorities List, making the contaminated site eligible for a federally administered cleanup. The retired landfill occupies 187 acres in Chatham Township. Forty acres of the site overlap onto the Great Swamp National Wildlife Refuge, a 7,400-acre nature preserve in Somerset and Morris counties.

Rolling Knolls was the site of municipal and industrial dumping for over three decades before closing in 1968. Thirty years later, contaminants – including mercury and PCB's – still lingered in the soil, guests that had long overstayed the permissive welcome of outdated waste disposal laws. Rolling Knolls had lay fallow, a pockmark on the edge of the Refuge, until an investigation by Watershed Association consultants six years ago.

Pharmaceutical compounds like barbiturates and muscle relaxants are just a few of the pollutants that they identified in Rolling Knolls' ground and surface water. And these pollutants have been leaking. If current laws require toxic chemicals to be disposed of in sealed vessels, then Rolling Knolls is an open container: the same contaminants found in its surface and sub-surface soils were detected in off-site surface water, sediments, groundwater, and fish.

"The site [has had] a measurable impact" on its surrounding environment, said environmental engineer Paul Fox. The Wildlife Refuge, on the southwestern edge of Rolling Knolls, is home to numerous endangered and threatened species.

Pollution at Rolling Knolls poses a threat to human health as well. Water from the site flows into the Passaic River, which provides drinking water to 1.2 million residents of Central New Jersey.

The initial findings led to another investigation, this time by the U.S. Environmental Protection Agency (EPA). Using its Hazardous Ranking System (HRS) to rank potential NPL sites, the EPA gave Rolling Knolls an HRS score of 58.31. A score of 28.50 is considered high enough for a site to be eligible for Superfund remediation.

However, Fox believes that the EPA investigation was incomplete. "It was developed without any groundwater migration, ground water to surface water migration, or air migration score,"

Fox said, noting that Rolling Knolls' HRS would have been higher if these criteria had been included in the investigation.

From a geological perspective, Rolling Knolls is in a particularly sensitive location. Its contaminated soil sits atop sand and gravel deposits that a receding glacier scratched out of rock some 16,000 years ago. The Great Swamp surrounds this peninsula of porous deposits on three sides, and a thick swath of clay – more than 150 feet thick – extends across the swamp. The clay layer also runs underneath the sand and gravel deposits sitting beneath Rolling Knolls, and the permeability of these layers is very different: if the deposits are cotton, the clay is Gore-Tex. So any chemicals dumped in Rolling Knolls would seep through the deposits and off of the clay, and into region's water supply.

"The geological data clearly show that any shallow groundwater found under the [Rolling Knolls] site would only have one place to be discharged – the Great Swamp and its surface water bodies," said Fox. "We believe this to be a serious matter."

The EPA did not include pharmaceutical pollutants in its HRS score, either. Fox called these compounds "a significant concern."

Still, Rolling Knolls' NPL listing makes clear that the EPA thinks that a cleanup merits federal aid. What is unclear is the kind of aid it will receive. Current Superfund legislation delimits two classes of federally administered cleanups, for industrial or federal facilities. Industrial facilities are sites where it is possible to locate former users of the site as liable for the cleanup; the federal designation exists for the "orphan" sites whose polluters are defunct. The federal government pays for federal facility cleanups, but Superfund work at these facilities has been known to proceed slowly.

For now, Rolling Knolls has been proposed as an industrial, rather than federal, facility, a designation Fox agrees with.

"Sufficient information exists to identify viable former users of the site. Only a small portion of the site extends onto the [Refuge]; listing this site as a federal facility would only serve to exacerbate the present site remediation backlog at the Department of Interior and would not result in an expedient investigation and remediation of the site."

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

Free Nature Walks: Scherman- Hoffman Wildlife Sanctuary; Every Friday and Saturday, 8-9am. No pre-registration—just show up! Walks focus on birds, butterflies, wildflowers, and all other aspects of natural history. Led by Scherman-Hoffman naturalists, these walks are fun and informative. Meet at the Hoffman Parking Lot. (908) 766-5787

Natural History Day Camps; Scherman-Hoffman Wildlife Sanctuary. All our day camps focus on individual and small group discovery. At the end of our program, children will have grown in their comfort in, affection for, and knowledge of the natural world. (908)766-5787

Ford Mansion Tours; 10am, 11am, 1, 2, 3, 4pm Daily. Morristown National Historical Park. (973) 539-2016

July

4 - Somerset County Park Commission Family Fun Festival

4-11pm: Pony rides, musical entertainment, fireworks display. North Branch Park, Milltown Rd., Bridgewater. (908) 722-1200 x225

11, Great Swamp Heron Rookery

6pm till dusk: Observe many of the breeding birds of GSNWR in addition to the 30 or 40 Great Blue Heron's nests at the rookery. Meets at the Friends' office on Pleasant Plains Road, carpool to the rookery. With Mike Anderson. Free. (908) 766-5787

12, 1st Moonlight Horse Ride

8:30pm - 10pm: Open to riders twelve years of age or older who can walk, trot, and canter with control on the trails. Somerset County Park Commission Lord Stirling Stable, Basking Ridge. (908) 766-5955

12 & 13, Camp Stirling

A weekend camp including educational activities, crafts, games, hayrides, movies, riding, and camping in the indoor ring for adults. Somerset County Park Commission Lord Stirling Stable, Basking Ridge. (908) 766-5955

19, Garden Party

The fourth annual "Garden Party" will be held from 1pm - 5pm at the Perennial Garden (Parking Lot F). The party will feature lectures, workshops, and Horticulture staff to answer questions. Plants, horticulture related items, and refreshments will also be available. Musical entertainment will round out a beautiful summer's day in the park. Somerset County Park Commission Colonial Park, Franklin. (732) 873-2459

20, The West Indies in the American Revolution

1, 2, 3 & 4pm: The Revolutionary War wasn't fought just in the 13 states. It was a world war. Learn about the role of the West Indies during the

American Revolution when you meet one of Washington's aides on a tour of the Ford Mansion. Morristown National Historical Park. (973) 539-2016

20, Summer Nature Ride Friends of Lord Stirling Stable event

This ride is an opportunity for non-riding family members to ride with their equestrian relatives at a leisurely walk for an hour on the trails. Somerset County Park Commission Lord Stirling Stable, Basking Ridge. (908) 766-5955

26, Tools of the Farmer

1:30 - 3:30pm: Come to the Wick House to see and learn about the variety of tools used by colonial farmers, such as Henry Wick, in their daily tasks. Watch shingles being riven and see an 18th century version of the lawnmower. Morristown National Historical Park. (973) 539-2016

27, Children in the American Revolution

1, 2, 3 & 4pm: Children were part of the war too. Learn about the role of children during the Revolutionary War when you meet one of Washington's aides on a tour of the Ford Mansion, Morristown National Historical Park. (973) 539-2016

27, Sunday Dragonfly and Butterfly Walk

9:30am to mid-afternoon: Join associate naturalist Tom Halliwell to search for butterflies and dragonflies. Learn the essentials of butterfly and dragonfly identification, or chart the species changes as the summer progresses. Beginners welcome. Close-focusing binoculars are helpful. Bring lunch. Sussex Branch Trail. (908) 766-5787

27, Introductory Horse Ride

A one-hour trail ride with a brief lesson beforehand. This program is geared for people who would like to become more familiar with English saddle riding. Must be a minimum of twelve years old. Somerset County Park Commission Lord Stirling Stable, Basking Ridge. (908) 766-5955

August

2, 9, 16, 23, 30, Spin A Yarn

1:30- 3:30pm: Visit the Wick House to see how the average American once made yarn or thread without a spinning wheel. Learn how something simple such as the drop spindle opened the way for the invention of walking wheels and later the sitting spinning wheel. Morristown National Historical Park. (973) 539-2016

3, Invalids & Lunatics: The Disabled in the American Revolution

1, 2, 3 & 4pm: Many soldiers became physically or mentally disabled as a result of their service in the Continental Army. Meet one of Washington's aides on the Ford Mansion tour and discover how America dealt with its invalid soldiers and how some continued to serve despite their injuries. Morristown National Historical Park. (973) 539-2016

9, 23, Cold Hearth, Warm Spark

10 & 11am: The morning cooking fire has gone out! Come to the Wick House to see how flint and steel were used to restart a fire. Learn why flint and steel were important for civilians, and how they also played a crucial role in the Revolutionary War. Morristown National Historical Park. (973) 539-2016

September

13, Autumn in the Perennial Garden

Join us for our seasonal tour as we highlight fall blooming perennials. The program will be conducted in the Perennial Garden (Parking Lot F). Somerset County Park Commission Colonial Park, Franklin. (732) 873-2459

What's That? Up In the Sky!

Long-time Watershed Association volunteer and naturalist Blaine Rothauser is also an accomplished nature photographer. (In addition, he is one of the main forces behind our Conservation and Restoration property in Harding Township.) Sometimes he takes his enthusiasm for taking pictures to great lengths, or, in this case, great heights.



Blaine Rothauser, slipping the surly bonds of earth, courtesy of your local equipment rental company.

This past May he rented a 60-foot boom lift machine and spent the first hours of light every day for a week photographing warblers, vireos and orioles in their playground high in the canopy of a hardwood forest. Braving wind, rain and vertigo he would wait patiently for his chance to capture on film common backyard birds in an environment rarely seen by the occasional birdwatcher.



Baltimore Oriole, 67 feet high up in a pin oak.

Look for more of Blaine's photos on our website.

"Do the Swamp Thing" Wrap Up

continued from page 2

Association website. Matt Rodman of Morristown is the grand prize winner of a shopping spree at Kings. Susan Palmer of Oldwick won second prize – binoculars donated by NJ Audubon Society, and Betty Estwin of Morristown won third prize – a North Face backpack donated by Blue Ridge Mountain Sports.

Kings Super Markets advertised "Do The Swamp Thing" on their grocery bags throughout the celebration and Recorder Community Newspapers distributed "Do The Swamp Thing" supplements in their newspapers, advertised events, and ran articles about the promotion each week.

Watershed Association Welcomes Summer Interns

Great Swamp Watershed Association is fortunate to have three dedicated summer interns to help keep the organization running smoothly:

- Diana Lemberg is a rising junior at Princeton University. Her internship with the Watershed Association is being funded by the Princeton Class of 1969 Community Service Fund. She is currently signed into the art history department, but reserves the



right to change her major until the last possible moment. Extracurricular hobbies include hiking and reading good nonfiction. Diana hails from Bernardsville, NJ.

- Kim Harding is from Basking Ridge and will be a sophomore at Middlebury College in the fall. She is leaning towards Art History as a major, but may not be willing to give up her attraction to Environmental Science. Her interests include visual arts, backpacking, and contemporary music (of the non-pop sort). Kim puts Tabasco on nearly everything she eats.

- Bill Appicelli is from North Haven, CT and will be entering his senior year at Drew University. An economics major, Bill has studied with an emphasis in policy and hopes to use it in law or graduate school to affect the way people think about the environment. As a former soccer and rugby player he enjoys spending time outdoors, including golf and mountain bike riding. He seeks to expand his knowledge of the watershed area and effective ways of protecting natural resources through his experience this summer.

Staff Notes

On May 28, **Jan Malay** gave a presentation on conservation easements in Jefferson Township. Sponsored by ANJEC (Association of NJ Environmental Commissions), the presentation was geared towards municipal officials and private residents in the Morris/Sussex County area.

Project Director **John Malay** and his running mate, Carolyn Kelly, ran in and won the Republican primary for township committee in Bernards Township. They will be the official Republican candidates in the November election. If successful, John will become a member of the Bernards Township governing body in January, 2004.

John also recently concluded a survey of conservation easements for the Chatham Township Environmental Commission (chaired by GSWA Trustee **Dot Stillinger**). John and Watershed Association Trustee **Ann Parsekian** continue their efforts with the New Jersey State Water Supply Plan advisory group, attending meetings on how the plan should be merged with the Smart Growth initiative.

Welcome and thank you to **Patsy Clew**, who stepped in as Director of Finance and Membership this summer. She is filling in for **Cheryl Amatelli**, who has moved on to greener pastures.

As chair of the Morristown Environmental Commission, Project Director **Karen Patterson** applied for an ANJEC Smart Growth Planning Grant to enable Morristown to do a comprehensive Open

Space and Recreation Plan. The E.C. received the grant and will begin working on Morristown's first-ever Open Space and Recreation Plan this summer and expect that it will take about six months to complete.

Julia Somers attended the first International Heritage Development conference, in Pittsburgh, PA. The Crossroads of the Revolution is proposed to become New Jersey's only National Heritage Corridor. Pennsylvania already has five federally designated corridors and six more state designated corridors. The entirety of the Great Swamp watershed is included in Crossroads. Julia found much of what she learned is applicable to our region and our watershed, with a particular focus on heritage tourism. In addition to visiting Pittsburgh and the site of "the battle of Homestead," she also toured Falling Water, Frank Lloyd Wright's architectural masterpiece.

Contributions

Many thanks for their generous donations...

Mrs. Renee Herman in memory of David Herman, Alfred Angelo in memory of Kathryn; Ron Dickhardt in memory of Florence and Albert Dickhardt; Alfonso Pescatore in memory of Lucas Pescatore; Susan Rawitz in memory of her parents and brother; and Henry Ryan in memory of Bernice Ryan.

Contact us at 973.966.1900 or visit our web site at www.greatswamp.org

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Save the date!
Great Swamp Watershed Association
Annual Meeting on November 14th!

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Rolling Knolls p.9
Calendar p.10

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

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