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ACROSS THE WATERSHED

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Spring 2002

The Great Swamp Watershed Association

Vol. 22 No.2

"DO THE SWAMP THING" RETURNS

Back by popular demand, 'Do the Swamp Thing' is a month-long celebration of the recreational and educational resources abundant in the Great Swamp watershed. From April 20th through May 19th GSWA will be publicizing events at venues throughout the watershed.

Now in its second year, '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 includes a six-page advertising supplement in many of Recorder's local papers, weekly ads highlighting a wide variety of family activities, publicizing the event on Kings grocery bags, and a special "Passport Drawing" for some great prizes.

A "Passport to Win" was in the advertising supplement distributed to nearly 40,000 residents on April 18. Anyone interested in the prize drawing is encouraged to get the "passport" stamped at any of the swamp sites throughout the promotion.

With a minimum of two stamps, participants would then send their passport to the Watershed Association for the special drawing to be held later in May. First prize is a one-minute shopping spree at Kings, second prize is a Pentax camera donated by Madison Camera Shop, and third prize is a pair of Nikon "naturalist" binoculars, donated by NJ Audubon Society.

As part of the "Do the Swamp Thing"

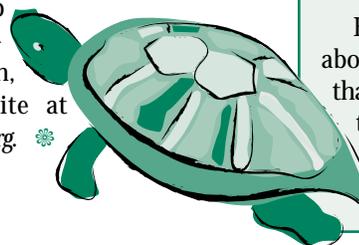
promotion, the Watershed Association is offering two special events for members. On May 5, Blue Ridge Mountain Sports, along with the Watershed Association will provide a hands-on canoe and kayak demonstration at the Somerset



County Park on Lord Stirling Road, in Basking Ridge from 1 - 5. On May 18 we are hosting a nature talk on the wide variety of animal tracks that rabbits, bears, frogs and others make. Children ages 6 - 12 are invited to create an ink project with stamps at the Bernardsville Library, 1 Anderson Hill Road from 2 - 3:30. Both activities are free. Call for reservations.

On April 21st, State Senator Rich Bagger and Assemblyman Tom Kean, Jr. highlighted the treasures of the Great Swamp in the inaugural event of "Do the Swamp Thing." Held at the Morris County Outdoor Education Center, crowds of people gathered to celebrate the incredible resources of the region and participate in a program about the importance of water.

For updated "Do the Swamp Thing" events, membership specials and calendar information, check our website at www.greatswamp.org ❁



Watershed Association Introduces Corporate Council

Robert Blanchard, Vice President of the Great Swamp Watershed Association, recently announced the formation of a Corporate Council to collaborate with the Watershed Association on projects both in the workplace and in area communities. This is the first time the Watershed Association has enlisted the support of local businesses.

Atlantic Mutual, Briarpatch, Honeywell, Integrated Communications, Kings Super Markets, Pharmacia, PSEG, Schering-Plough HealthCare, and Wyeth have joined forces with Great Swamp Watershed Association. According to Mr. Blanchard, "The Corporate Council will be a two-way street. The Watershed Association will provide guidance and advice to the companies on managing their business properties in environmentally friendly ways and provide environmental programs for their employees and families. The businesses offer the Watershed Association support through a variety of ways including financial resources, providing volunteers, and promoting activities through their websites and other company resources. We will also develop joint public awareness promotions, like 'Do the Swamp Thing', which is now in its second year."

Blanchard continued, "We're excited about the possibilities and appreciate that these corporations value our work to protect the Great Swamp watershed region." ❁

From the Desk of Julia Somers, Executive Director: Exxon Property Controversy Continues

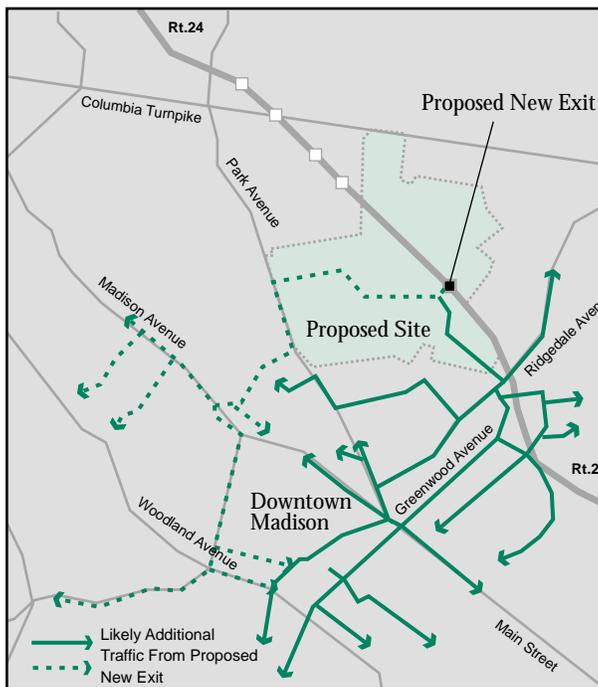
Redevelopment of the Exxon property in Florham Park continues to be a hot issue. On March 19, the Florham Park Council approved a new ordinance for the Exxon site which would allow massive additional office space on that site. 2.1 million square feet of commercial (office or light industrial) space, a large new hotel across Park Avenue from Hamilton Park and a child care center are proposed to be built on the site in two phases. At this time, phase two may be constructed if a new ramp is built from the south side of I-24 across the property to Park Avenue.

Although hundreds of residents and elected officials from Florham Park, Madison, Morris Township, Chatham Township, Chatham Borough, Harding Township and Morristown voiced their concerns at the meeting, the Florham Park Council voted without discussion to proceed without strengthening the ordinance in any way. Residents from neighboring towns and a variety of environmental, planning and traffic experts expressed profound concerns about water and environmental issues and regional traffic volume at this and other meetings, but to no avail.

Surely, this experience highlights the value of S-154, a bill sponsored in Trenton by Senator Richard Bagger (R-District 22) which would establish cross-acceptance of local master plans and intermunicipal review of certain development applications. In the Assembly, companion bill A-397 is sponsored by Tom Kean, Jr. (R-District 22).

Florham Park's new Planned Office Development ordinance will have a profound and lasting impact on the entire region and beyond. For a more detailed analysis of the ordinance visit the SEAMLESS (Southeast Morris League for Strategic Solutions) website at www.rosenet.org/seamless.

"Phase I" plans are shown on this map adapted from the SEAMLESS website. ❁



Julia

Across the Watershed is a quarterly publication of the Great Swamp Watershed Association. GSWA 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

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Conserving Water in the Great Swamp Watershed Region

By Karen Patterson

By now you have heard, read, seen and talked about the news that New Jersey's Governor declared a drought emergency on March 4, 2002*. Drought restrictions that include prohibitions on watering lawns, washing cars, driveways and boats, filling pools, serving water in restaurants, and more were published March 15th. The full Administrative Order (2002- 05) outlining the restrictions, and exemptions from them, can be read at <http://www.njdrought.org/ao02-05.htm>.

With rainfall totals down by 50% over the past three months, and 12.5 inches below normal since last June, the state's reservoirs are currently at 40% (and less) of their capacity. In comparison, the last time a drought emergency was declared in NJ, the reservoir levels were down to only 75% of their capacity, and that was during the summer months of 1999. As a result of the current drought, the state has implemented Phase 1 (of four possible phases) water restrictions with the initial goal of immediately reducing water consumption by 5%. If Phase I measures fail to conserve enough water, and rainfall remains scarce, the state could move to Phase 2 drought restrictions.

Phase 2 restrictions could limit daily residential water use to 50 gallons per person, require the use of disposable plates and utensils in commercial facilities, close state parks and forests for fire protection purposes, and increase water rates for commercial and industrial uses, among other measures. Phases 3 and 4 become increasingly draconian, with tap water restricted to sanitary purposes, requirements that rainwater be collected and used for non-sanitary water needs, the closing of restaurants and bars, the prohibition of air conditioners that use potable water, etc.

* Due to the lag time between writing this article for the GSWA newsletter and the appearance of the newsletter in your mailbox, it is possible, but not probable, that the drought emergency will have been lifted by the time you receive this.

So what are some practical steps that you and your household can take to help us all conserve enough water to avert a true disaster? First, it's important to understand the average allocations of household water use. According to WaterWiser (a water conservation and efficiency clearing house, found at www.waterwiser.org) average per capita indoor water used is as follows:

Indoor Water Use

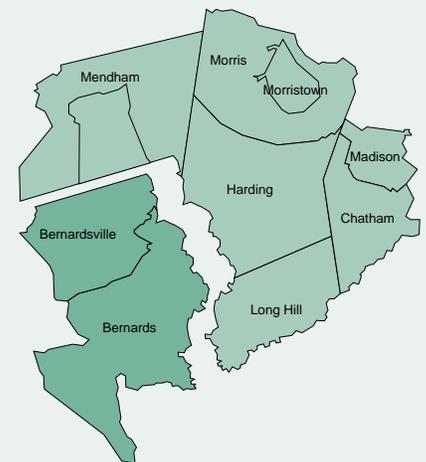
Showers = 16.8%. To conserve: take shorter showers; place a bucket in the shower to catch the water as you are waiting for it to warm up (better yet, leave the bucket in there while you shower to catch "runoff") — then use that captured water to water household plants, flush the toilet, and once the growing season begins, water shrubs, trees and flowers.

With rainfall totals down by 50% over the past 3 months, and 12.5 inches below normal since June, the state's reservoirs are currently at 40% (and less) of their capacity.

Toilets = 26.7%. To conserve: identify leaks by placing a few drops of food coloring in the tank — if the dye appears in the bowl, you have a leak (repair by replacing the flap and/or chain). Repairing a leaky toilet can save up to 200 gallons of water per day, a huge savings. If you do not have a low flow toilet (toilets manufactured before 1993 use approximately 3.5 gallons per flush, post-1993 toilets use 1.6 gpf – check under the toilet tank cover for manufacture date), you can place a weighted plastic bottle in the tank to displace a portion of the water. In addition, reduce the number of flushes by flushing only when necessary, and use

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The severity of the drought restrictions actually depends on what town you live in, and thus what water region you are in. The Great Swamp watershed is located partly within ten towns and two counties. Eight of those towns (Chatham, Harding, Long Hill, Madison, Mendham Borough and Mendham Township, Morris Township and Morristown) are located in Morris County, which is part of the Northeast Drought Region. Bernardsville and Bernards Township are in Somerset County, part of the Central Drought Region. While all of New Jersey is facing a serious water shortage, the Central Drought Region is in somewhat better



shape than the rest of the state. The main difference between the Central Drought Region and the rest of the state is that residents in the Central Drought Region are still allowed to water their lawns on an odd-even basis. This means that watering can occur on even numbered days on the side of the street with even numbered street addresses, and on odd numbered days on the side of the street with odd numbered street addresses. For locations without street addresses, watering can occur every other day. ❁

Event Calendar

What's Happening In the Great Swamp

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

Every day, 9 a.m. - 5 p.m.: Raptor Trust bird viewing area open to the public, free. 908.647.2353.

Every Friday and Saturday, 8 - 9 a.m.: Naturalist-led walk at Scherman-Hoffman Sanctuaries of the NJ Audubon Society, Bernardsville. Free. 908.766.5787.

May

3, 10, 17, & 24, 7:00 a.m. - 3:00 p.m.: Fridays With Friday; Prime Time Migrants. Meet at the Scherman parking lot with sanctuary director Don Freiday and hit some of the best migrant traps in the state. Scherman-Hoffman Sanctuaries of the NJ Audubon Society, Bernardsville. Member, \$15. 908.766.5787.

5, 1 - 5 p.m.: Hit the H2O. A canoe and kayak demonstration on the Passaic River hosted by the Great Swamp Watershed Association and Blue Ridge Mountain Sports. Meet at the "fisherman's parking lot" in the Somerset County Park, Lord Stirling Road, Basking Ridge. Free. 973-966-1900

12, 2 p.m.: Early Wildflowers: Staff naturalist Judy will introduce you to the early spring wildflowers through a slide presentation and walk. Great Swamp Outdoor Education Center, Chatham Twp. 973.635.6629.

16, 6:00 - 7:30 p.m.: Wildflower Wandering: Enjoy a spring stroll through Lord Stirling Park to see what is in bloom! Guidebooks will be provided, and using them will help you learn who's who as you wander the trails. Somerset County Environmental Education Center, Basking Ridge. \$6. 908.766.2489.

18, 2 - 3:30 p.m.: Animal Tracking Art Project. Great Swamp Watershed Association is hosting a nature talk on the wide variety of tracks that animals (rabbits, bears, frogs, etc.) make. Children age 6 - 12 are invited to create an ink project using stamps that make animal tracks. Bernardsville Library, 1 Anderson Hill Road. Free. Call for reservations, 973-966-1900.

18, 7 - 9:00 p.m.: Basically Bats: Learn some bat biology. Class will include their famous bat quiz, slide show, and lecture about bat ecology, as well as a field walk to look for these elusive nocturnal creatures. Somerset County Environmental Education Center, Basking Ridge. \$8. 908.766.2489.

24, 7 - 9:00 p.m.: Open House at Scherman-Hoffman for members and friends. Scherman-Hoffman Sanctuaries of the NJ Audubon Society, Bernardsville. Free. 908.766.5787.

June

1, 10:00a.m. - noon: Take a Shot and Paint it Green: Art and Nature meet as you take a hike, take some digital pictures, and return to the center to try your hand at drawing the images you see. Somerset County Environmental Education Center, Basking Ridge. \$8. 908.766.2489.

1, National Trails Day, Reeves-Reed Arboretum will host a woodland weed-out and trail-tending day. Reeves-Reed Arboretum, Summit. 908. 273.8787.

2, 2:00 p.m.: Animals You Love to Hate: Snakes, Spiders & More: Bill Boesenberg will delight you again with his unusual roommates! Find out why you don't have to be afraid of these important animals and meet these critters up close and personal. Great Swamp Outdoor Education Center, Chatham. Free. 973.635.6629.

7, 6:30-8:00p.m. AWESIM Adventures Open House: If you have an interest in travel, hiking, photography, ecosystem exploration, horseback riding, night hikes, and bird and butterfly watching, come to an open house to find out about this year's adventure to America's dynamic west. Pre-registration is required. Somerset County Environmental Education Center, Basking Ridge. Free. 908.766.2489.

9, 2:00p.m.: Learn About Trees with Your Grandchildren: Skip a generation, grab a grandchild or grandparent and explore the wonderful world of trees with a staff naturalist. Great Swamp Watershed Outdoor Education Center, Chatham. Free. 973.635.6629.

15, 10:00 a.m. - 12:30 p.m.: Tree, Fern, and Flower Foray: Learn the common name of the native trees, shrubs, and flowers in the vicinity of the headwaters of the Passaic River. Scherman-Hoffman Sanctuaries of the NJ Audubon Society, Bernardsville. Member \$8. 908.766.5787.

16, 11:00 a.m.: Friends Father's Day Ride. Lord Stirling Stables. 908.766.5955.

21, 8:30 - 10:30 p.m.: Night Wonder Walk: Join Don Freiday at the time of the summer solstice for a very special evening exploration of the sanctuary's trails. You'll stargaze, call for owls, and learn about nocturnal animals. Scherman-Hoffman Sanctuaries of the NJ Audubon Society, Bernardsville. \$3. 908.766.5787.

23, Introductory Ride at Lord Stirling Stables. 908.766.5955.

29&30, Camp Stirling-Juniors. Lord Stirling Stables. 908.766.5955.

30, 2:00p.m. : Insects: Learn about what makes an insect an insect, identify different species, participate in a catch, identify, and release activity, and "dissect" an old log to see who lives inside. Great Swamp Watershed Outdoor Education Center, Chatham. 973.635.6629.

July

28, Introductory Ride At Lord Stirling Stables. 908.766.5955

Stream Data Analysis Begins

by Robin Timmons

The Great Swamp Water Quality Monitoring Program is designed to document baseline conditions and to document long-term trends in the conditions of the Great Swamp and its watershed. Stream monitoring stations have been installed along each of the five tributaries to the Great Swamp: Black Brook, Loantaka Brook, Great Brook, Primrose Brook, and the Passaic River. Devices at each station monitor the flow of water into the swamp and collect samples of the water during rain storms.

The GSWA's "Stream Team" volunteers routinely visit each station to check the equipment. Following rainstorms, volunteers visit the stations to collect and then send water samples to F.X. Browne, Inc. in Lansdale, Pennsylvania for water quality analysis. Amy Leib, an engineer at F.X.Browne, has been working on behalf of the Ten Towns Committee with GSWA on this project and provided the following information. Major threats to water quality in the watershed are from nutrient over-enrichment and excessive sedimentation. The nutrients phosphorus and nitrogen enter our waterways from a variety of sources and cause excessive algae and plant growth leading to a number of environmental and health concerns. The Great Swamp Water Quality Monitoring Program includes analysis of phosphorus, nitrogen and suspended solids content of the water.

Nitrogen can enter waterways in a variety of ways:

- **Rainfall** — Precipitation contributes some nitrates to aquatic systems. Acid rain contains nitric acid. Levels of nitric acid in precipitation tend to be higher when there are more automobiles around.
- **Overland runoff** — Surface runoff can contain nitrogen in various forms including inorganic nitrogen from fertilizers and organic nitrogen from animal waste.
- **Groundwater** — Nitrate is not absorbed by soil particles as easily as phosphates or ammonium ions. Nitrate ions move easily through the soil to the groundwater, become inaccessible and unavailable for uptake by terrestrial plants and can result in high groundwater concentrations of nitrates.
- **Nitrogen fixation** — Some types of plants can convert gaseous nitrogen into a usable form for plant growth. Blue-green algae are capable of nitrogen fixation in aquatic systems as are some wetland plants, including alder and Ceanothus (e.g. New Jersey Tea).
- **Point sources** — Wastewater treatment facilities can be sources of nitrates. Generally, effluent undergoes aeration to convert ammonia to nitrogen, however many treatment facilities lack denitrification and export nitrogen as nitrates.

Phosphorous can enter a water body from several watershed sources:

- **Erosion** — The inflow of large amounts of total phosphorous into aquatic systems results mainly from the erosion of soil particles from steep slopes and disturbed ground (Horne and Goldman, 1994). Stream channel erosion also adds sediment and consequently bound phosphorous to the water column. Changes in patterns of erosion and sedimentation transport strongly influence the overall phosphorous transport process in aquatic systems.
- **Surface runoff** — Orthophosphates are applied to agricultural, residential and commercial land as fertilizers and can reach a stream via overland runoff if they do not bind to soil particles.
- **Point sources** — Wastewater treatment facilities are sources of soluble phosphate.

In 1999, data were collected during major rainstorms and it was found that nutrients and other pollutants that accumulate on the ground between storms wash into Black Brook and Loantaka Brook at the onset of a storm. Great Brook, Primrose Brook and Passaic River are less affected by this "first flush" phenomenon.

Since 1999, the flow of water into the swamp and water samples have been collected during both wet and dry weather. Recently, Dick Barrett and Robin Timmons have volunteered to begin to analyze the data collected by the Stream Team. They are currently looking at measures of water quality during storms and during baseline dry conditions. The baseline measures give an estimate of the amount of nutrients and sediments entering the swamp on a daily basis and allow us to determine how these substances vary with the seasons.

The long-term goal is to monitor changes over the years to ensure that overall water quality does not deteriorate and to document changes accompanying improved watershed management practices. The storm data allows us to monitor the effects of stormwater runoff on the swamp. ❁



Robin Timmons is a Professor of Psychology at Drew University and Director of the Neuroscience Program at Drew. She has had extensive training in statistics and teaches several courses in research design and statistical analyses. Robin also lives in Great Swamp.

Swamp Watch — Local Environmental Hot Spots

Madison

Madison Matters and GSWA Hire Planner to Review Proposed Exxon Development

GSWA and land-use group Madison Matters joined forces in January to hire a planner to review the proposed development of the former Exxon site. Though the site, which lies mainly in Florham Park, is not located directly within the Great Swamp Watershed, potential large-scale development (including up to 2.1 million square feet of office space and a possible connector to Rt. 24) will have definite impacts to the region, including the watershed. The groups have successfully coordinated with town officials from Madison, Chatham Borough, Chatham Township and Morristown to review and comment on Florham Park Ordinance 06-01, a Planned Office Development (POD) Ordinance that will guide development of the property. The neighboring towns hope to persuade Florham Park's Council to delay voting on the POD until it is improved. Their goal is to mitigate the potential negative impacts of the development, including increased traffic and transportation congestion, environmental impacts — especially to wetlands, water quality and quantity, public safety, loss of open space, and other concerns. For more information, visit www.rosenet.org/seamless.

Judy Kroll

Harding Township

Wildlife Preserves

The Township continues to work towards acquiring a 62-acre piece of property on Long Hill Road from Wildlife Preserves, Inc. The property has both uplands and wetlands and is zoned "farmland, recreation and conservation." It is surrounded by the Great Swamp National Wildlife Refuge on two sides.

Julia Somers

Tree Ordinance Modified

The existing tree ordinance required a permit for the removal of healthy trees with an eight inch diameter, located within 25 feet of the property line in the R-1 (three-acre) zone. At the request of residents, the ordinance was extended to all zones. The ordinance, however, would apply to a strip equal to one-half the applicable setback requirements in other zones. So far the process in R-1 seems to be working well. Several permits have been granted. The restriction on tree removal does not apply to diseased trees or to cases where trees block a driveway, right of way, or utility access.

Marshall Bartlett

Bernards Township

Basking Ridge Village Redevelopment

The Bernards Township Board of Adjustment unanimously approved an application for a new retail building in the village center at the site of the demolished Waring Chevrolet building. Renovation and expansion of a smaller adjacent building was included in the proposal. Taking advantage of a sloping site, the larger building will have two floors of retail space and two residential units on a third floor. The smaller building will be expanded toward the rear and will also have two apartments on the top floor. The township will take over the parking area at the east end of the property and will construct a municipal lot, which will also encompass several other adjoining, previously privately-owned, parking lots. The new parking lot, designed by the developer, Basking Ridge 2001, LLC, will incorporate new landscaping features. The project engineer reports that there will be a net decrease in runoff due to a decrease in impervious surfaces. The developer's environmental consultant reports that soil remediation work is in its final stage and expects approvals from NJDEP shortly. Ground water monitoring will begin shortly after soils approvals are received, and will continue for at least two years.

The Board of Adjustment also recently approved expansion plans for the Bishop Jane Methodist Church, located just to the north of the Basking Ridge 2001 project. An 1830's house currently on the church property is scheduled for demolition as part of the expansion. Part of the current church parking lot will be incorporated into the new municipal lot.

Omnipoint Cell Tower Application Denied

The public comment portion of the public hearing of Omnipoint's application for a 100-foot monopole at the Basking Ridge Train Station was held on March 6, 2002. About 40 neighborhood residents commented in opposition to the monopole. The attorneys for both Omnipoint and the Board of Adjustment explained the governing statute, N.J.S.A. 40:55D-70d, which requires an application for a use variance to satisfy both the "positive criteria" and the "negative criteria."

Generally speaking, to satisfy the positive criteria, an applicant must prove that the use promotes the general welfare because the proposed site is particularly suitable for the proposed use. To satisfy the negative criteria, an applicant must prove that the variance can be granted without substantial detriment to the public good and also demonstrate, through an enhanced quality of proof, that the variance is not inconsistent with the intent and purpose of the master plan and zoning ordinance.

Comments by board members included the opinion that Omnipoint's expert real estate appraiser was not credible; and the opinion that the visual and environmental impact to the neighborhood would be substantial. The board chairman also commented that a Cultural Resources Survey was conducted to allow the State Historic Preservation Office an opportunity to review the project's effects on historic resources (Section 106 Review). The survey resulted in a determination that an adverse effect on the historic resources would result from the tower. The board then voted unanimously to deny the application.

In related news, the Bernards Township mayor has demanded that NJ-American Water Co. remove all cell phone antenna panels from a massive water tower located at the north edge of the Lyons VA property. Additionally, Rep. Rodney Frelinghuysen has requested the director of the Lyons facility to take immediate action to remove the panels. Legally, the federal hospital is not subject to the local ordinance that stipulates cell tower distance requirements from residences.

Planning Board Suit

A Basking Ridge property owner has sued the Planning Board for rejecting her subdivision application even though she complied with the township's new stream conservation ordinance, which created a 75-foot wide stream conservation zone. The property owner now lives in a locally significant 18th century house at the northern end of the 1.8-acre property on North Finley Avenue, which is part of the Basking Ridge Historic District. The property owner intends to create one lot of .95 acres for the existing house and a new .81-acre lot. The property is in an R-6, three-quarter-acre zone.

There is a pond at the rear where the property slopes steeply down toward the east, and a tributary of Penn's Brook crosses a portion of the southern part of the property. In accordance with the new stream buffer ordinance, the property owner submitted a stream buffer

Long Hill Township

The Long Hill Township Planning Board held the line on the Morris application, denying the revised application primarily on the grounds of excessive disturbance. The application process began nearly three years ago with a proposed flag lot (not permitted in Long Hill) to subdivide an existing property. When this project was denied, the applicant went to court and simultaneously submitted a revised application with a full road and cul-de-sac. The plans called for destruction of nearly 150 trees, including an historic black oak and a number of trees on neighboring properties. The applicant refused all options to re-site the house, provide conservation easements, and so forth, resulting in the second denial. They will be back.

In yet another in-fill application, the Board had its hands tied in a very unfortunate manner. The applicant proposed a single home on an extension of Long View Terrace. At first, it appeared to be an easy denial, because the property was almost entirely steep slopes, and only had sufficient lot size through an innovative purchase of a PSE&G easement, followed by a return of the easement to PSE&G. The bombshell came when the owner produced a 1962 document from the Long Hill Zoning Board granting permission to build! The Planning Board's attorney could not find a sunset clause, so the Board approved the project on March 12, 2002. Although the Board cannot be blamed for what happened in 1962, they could have done considerably more than they did in terms of requiring phased construction, special stormwater management, and other techniques to minimize the damage from construction on steep slopes. The second bombshell may be yet to come: the construction will probably require blasting for the basement, and the project is less than 100 feet from the old Transco pipeline!

Len Hamilton

continued on next page

management plan to the township engineer and received a zone two waiver, permitting construction within 35 feet of the stream and thus creating the minimally-sized building envelope on the proposed subdivision. The proposed 3,500 square foot house would be located only 54 feet from the existing historic house. However, the application was rejected by the board specifically due to setback issues of the new building site. Complicating the proposal and the board's decision have been the existing setback deficiencies of both the historic house and a late 20th century detached garage.

Millington Quarry Subdivision Applications

In late January Millington Quarry Inc. announced it would amend two subdivision applications before the Bernards Township Planning Board. After the applications seeking a total of 29 lots were filed, but before they were deemed complete by the Planning Board, the Township Committee had rezoned the two tracts from one-acre to two-acre zoning. In order to comply with the new zoning, MQI will submit revisions for both subdivisions within 90 days. Under the new zoning, the combined sites will allow no more than 14 lots.

Also, MQI has recently filed a third application, for a 21.53-acre lot to the rear of The Barons condominium complex on South Maple Avenue. The tract is zoned for one-acre use and the application seeks eight lots on a 2,100-foot long cul-de-sac.

Just Outside the Watershed: Geier Farm Development Plans

In 1999, as part of a 36.5-acre open space purchase along the Passaic River, Bernards Township acquired a farmhouse and a complex of ten outbuildings. After the purchase, township officials were informed by the local historical society of the possible historic and cultural significance of the house.

New Jersey Historic Preservation Office (HPO) identified the large 18th century English barn on the property as a rare survival that would qualify the farmstead for listing on the National Register. The farmhouse and a wagon house were mentioned as contributing to the significance of the farmstead.

Township officials then applied for a county grant to fund stabilization work and an historic preservation plan. A task force was appointed to provide community input to the historic preservation consultant preparing the plan. Twp. Engineer and Planner Peter Messina assumed chairman duties of the task force; Messina has subdivided about 4 acres from the tract for the historic site and has prepared a conceptual plan for development of a recreation complex on the rest of the tract.

The plan for a recreation complex, with parking lots and playground areas adjacent to the existing neighborhood and the potential for four lighted ball fields, is raising concerns among the neighbors, who evidently misunderstand the meaning of "open space".

The Conservatory

Bergen County developer Salvatore Cangiano is seeking variances to build a development of 12 homes on a 185.1-acre tract bounded by Whitenack Road, Annin Road, Minebrook Road and Rt. 287 in the western section of Bernards Township. Variances are needed to permit two flag lots (although a conforming site plan has also been prepared). There are wetlands on the tract, and there has been an ongoing dispute with neighboring property owners about their extent. This application is currently being heard by the Planning Board.

Ann Parsekian

Bernardsville

Bernardsville 10-acre Zoning Approved

On March 4, 2002, the Bernardsville Borough Council adopted a law that changes the minimum acreage for residential development in environmentally sensitive areas from five to 10 acres. Opponents of the law argued that the ordinance would prevent landowners from selling subdivided land, would reduce land values, and would deny the borough extra property taxes. Officials said that the ordinance would ensure that developers do not carve up land in areas deemed environmentally sensitive. GSWA's director Julia Somers commented that the borough sits at the headwaters for both the Passaic and Raritan watersheds and the area supplies water for millions of people downstream.

Ann Parsekian



Majestic mature hardwood trees abound at the GSWA Conservation Area in Harding Township. Sections of the tract were too wet to be farmed and thus were never cleared.

Morris Township

Southgate IV

We have reported on this application in the past; as of this writing it continues to be heard by the Morris Township Planning Board. The application to build a 150,000-square foot commercial office building, a two-story parking deck and a 15,000-square foot child care center on Southgate Parkway is expected to come up for a vote shortly. Multiple variances are needed for the application to be approved on a site riddled with wetlands, much of which is floodplain for Great Brook.

St. Mary's Abbey

As was reported in an earlier issue of Across the Watershed, the Watershed Association is part of the Washington Valley and Jockey Hollow Conservation Coalition. The coalition is actively opposing a Continuing Care Retirement Community (CCRC) proposed for the St. Mary's Abbey/Delbarton property adjacent to Jockey Hollow National Historical Park. We believe such a proposal's impact on the Park and the Valley's historical and environmental resources would be profound. The Park lies entirely within the Great Swamp watershed.

Morris Township's Planning Board, having amended its Master Plan to accommodate the CCRC at this site, is expected to recommend to the Township Committee an ordinance to rezone the property. The Committee must then conduct a Public Hearing on the ordinance.

Permission to run a sewer line along old Route 24 is presently being sought from NJDEP. The Watershed Association's position is that this new sewer line proposal runs directly counter to a State Plan policy to "confine programmed sewers and public water services to Centers" in Planning Areas 4 and 5. This property lies in Planning Area 5, which includes the most environmentally sensitive and historically significant areas of the state.

An earlier request that it provide sewer capacity to the project was denied by Morristown which stated that, as an endorsed regional center within the State Plan, it would not support taking an action that was contrary to the policies and goals of the State Plan.

The Coalition is working with a variety of appropriate experts (engineers, planners and lawyers) and will participate vigorously in the process this application must go through at the local and state levels.

Julia Somers

DEP Rescinds Water-Lowering Permit for Sterling

by Daniel Somers

In the case of Sterling Properties' proposed townhouses development on a 30-acre site near the intersection of Shunpike and Green Village Roads, the DEP is recognizing the superior flood control and sediment-filtering capabilities of natural drainage systems. In early March, the DEP rescinded a water-lowering permit that was to allow Sterling to empty and convert the existing pond into a clay-lined detention basin. The DEP had granted the water-lowering permit in November, but during the stream encroachment permit review in March, the Bureau of Freshwater Fisheries found that "the permit was erroneously issued prior to any review of associated information regarding the scope and details of the entire project."

The pond features a functioning ecosystem. Presently, water flows underneath or possibly through the dam, also creating a wetland ecosystem downstream. Sterling's current plan would not allow water quality and flood control benefits of this filtering through the dam and the wetland. The pond on the Sterling site, which receives storm water from a 47-acre drainage area, would as a clay-lined detention pond, simply release 47 acres worth of untreated water into a pipe, which would send it downstream through the Heyl property to the Great Swamp. In direct opposition, the DEP said that, "The open waters and pond/stream habitats should be preserved and not altered into the development's storm water system. Portions of the development need to be re-designed to incorporate off-channel storm water/water quality controls."

GSWA's planning and environmental consultant, John Thonet, recommends keeping the current pond and creating another pond, a settlement basin, on the highest area of the property. The dam may have to be rebuilt, but Thonet recommends that it remain an earthen dam. The DEP will be looking closely at the plans for a new dam, since it must issue a dam safety permit.

Another aspect of the Sterling application is GSWA's lawsuit, filed in State Superior Court in December. GSWA had appealed the Planning Board's October decision to bifurcate the approval process after over a year of testimony on the entire site plan application so that it could vote on a steep slopes variance before the rest of the application was ready for approval. The Board ruled in favor of Sterling and granted the steep slopes variance. GSWA contends that the bifurcation, which occurred at Sterling's request, is not allowed in the manner done by the Board under the Municipal Land Use Law of New Jersey. Sterling is trying to have this lawsuit dismissed on grounds that GSWA had not ordered transcripts of the Planning Board proceedings. However, it has not demonstrated that they are necessary under the court rules to a determination of the legal issues involved.

The Planning Board had approved the steep slopes variance conditioned on DEP approval of all permits. Without the water-lowering permit, the Planning Board's steep slopes variance may have become void. ❁

Chatham Township Inventories Conservation Easements

The Township Environmental Commission has received a \$2,500 matching grant from the NJ Department of Environmental Protection and will use it to do an inventory of those properties in town with conservation easements. They will also be collecting as much relevant documentation as possible, including deeds, easement agreements, maps, surveys, wetland delineations, and so on. All of this will serve as a first step in setting up a program of land stewardship for those parcels.

Conservation easements are legal agreements attached to the property deeds in perpetuity and which limit in various ways the rights to use or develop a parcel of land or a portion of a parcel. By selling or granting such an easement land owners can help preserve land while retaining title to it. By limiting development rights to the land they may often gain tax benefits to themselves or their heirs. For more information on conservation easements, contact the GSWA office.

Eventually the Environmental Commission plans to visit and demarcate each easement and meet with the property owner to establish an on-going program of land stewardship.

The inventory is being done by John Malay of GSWA with the help of intern Daphne LaBua, a Chatham Township high school senior. GIS and mapping support is being provided by Louis Caprioglio of the Environmental Commission. The document accumulation phase of the project is scheduled to be completed in mid-May. Any Chatham Township property owner with easement information is encouraged to communicate with the team via email at johnm@greatswamp.org. ❁

Contributions

Thanks to Cecily and Michael Hewes for their generous donation in memory of Emily Roberts.

Conserving Water in the Great Swamp Watershed Region

continued from page 3

captured household water to flush whenever possible.

Clothes washer = 21.7%. To conserve: run the washing machine only when full; wear weekend and “play clothes” more than once, invest in a front loading washing machine which can save up to 30% over top-loading models.

Faucets = 15.7%. To conserve: turn faucets off when not in use while shaving, washing dishes, brushing teeth, etc; repair leaky faucets; install a water-saving aerator.

Leaks = 13.7%. To conserve: repair ASAP! A slow, steady drip can waste 350 gallons of water per month.

Other domestic = 2.2

Baths = 1.7%. To conserve: reduce the amount of water used per bath; reuse bath water for flushing toilets and watering trees, shrubs and flowers.

Dishwashers = 1.4%. To conserve: run only when full; use conservation setting if applicable.

Outdoor water use

Conserving water indoors is great, but during the summer, half of all household water use is for the lawn and garden. With drought restrictions already in place before the growing season begins this year, there will be less room to conserve. However, even with the limited amount of watering that is allowed, there are ways to stretch that water use and cut back on your overall household use of water.

Use captured household water from the shower, bath, washing machine or dehumidifier. According to the Rutgers Cooperative Extension, using laundry and other water with soap residue will not harm your trees, shrubs or flowers, and may even benefit those plants by helping to keep bugs away.

Capture any rainwater we do receive with a rain barrel. Rain barrels can be purchased for \$75-125 from local garden stores, internet sites such as www.gardeners.com (see their article *8-Steps to a Water-Wise Garden* for

other important tips), www.realgoods.com, and www.rainpail.com. Or, you can make one yourself, using a large trash can and creating a secure wire mesh cover to keep children, small animals, and mosquitoes out. Place the rain barrel under a down spout (rain gutter) and make sure the gutter is free of leaves and is in good working condition.

Additional Resources

For starters, see: www.njdrought.org - contains up-to-date information on the status of each drought region, drought restrictions, water saving tips, hotline phone number for questions about the drought, and a form to fill out for hardship exemption from the

***Drought restrictions...
include prohibitions on
watering lawns, washing
cars, driveways and boats,
filling pools, serving water in
restaurants, and more...***

restrictions. For specific questions on what is and is not allowed under Phase 1 restrictions, call the drought hotline at 800-4-its-dry or 800-448-7379. Or send them an email. When I used the hotline last week, a real live person answered on the first ring and was very helpful, and I received an e-mail reply to a question within hours.

www.waterwiser.org — This site provides lots of information on water use, both indoor and outdoor, a drip calculator to help you determine how much water your leaky faucet may be wasting, books on water conservation, and more.

www.h2ouse.net — This site allows you to “tour” the typical bathroom, kitchen, laundry, and landscaped areas to see where the areas of greatest waste are, and has extensive information on how to reduce that waste and conserve water.

www.peqnj.org/ — The N.J. non-profit organization, Partners for Environmental Quality, is selling water conservation kits for \$20. The kit includes an Earth Massage low flow shower head, toilet tank bank, toilet fill cycle diverter, and a variable dual setting aerator for the kitchen sink. The water conservation kits can save the typical family of 3 about 50,000 gallons of water per year. ❁

Cut along dotted line.

1. How to enter: Cut out this "Do The Swamp Thing" passport and fill in (print) your name and address. Attend any of the "Do The Swamp Thing" events OR visit any of the places mentioned in this brochure between 4/20 through 5/19/2002. At the time of your visit, you must receive an official "stamp" on your passport from the participating recreational, environmental or historical center. You are required to have a minimum of 2 stamps on this passport to be eligible for the Special Drawing to win the prizes listed below. Mail your passport in as an official entry form to: Great Swamp Watershed Association (GSWA), 36 Main Street, Madison, NJ 07940. One entry per person. Photocopies, facsimiles, or mechanically reproduced entries are not eligible. All violators will be disqualified from the Special Drawing. GSWA is not responsible for lost, late, damaged, illegible, unreadable, incomplete or misdirected entries. By entering, all participants agree to these official rules.

2. Prize Awards: The first prize winner will be chosen in a random drawing from all valid entries received and will be awarded the King's "One Minute Shopping Spree". The second prize winner will be drawn next and will be awarded the Pentax camera, and the third prize winner will be drawn last, and will be awarded a pair of Nikon binoculars. Entry deadline is Saturday May 25, 2002. Mailed entries must be postmarked by Wednesday, May 22, 2002. Drawing date is Tuesday, May 28, 2002. Odds of winning depend on the number of valid entries received. The winners will be contacted by phone on May 28, 2002 or by mail shortly thereafter. If the winners cannot be reached by June 4, 2002, then an alternate winner will be contacted, as drawn on the drawing date. All decisions of the judging organization are final. All entries become the property of Kings and the Great Swamp Watershed Association. No entries will be returned. By entering this special drawing, the entrant consents to the use of his/her name or his/her likeness for any advertising and/or trade purposes by Kings and the Great Swamp Watershed Association and their agents without additional compensation or permission from entrants.

3. Eligibility: All entrants must be at least 18 years of age. Void where prohibited, taxed or restricted by law. Employees of Kings, the Great Swamp Watershed Association, their agents and their immediate families are not eligible.

4. Winner Notification/Releases: Winners will be notified by mail and/or telephone. The Kings One Minute Shopping Spree must be taken at a mutually convenient time for Kings and the recipient within 3 months after the drawing date. Winners may be required to execute an affidavit of eligibility, release and indemnity and return it by certified mail, return receipt requested. Failure to comply will result in prize being awarded to an alternate winner.

5. Winner: For the name of the winner, send a stamped, self-addressed envelope to: the Great Swamp Watershed Association, P.O. Box 300, New Vernon, NJ 07976.

To enter, **print** your name, address, daytime phone number on this official entry form (passport) and mail it to GSWA, P.O. Box 300, New Vernon, NJ 07976 by May 22, 2002.

You must be at least 18 years of age to enter the drawing for prizes, but anyone can enjoy these great events and get their passport stamped!

GREAT SWAMP



PASSPORT To WIN

Use your passport to the Swamp to win great prizes!

From April 20 - May 19, 2002 bring this passport with you every time you visit one of the sites listed on the event calendar and they will stamp it for you. Submit your passport (with at least two stamps) to Great Swamp Watershed Association and you'll be entered to win! Prize listing and rules are on this sheet.

Inside 36 Main: Staff Notes

Julia Somers represents the Watershed Association, which is a member organization of the Washington Valley & Jockey Hollow Conservation Coalition. The Coalition is actively working with GSWA and ANJEC to protect the Washington Valley in Morris Township, Morristown and Mendham Township, including opposing St. Mary's proposal to build a Continuing Care Retirement Community on the Delbarton campus (for more information see article in SwampWatch).

Cheryl Amatelli, Jan Malay, John Malay and Karen Patterson attended the annual NJ Land Trust Rally given by the Land Trust Alliance on March 16th. Held at the AT&T Learning Center in Basking Ridge, it was a full day of seminars and forums dealing with land use and preservation, land stewardship, funding and acquisition strategies.

Jan, John and Trustee Gene Fox also attended the Stream Restoration Workshop sponsored by the N.J. Resource Conservation & Development Council, Trout Unlimited and the NJ Division of Fish & Wildlife.

Technical Coordinator John Malay is conducting a survey of all Conservation Easements for Chatham Township Environmental Commission (see article on previous page). He also prepared an open space land map for the Bernards Township Environmental Commission using GIS information. In January, John became a regular member of the Bernards Township Planning Board (moving up from alternate). ❁



The Passaic River as it prepares to leave the Watershed near White Bridge Road in Long Hill Township.

1st Prize – a One Minute Shopping Spree at Kings

Fill a shopping cart with as many Kings items as you can – rules will be provided to the winner in advance of the spree.

2nd Prize – Pentax IQ Zoom Camera, courtesy Madison Camera Shop, Madison NJ

3rd Prize – Nikon 7 x 35 “Naturalist” binoculars, courtesy NJ Audubon Society

NAME _____

ADDRESS _____

CITY _____

STATE _____ ZIP _____

DAYTIME PHONE _____

To enter, print your name, address, daytime phone number on this official entry form (passport) and mail it to:

GSWA
P.O. Box 300
New Vernon, NJ 07976

Must be postmarked by May 22, 2002.

Great Swamp National Wildlife Refuge, Long Hill Township



Morris County Outdoor Education Center, Chatham



Morristown National Historical Park, Harding Township & Morristown



New Jersey Audubon Society Scherman-Hoffman Sanctuaries, Bernardsville



Somerset County Environmental Education Center, Basking Ridge



Great Swamp Watershed Association



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

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