

Belmont Citizens Forum

Vol. 3, No. 6

A Newsletter for Belmont Residents

November 2002

Met State Land to Be Used For Park, Housing

By Marta B. van Dam

The site of the former Metropolitan State Hospital, which was declared surplus by the state in 1992, is to be developed as open space, recreational acreage, and housing, according to a plan adopted in 1994 and amended this past May. Of the 346 acres, 225 are in Waltham, 88 are in Lexington, and 33 are in Belmont.

Most of the Belmont acreage is likely to become conservation land under the control of the Metropolitan District Commission (MDC), as part of an expanded Beaver Brook Reservation. The Waltham portion will be split between open space and a golf course, while Lexington will get open space and housing.

The hospital property is part of a thousand-acre stretch of open land that local conservationists have labeled the Western Greenway. The Greenway also embraces the MDC's existing Beaver Brook Reservation, Belmont's Rock Meadow, Massachusetts Audubon Society's Habitat and Highland Farm, the north end of the McLean Hospital property, portions of the Olympus Hospital property in Waltham, the University of Massachusetts field station, the Waltham Woods, Lexington's Concord Avenue Conservation Land, and other properties.

New Housing in Lexington

The Commonwealth of Massachusetts, through its Division of Capital Asset Management and Maintenance, is currently considering proposals for

private-party development of a portion of the Metropolitan Hospital site (approximately 23 acres of land in the Town of Lexington, with a small portion in the City of Waltham) for the housing development. This portion includes the main campus, comprised of seven buildings having approximately 640,000 square feet of space. The buildings are perched atop a hill with spectacular views of the surrounding area. A report by the Housing Fact-Finding Group, appointed by a task force representing the three towns and the state, shows that a diversity of housing types, serving a broad range of age groups and income levels, could be accommodated in this location. Purchasers who redevelop existing

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Environmental Events Calendar

Invasive Species at Alewife. The Friends of Alewife Reservation are identifying 12 non-native species within the Reservation's borders and marking them with small signs for eventual removal. This is a continuing project, so you can come any-time. Call Mark Kirk at (617) 489-7717 for details.

Bird Walk at Fresh Pond. Identify migrating songbirds and ducks during this three-hour hike around the pond on **Sunday, November 24 from 8 a.m. to 11 a.m.** Participants will use maps to record the birds' location and numbers. Birders of all experience levels are welcome. The Friends of Fresh Pond Reservation and the Fresh Pond Ranger Program have a telescope, binoculars, and bird guides to lend. Meet in the parking lot of Neville Place, 650 Concord Avenue, Cambridge. If you can come for only part of the time, you will find the group walking clockwise starting from near Sousa's Rock. Children must be accompanied by an adult.

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Belmont Citizens Forum, Inc.
is a not-for-profit organization that strives to maintain the small-town atmosphere of Belmont, Massachusetts, by preserving its natural and historical resources, limiting traffic growth, and enhancing pedestrian safety. We do this by keeping residents informed about planning and zoning issues, by participating actively in public hearings, and by organizing forums on key subjects. Our newsletter is published six times a year (January, March, May, July, September, and November). Published material represents the views of the authors and not necessarily those of the Belmont Citizens Forum.

Letters to the editor may be sent to
P. O. Box 609, Belmont MA 02478.

To sign up, please call Chief Ranger Jean Rogers at (617) 349-4793 or e-mail Elizabeth Wylde at friendsoffreshpond@yahoo.com

Shrubs in Winter: No Leaves? No Problem!

Learn to identify witch-hazel, highbush blueberry, spicebush, maple-leaved viburnum, and many other native shrubs, plus a few non-native invasive species, at Habitat Wildlife Sanctuary in Belmont on **Sunday, November 24, from 9:30 a.m. to 1 p.m.** Roland "Boot" Boutwell will discuss macro-characteristics such as branching patterns, growth habits, bark, persistent fruits, galls, and habitat. The program begins indoors, then continues outside. It is co-sponsored by the New England Wildflower Society. \$24 for Massachusetts Audubon Society members, \$30 for non-members. For registration information, call Habitat at (617) 489-5050.

Bird Nesting Boxes at Alewife. Join a team from the Friends of Alewife Reservation in planning, erecting, and monitoring nesting boxes around the Reservation. Call Stew Sanders at (617) 489-3120 for more information.

Urban Wild Art Show. Works by nationally known and local artists focusing on natural resources in the Alewife Reservation. Paintings include two original watercolors of New England birds done by Roger Tory Peterson when he was a teenager. **Weekends through November 24. Saturday: 11 a.m. to 5 p.m. Sunday: Noon to 4 p.m.** Stebbins Gallery, First Parish Church, Zero Church Street, Cambridge.

Birds' Nest Inventory at Fresh Pond. Help the Friends of Fresh Pond look for birds' nests in the area between Black's Nook and Little Fresh Pond, write down descriptions, and mark their location on a map. This information will be compared with a previous inventory done in March. **Saturday, December 7, 12 p.m to 3 p.m.** Meet at the Neville Place parking lot, 650 Concord Avenue, Cambridge. All are welcome. Children must be accompanied by an adult. To sign up, please call Chief Ranger Jean Rogers at (617) 349-4793 or e-mail Elizabeth Wylde at friendsoffreshpond@yahoo.com

Town Complex Renovation to Begin in Spring

By Sharon Vanderslice

The Town Hall Complex Building Committee and the Historic District Commission are close to finalizing renovation plans for three town buildings in Belmont Center.

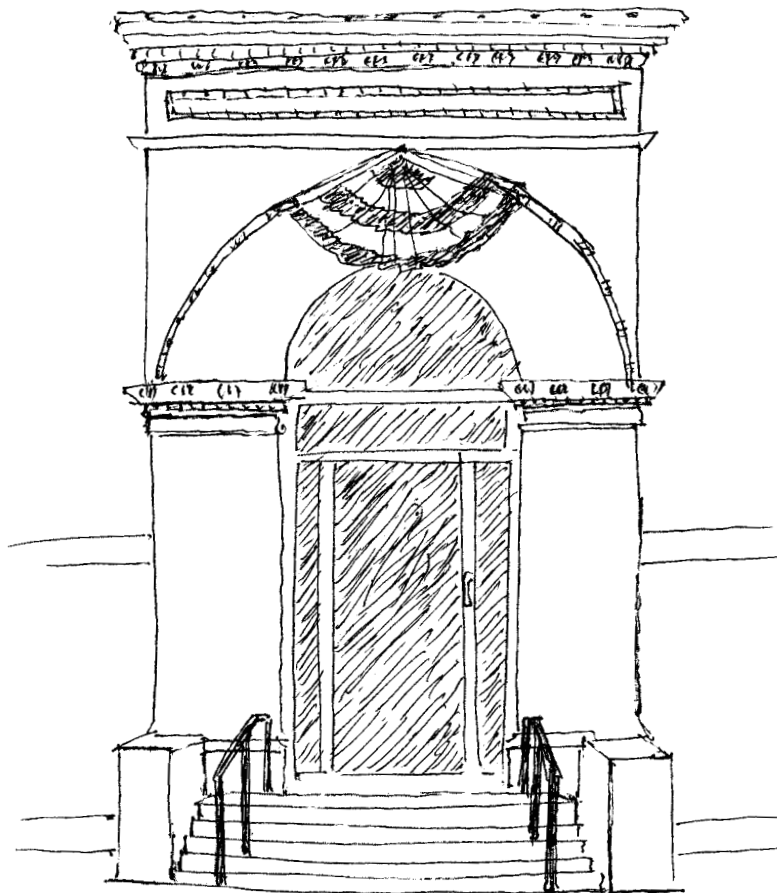
Work on the 1881 Town Hall, the 1898 Town Hall Annex (formerly the Homer School), and the 1900 School Administration Building (formerly the Underwood Library) is to begin in May 2003. All three structures are historically significant.

Most of the Town Hall was renovated in 2000, but the top floor was never finished and other repairs remain to be done. On November 7, the Historic District Commission approved a Certificate of Appropriateness for the remaining work on the building. On the exterior, two leaking cupolas are to be removed and rebuilt. Inside, the second floor will be

renovated to house town offices, and the Town Clerk's Office on the ground floor will be rearranged to make it more accessible to the public. In the auditorium, acoustical panels will be placed on a portion of the ceiling to reduce what engineers call "auditory confusion." This means that it will be easier to hear what is being said in this room, the former site of Belmont Town Meeting. These panels, which are constructed from a urethane material covered with fabric, will be colored to match the paint on the walls, so they will not be obvious to the naked eye. The auditorium will also be carpeted temporarily, so that it can house the Office of Community Development (the Building Department) during renovation of the Town Hall Annex next door.

Tadhg Sweeney of Donham & Sweeney Architects, Inc. has reported that bids to complete

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Town Hall Complex, continued from page 3

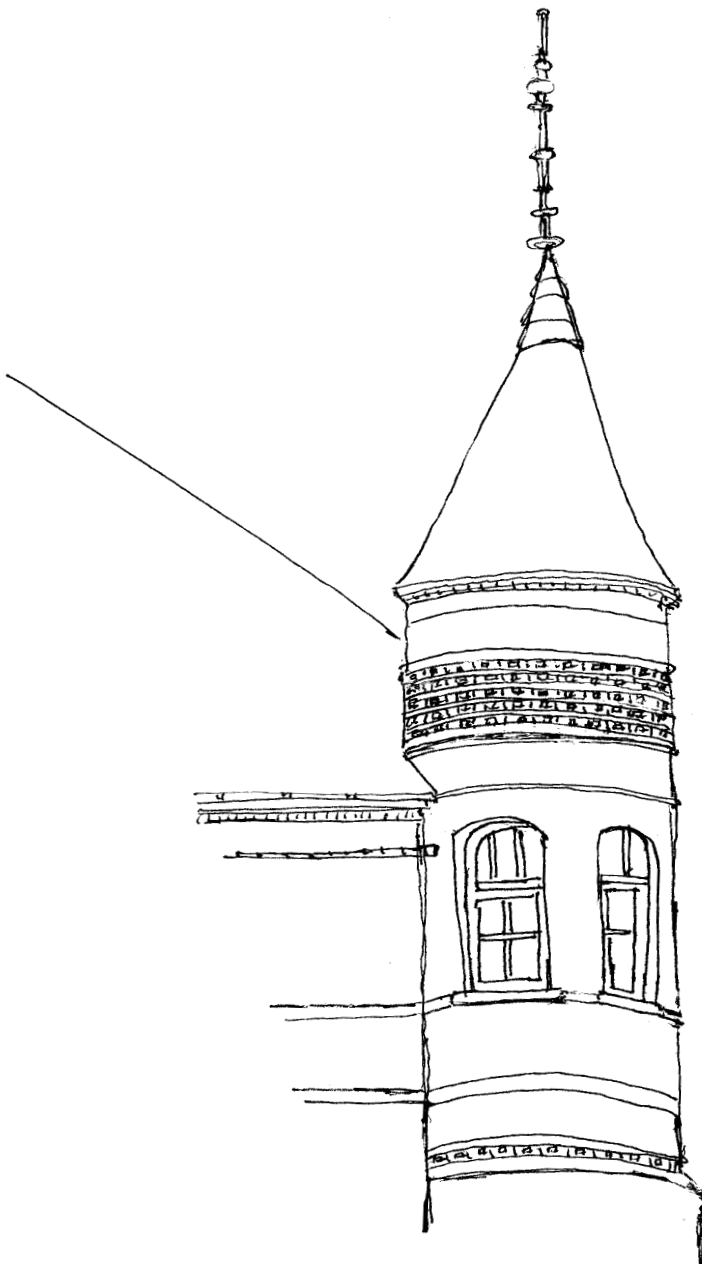
this work are coming in ten percent lower than expected. This means that the Town may be able to afford a new drainage system outside the building that would prevent moisture from seeping in to the ground-floor meeting rooms, the walls of which now show the white powdery efflorescence that is a sign of dampness. If the budget allows, the auditorium stage will be restructured so that scenery and stage lights can be hung properly.

The rear roof of the School Administration Building will be altered somewhat, but not drastically, to allow for installation of an elevator. Elevators are required by the Americans With Disabilities Act. On the interior, which has had no significant renovations since the library moved out, old woodwork will be removed, refinished, and reinstalled once new mechanical and electrical systems are in place. A new stairway that complies with current building code will be built into the hexagonal turret on the front of the building.

The interior of the Town Hall Annex will be completely gutted and rebuilt, as described in our May 2002 issue. The design drawings for this project are almost completed.

On October 29, the landscape architect for the Town Hall Complex project met with the town's Tree Warden and Shade Tree Commission, as well as representatives of the Town Hall Complex Building Committee and the Historic District Commission, to review preliminary proposals for the grounds. A primary goal is to make the area easier for pedestrians to navigate. Plans call for the driveway between Concord Avenue and Moore Street to become serpentine, and for granite pavers and black iron bollards (posts) to be installed near building entrances to delineate car and pedestrian zones. Outdoor seating will be added and new trees will be planted. The joint committee recommended that Valley Forge Elm, a tree that is historically appropriate but more resistant to disease than other types of elms, be placed around the perimeter of the complex.

Sharon Vanderslice is on the Historic District Commission.



Alien Plants Threaten Belmont's Native Species

By Peter Alden

Gardens, lawns, woodlands, fields, swamps, streams, and pond shores in and around Belmont are being attacked by alien plants. Each of these interlopers was welcomed to the area by gardeners seeking to beautify the landscape but has since become a major nuisance.

Most non-native plants, including lilac and forsythia, stay where they are planted; they do not have the pollinators or fertile seeds and fruits to be spread by wildlife, wind, and water. But more than one hundred of these alien species (the worst of which are described on page 11) have leapfrogged over vast areas, overwhelming native wildflowers, trees, and shrubs and threatening wildlife, including butterflies, frogs, birds, and mammals. They kill off natives by stealing their water, nutrients, and sunlight. Some

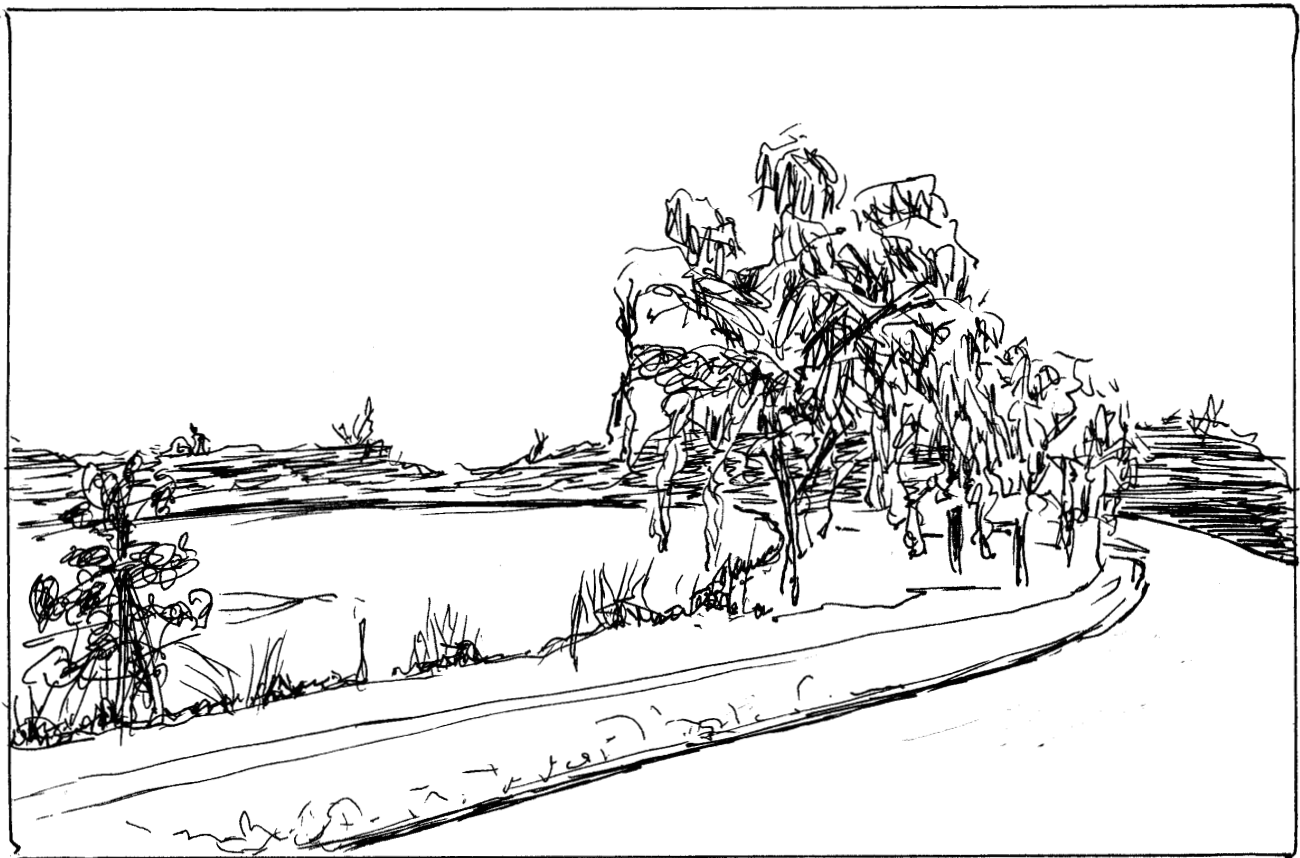
also introduce into the soil chemicals that inhibit the growth of all other sprouts.

Some invasive plants provide cover for wildlife, but at a huge cost. Other species provide seasonal food, particularly for birds, but the food quality is often poor. The birds suffer in the long run as food from native plants gets scarcer.

Many governmental and non-profit organizations are active in protecting the last populations of some rare native plants, but protecting a few sensitive sites is only a stopgap measure.

The state government is working with the horticultural and conservation communities to devise strategies for combating invasives. One possibility would be to ban the sale of these pests. Another is to cut them out and destroy them, as the Massachusetts Audubon Society has been doing at its Habitat

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Clay Pit Pond

sanctuary in Belmont. But the number of fertile seeds, fruits, and live rhizomes being spread increases every year. Governments and landowners cannot afford to wage a long war on these plants. Novel and coordinated ways must be found to wipe out current growths and prevent further infestation.

The obstacles to a coordinated effort are many, beginning with getting permission from landowners. Multiple permits must be sought to remove offending plants from federal, state, and town properties; separate permission is needed from private landowners.

Accurate identification of problem plants is essential. Untrained people sometimes pull up native plants by mistake. It would not be difficult to disseminate a full-color identification guide, specific to our local area, so that gardeners could distinguish alien plants from native lookalikes.

Proper removal techniques, which vary by species, should minimize the use of herbicides, especially in wetland areas.

Disposal of pulled, cut, and dead plant matter must also be done with care. Some of these plants should not be added to compost because they contain

toxins as well as seeds or stems that are still viable. Some create toxic fumes when burned; others may be recycled into kindling wood or perhaps burned to generate electricity.

Although details remain to be worked out, it is important to educate ourselves about the problem now.

Neighborhood Conservation Corps

Schoolchildren could be motivated and mobilized for this purpose in every school in the state. By dividing each town into defined neighborhoods, teams of students, their parents, and other concerned citizens could locate and map infestations, label such plant clumps with colored string or small signs, and, after they receive a mandate and permission, remove alien plants and monitor the sites for new growth. Once motivated, many students relish such tasks.

Permission to work on private land is more easily secured by neighborhood residents than by outsiders. Neighborhood conservation corps could combat infestations of poison ivy and ragweed, which cause so much human suffering, and could also help eliminate litter and graffiti.

I am currently labeling populations of the worst non-native plants at the Alewife MDC Reservation, with the Friends of Alewife Reservation and volunteers from the Eagle Eye Institute. You are encouraged to visit the Reservation to learn how to identify these plants in the wild.

Peter Alden, of Concord, Massachusetts, is the author of the National Audubon Society Field Guide to New England and 14 other nature books. He is also a consultant to the state's Executive Office of Environmental Affairs and the organizer of its Biodiversity Days program. The views expressed in this article are his own. He can be reached at (978) 369-5768.

Publicity Volunteers Needed

The Belmont Citizens Forum needs volunteers to help post fliers around town to publicize our events and Friends meetings. All we ask is one half-hour of your time every month or two. If you're interested, please call the Belmont Citizens Forum.

Thank you!

Call (617) 484-1844.

**Least Wanted List of the Twelve Worst Invasives
See page 11.**

Can You Spell *Paideia*?

The Belmont Citizens Forum spelling team risked the stings and buzzes of outrageous fortune, as well as embarrassment on cable TV, by participating in the Foundation for Belmont Education's annual spelling bee. The members of this year's BCF team, Gerry Polcari, John Howe and Jim Graves, did their homework—studying over thirty pages of words you would not normally attempt to spell or define, much less use in everyday discourse. Their children took

great pleasure in turning the tables and testing them on the toughest words, in order to prepare them for the rigors of literary combat.

With an entry fee of \$375 per team and 36 adult teams in total, the Foundation raised a considerable sum for a very good cause. There were also an unprecedented 62 children's teams, contributing \$75 each. The Foundation uses these funds to buy equipment and other must-haves not covered under the Belmont school system's constrained school budget. Members of the BCF board voted to ante up personally to cover this year's team fee.

How did our team do? Well, we survived some tough ones like *sessile*. (Or is it *cescile*, and what is that anyway?) But, next year, team members are vowing to go on a 30-day training regimen—reading really fat dictionaries and studying lists of the words that separate the near greats from the king and queen bees.

Who won? The *Mothers from Brothers Pizza* (Jane Minasian, Kathy Baskin, and Chris Sahagian), who undoubtedly did more homework than we did.

—Jim Graves

Finding a Place for Dogs to Play

Dogs have nowhere to run free in Belmont because of the town's leash laws. Michael Flamang, Chairman of Belmont's Conservation Commission, will present some possibilities for such a place as part of a plan for Rock Meadow, a 70-acre expanse of open space on Mill Street. Refreshments will be served.

Thursday, November 21 at 7:30 p.m.
All Saints' Episcopal Church
Corner of Clark and Common Streets

Friends of the Belmont Citizens Forum

Met State Land, *continued from page 1*

historic buildings may be eligible for Historic Tax Credits. A few of the peripheral residential buildings belonging to the former hospital's main campus will remain in use by the state.

The Belmont land is predominantly wetlands and is not suitable for development.

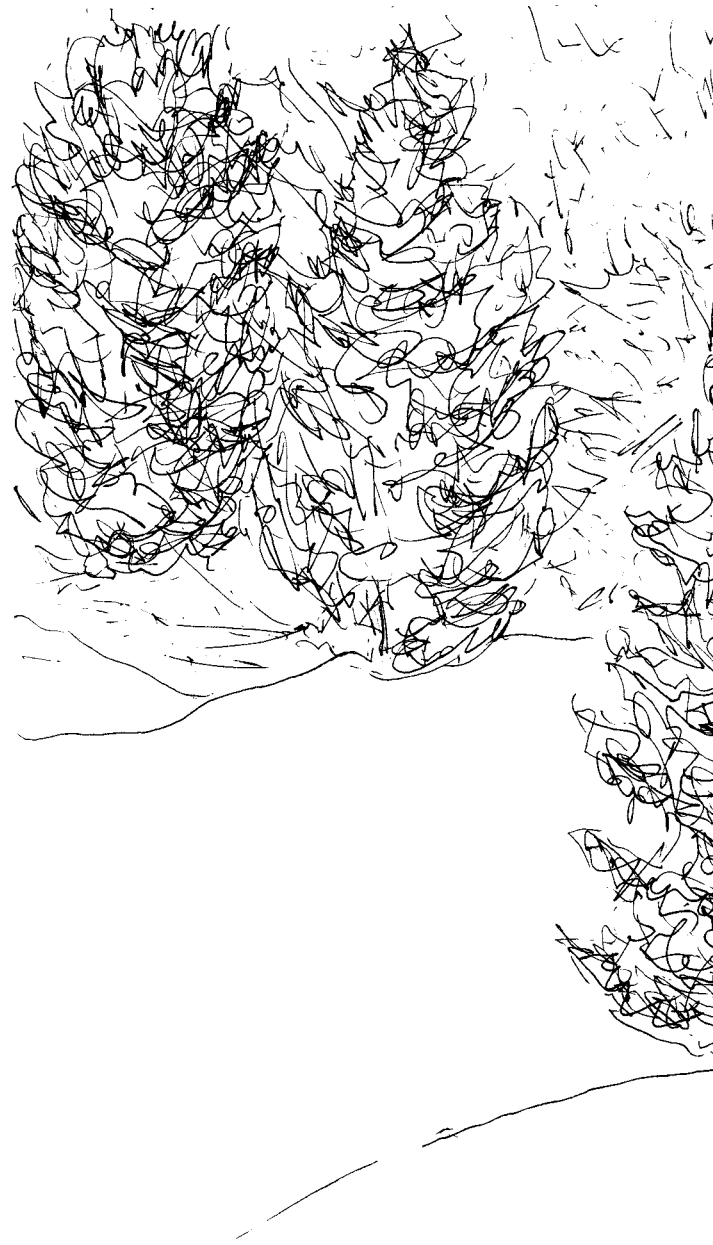
MDC Park to Be Created

There is a proposal to create, in addition to the housing, a public reservation under the auspices of the MDC, once the park's boundary is agreed upon. The MDC's primary objective is to protect the eco-

logical integrity of the site. The park would protect a total of about 230 acres. It would include approximately 120 acres of the 136.5 acres of wetlands, two brooks (including Beaver Brook), 14 vernal pools, important geological features, mature woodlands, habitat for migratory birds, an area known as Mackerel Hill, and an existing network of trails that crisscross the land. This park would include most of the land within Belmont's borders.

Plans call for a park headquarters and visitor/education center at the site of the existing morgue.

Unfortunately, there are a number of environmental clean-up issues that need to be addressed.



Of Metropolitan State Hospital's 346 acres, approximately 230 would be included in a proposed park controlled by the MDC.

Within the proposed MDC boundary are two small dumps; possibly hazardous material near an incinerator; possible soil contamination in the softball playing area; three buildings that need to be removed; and leaking sewers to be repaired. The MDC would require that each of these issues be resolved before an official transfer of the property is completed.

Nine-Hole Golf Course

On Waltham's portion of the property, the city would like to build a public nine-hole golf course. This project has the support of the MDC, provided that certain conservation restrictions are met and the ecological integrity of the site is preserved.

Waltham may purchase up to 49 acres from the MDC if it develops the golf course within a reasonable time, approximately the next 8 to 10 years. A portion of the proceeds from the sale of the land in the amount of \$600,000 is to be deposited in the Metropolitan Parks Trust Fund and used solely for management and operations of the expanded Beaver Brook Reservation.

Roads through the golf course and the MDC Reservation will be designed to protect the natural, scenic, and open character of the area. The main access will be a parkway from Concord Avenue in Lexington, with emergency access from Trapelo

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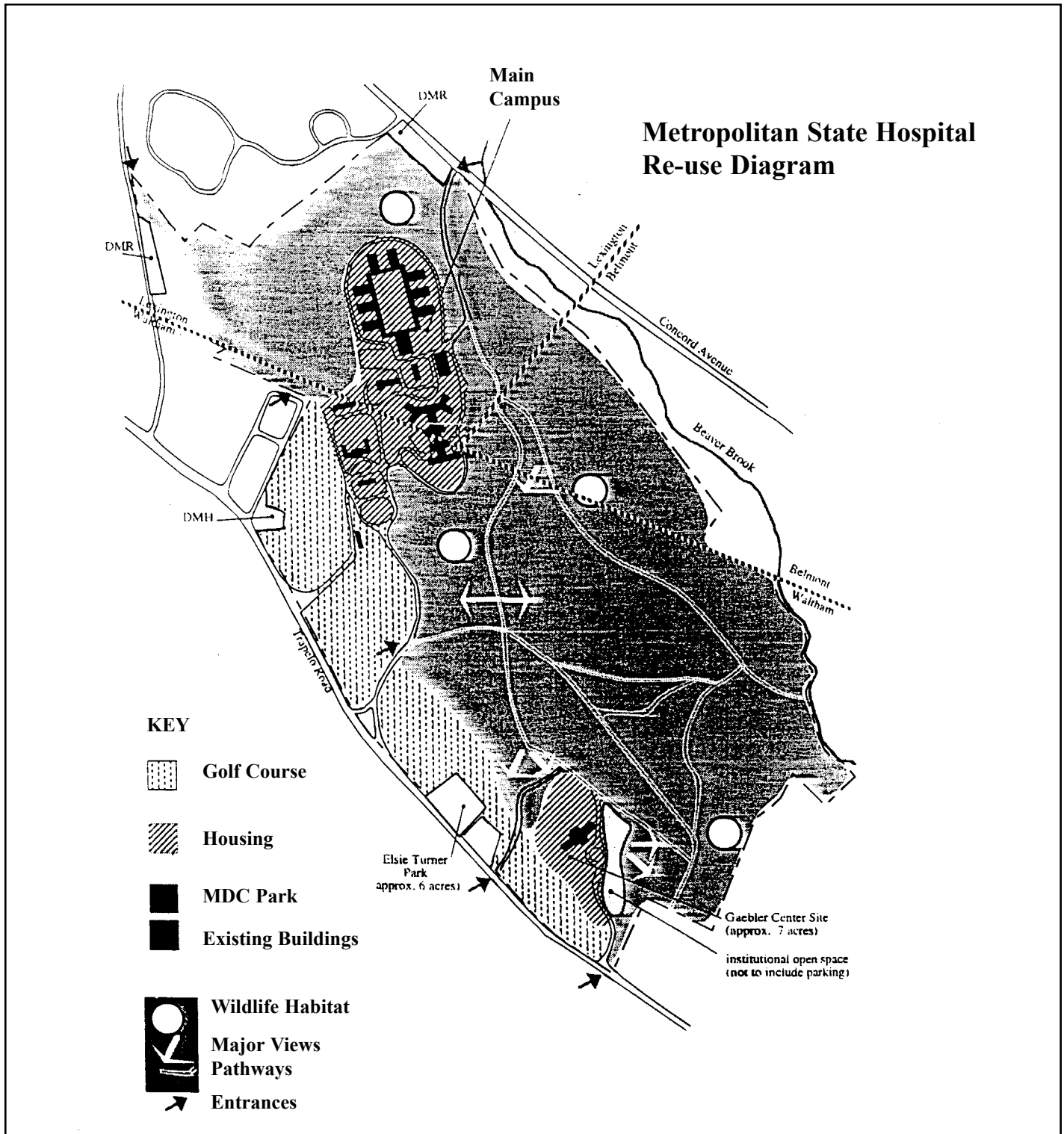
Met State Land, *continued from page 9*

Road in Waltham. Bicycles will also be allowed to use this road to get to existing trails.

Visitors can currently reach the land from the main driveway on Trapelo Road in Waltham or from Concord Avenue in Lexington. They can also get

there on foot by hiking through Belmont's Rock Meadow and crossing a small wooden bridge over Beaver Brook.

Marta van Dam is a Belmont resident and a partner in the Corporate Department of the law firm Gadsby Hannah LLP.



Invasive Plants: The Twelve Worst Offenders

There are more than one hundred aggressive non-native plants in Massachusetts that are crowding out native species. Here is a list of the twelve worst, with tips on how to identify and control them.

Oriental Bittersweet

Celastrus orbiculatus

This woody vine is the most invasive plant in Massachusetts. It can envelop trees up to 80 feet tall. Older specimens can be up to five inches thick. Bittersweet eventually kills the host tree. Weakened by the weight of the vine, it is vulnerable to wind and snow damage. The fruit is red and fleshy, with a four-pointed yellow base, and grows in clusters along the branches. (Rare native American Bittersweet produces fruit only at the branch tips.) Decorators consider the fruit attractive, and it is eaten and spread by European Starlings, American Robins, and other birds. Its leaves vary in shape from oval to round, with pointed tips, and turn yellow in the fall. Its flowers are white and inconspicuous. This vine should be cut before it fruits and herbicides should be used on cut stumps. Great care is needed in disposing of cuttings to prevent the bittersweet from spreading.

Black Locust

Robinia pseudoacacia

If eaten, the seeds, leaves, and bark of this tree are poisonous to most animals, including humans. Black Locusts, which can grow to be 80 feet tall, are native to the southern United States, but not to Massachusetts. Once planted, they spread underground, forming ever larger colonies that shade out native plants. This tree is a huge nuisance on Cape Cod. You can distinguish it by its trunk, which is deeply furrowed when mature, and its fruit: reddish, four-inch, hanging pods. It produces large clusters of pretty white flowers on its branch tips in May or June. If cut, it will sprout again. Repeated cutting is necessary for several years, or you may apply full-strength glyphosate herbicides on fresh stumps.

Purple Loosestrife

Lythrum salicaria

This perennial herb with showy clusters of tiny pinkish purple flowers is popular in gardens. It can grow to be 10 feet tall. The stems feel woody; the leaves have smooth edges and grow opposite each other or in whorls of three. Each plant can produce two million tiny seeds per year, which spread rapidly by water and wind but provide no food for local wildlife. Purple loosestrife forms impenetrable mats that sterilize freshwater marshes and ruin homes of native freshwater plants and animals. The sale and growth of this European plant is prohibited in many states, but not yet in Massachusetts. Pulling new colonizers before they set seed is vital. Eliminating large stands is difficult. Some hope that European beetles may control its spread.

Phragmites

Phragmites australis

This giant European grass is commonly found on the edge of salt marshes, where its monolithic mass can keep all other native plants and animals from surviving. It can grow as tall as 15 feet. Its stems are round and hollow and very thick at the base. It produces plume-like silky seed heads. The leaves are up to two feet long. It spreads via underground rhizomes and its shoots are so sharp that they can grow through pavement. Most new colonies start in dumped soil. Controlling this plant is labor-intensive. It can involve cutting, application of herbicides, dredging, burning, or flooding of an area for four months in summer.

Japanese Knotweed

Polygonum cuspidatum

Native to Japan and east Asia, this shrub-like herb grows six to 12 feet tall in dense stands that shade out all native species. Its stems are hollow and bamboo-like, its leaves broad and heart-shaped. Four-inch clusters of tiny white flowers appear in August through October. The seeds are black and

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Invasive Plants, continued from page 11

triangular and are enclosed in three-winged papery calyx. Ugly masses of Japanese knotweed can be found on roadsides, in gardens, and in wild areas. To eliminate it, persistent cutting is required during the growing season, and licensed workers can apply herbicide after each cut. This plant can keep sprouting from rhizomes in the soil for many years. Major infestations can be seen along Route 2 in the Alewife area and around the Belmont Center railroad station.

European Buckthorns

Rhamnus

There are two species of these invasive small trees or shrubs. Both can grow 25 feet high. The Common Buckthorn has unscented twigs and roundish leaves with fine toothing on the edges. Short thorns appear on the branch tips. Its fruit is black like huckleberry and it prefers dry, limey, neu-

tral, or alkaline soils. The Glossy Buckthorn has acrid-smelling twigs and fine white spots on its stem. The leaves are glossy and smooth edged. It has no thorns, and its fruits are red at first, later turning to purplish-black. It prefers wetter acidic soils. Birds love the fruit and spread the seeds everywhere as the fruit is a laxative. Buckthorn can be controlled by persistent hand pulling of younger pioneer plants. Weed wrenches are useful for getting out the roots of older plants. A 50 percent glyphosate herbicide applied in fall and winter is also helpful.

Norway Maple

Acer platanoides

This European tree is the most widely planted street tree in Massachusetts. It can grow as tall as 80 feet and is rapidly invading native woodlands. Its trunk, when mature, is furrowed in a barbecue grill-like pattern. Norway leaves are wider than those of native Sugar Maple, and are smooth on the bottom



*Norway maple
leaves*

instead of fuzzy. Norway Maple leaves exude a milky latex, turn only yellow in the fall, and drop later in the season than Sugar Maples. Sugar Maple leaves turn yellow, orange, or red. Winged Norway Maple seeds are paired at a 180-degree angle. This tree's dense shade canopy eliminates native plants beneath it. Seedlings can be pulled; mature ones may be cut close to the ground.

Black Swallow-wort *Cynanchum louiseae*

This twining vine is native to southeastern Europe and can grow up to seven feet tall. Its small flowers are maroon or purple-black. Its leaves are dark green, smooth-edged, and taper to a point; they have a disagreeable odor when crushed. The fruit is a long, thin milkweed pod. Once established, this vine is very difficult to eradicate because of its dense mass of knobby roots. Yank new sprouts when you spot them and remove all root pieces of mature plants.

Japanese Barberry *Berberis thunbergii*

This shrub, native to Japan, grows up to six feet tall and invades both garden edges and wild lands. The stems form a dense mass, with short sharp spines. Its leaves are small and rounded, and it produces a multitude of small, elongated, bright red berries. Wear heavy gloves when pulling young plants to protect your hands from the spines. If you remove it mechanically, you must pull most of the roots to avoid new growth. If you choose to use glyphosate herbicides, they are best applied at the cut by licensed permittees.

Oriental Honeysuckles *Lonicera*

These shrubs, between four and 12 feet tall, have opposite leaves and red berries. The commonest one, Morrow's Honeysuckle, is from northeast Asia and has 1 ½-inch leaves with short pointed tips. The Tatarian Honeysuckle is from Turkey and the Caucasus Mountains. Its leaves are 2 ½ inches long, tapering to a long point. All varieties, including hybrids, have seductively sweet-smelling white flowers, often tinged pink and fading to yellow.

They are loved by gardeners but spread quickly into wild lands via bird droppings. There they become the dominant shrub of the understory, choking out native plants. You may pull seedlings up to three years old. Older plants require the use of glyphosate herbicides.

Multiflora Rose *Rosa multiflora*

This native of northeast Asia was once promoted by the U.S. government as living fence. It can grow ten feet tall, and has sharp, stout thorns. The flowers, which are white and one-inch wide, appear in clusters in late May or June. Unlike rarer native roses, its leaves have feathery, fringed stipules at the base. Its red rose hips are eaten and defended by Northern Mockingbirds. It is found at garden edges, in pastures, and along roadsides, where it usurps native plant habitats. Use heavy gloves to pull small plants. Cut older plants repeatedly until dead. Herbicides can be used on cut stems in fall and winter. Repeated mowing in fields is also effective.

Ailanthus *Ailanthus altissima*

This tree, known as "Tree-of-Heaven," is the tree in the book *A Tree Grows in Brooklyn*. Now common along the edges of Route 2 on Belmont Hill, it can grow up to 90 feet tall. Its bark is smooth and gray; the younger trees resemble a feather-leafed palm. It produces a mass of greenish flowers in summer and reddish-brown papery winged seeds, which are dispersed by wind in the fall. Its compound leaves can be three feet long, with a single tooth on each side of the base (unlike a native lookalike, Staghorn Sumac, which has fully-serrated leaves). It dominates many urban lots and is spreading outside of cities, where it displaces native plants and their dependent animals. It also releases a chemical compound into the soil that inhibits the growth of other plants. It can be controlled by removing any new growth from stumps. Glyphosate herbicide can be applied to a stump or to the base of the tree once the bark is removed.

--Peter Alden

Flooding, *continued from page 16*

then gradually release it over the next day or two. The basin would be between five and seven feet deep, which is how high Little Pond and Little River rose during the last three floods in September 1996, June 1998, and March 2001.

In the 1996 flood, which town engineers in Arlington and Belmont agree was the flood of record (even worse than the 1955 hurricane), water from the stormwater pipes under Lake Street was streaming out of manholes in the middle of the road under the Route 2 overpass and draining into catch basins at the curb. These drains carried the water into the Little Pond area. If a basin were built on the former rink site, an overflowing pipe like this could flow into the basin instead, and there would be less flooding on Lake Street and in the basements

of nearby houses.

A flood storage basin on this site could also eliminate the need for the City of Cambridge to build a controversial storage basin in the middle of the Alewife Reservation across from the Arthur D. Little building.

New Data Needed

Before action can be taken on this issue, however, more data must be collected. The 1982 maps prepared by the Federal Emergency Management Agency (FEMA) are out of date. Three reports for Arlington, Belmont, and Cambridge said that in a 100-year frequency flood, the water elevation would be 8.2 feet. Yet water clearly is creeping over the low points of Route 2, near the Mugar property, when floodwaters are at 6.5 feet.



We need you.

If you can volunteer even a few hours a month, you can make a difference. You do not need to be an expert—just a person who cares about our town.

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Make checks payable to Belmont Citizens Forum and mail to Belmont Citizens Forum, P.O. Box 609, Belmont MA 02478. Thank you!

Interested individuals can improve the government's knowledge in this regard by taking their own water measurements during major floods. Good places to do this are in flooded basements, on the ground slopes behind houses, and on areas of streets that flood frequently. In each case, you should measure the depth of the water at some specific point (such as a tree, building corner, street curb, fire hydrant, or marked location on your basement wall). The most important thing to record is the highest water elevation. It is also helpful to record the time that the peak level was reached. Water level measurements taken earlier and later in the storm are also useful, because they can indicate how long it takes for floodwaters to build up and recede.

Citizens Can Track Flood Levels

This information can then be checked against survey maps, so that authorities can identify an elevation number, such as 6.5 feet, for the general area. If enough citizens track the flood levels, we will be able to figure out from these many measurements what differences exist at various locations along Little River, Wellington Brook, and other streams.

During the last three big storms, there were only seven measurements taken by government

agencies: one by Cambridge, zero by Arlington, three by Belmont, and three by the Army Corps of Engineers.

The problem is that the Cambridge readings appear to be too low by about a foot (they measured 5.5 feet for the 2001 flood), the Army Corps figures were haywire in 1996 (too high by two feet at two locations and too low by one foot at a third spot), and Belmont has not released any of its data for publication. The 2001 Belmont readings indicate water levels for Little Pond that are six feet higher than Wellington Brook. To put it simply, there is not a single government agency with any good flood measurement data for the past decade.

At this point, the best flood management tool is a tape measure. You may report your readings to Flooding Survey c/o Belmont Citizens Forum, P.O. Box 609, Belmont MA 02478. Doing so will help to prevent greater site runoff in the Alewife Brook watershed.

Stephen Kaiser is an MIT-trained mechanical engineer with a traffic and transportation background. He recently compiled a Survey of Reports and Data on Rainfall and Flooding for the Alewife Brook Area at the request of the Coalition for Alewife and the Association of Cambridge Neighborhoods.

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WHERE CAN DOGS PLAY?
A Public Forum
Thursday, November 21, 7:30 p.m.
See Page 7.

People Are Asking

What Can Be Done To Reduce Flooding in Town?

By Stephen Kaiser

Since 1996, Belmont residents have endured three floods in which the water table rose by 6.5 feet or more. The last one was in March 2001. Three inches of rain fell on saturated ground that already had substantial snow cover. Water and sewage overflowed from basement toilets, bubbled up from storm drains, and made some local roads impassable. Alewife Brook Parkway in North Cambridge was under a foot of water and had to be closed. Displaced traffic from Route 2 spilled into residential areas of North Cambridge and onto Lake Street in Belmont.

In short, the flooding and traffic problems showed that we must improve our planning.

Flooding has been an issue at Alewife since the 1950s, but it has gotten worse in the last decade. A 1987 environmental study by the state highway department suggested that some flooding could be alleviated by building a floodwater storage basin on a parcel of land owned by the Metropolitan District Commission at the intersection of Route 2 and Lake Street. This parcel used to be the site of an MDC skating rink and recently was proposed as a site for a soccer field.

The highway department estimated that the site could yield storage for about 15 acre-feet of stormwater. (An acre-foot is the amount of water in a one-acre pond one foot deep, or 300,000 gallons.) If adjacent state highway land were used for this purpose too, even more water could be retained. I estimate that the parcels together could hold up to 23.5 acre-feet.

The idea is that the basin would be empty at the beginning of a storm and then fill up like a large bathtub. It would store water at the flood peak and

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