

A Study of  
Open Space:  
Goals, Vacant Land,  
and Proposals  
towards a  
2001 Plan of Action

Town of Berlin  
Connecticut

Draft for Discussion  
June 2001

**Prepared for the  
Plan of Development Committee**

Chairperson: Dennis Kern

Staff: Brian Miller, Director of Development Services

by  
*Karen M. Pierson*  
*Planning and Public Policy Consultant*  
*22 Arnoldale Road*  
*West Hartford, CT*  
*860.236.1048*

## *Statement of Purpose*

The Town of Berlin is critically positioned at the heart of a key natural resource area within the center of Connecticut. Predominantly residential, with nodes of industry and commercial development, the community has been blessed by a countenance of rolling hills, woodlands, meadows, ridges and other features collectively contributing to what is termed open space.

Covering 17,592 acres [approximately 27.5 square miles] in the heart of the Mattabeset River watershed, Berlin is defined to the west and to the south by a series of traprock ridges. The ridges harbor unique plant and wildlife habitat and contribute significantly to the green space in Berlin with a diversity of exposed cliffs and peaks rising at various heights reaching 400 to 800 feet above sea level. The rolling terrain in the 'lowlands' is typical of that in traditional New England farming communities, where stone walls define the edges of woodlots and meadows, some of the latter in the early stages of reforestation. Orchards with gnarled trees give way to berry farms and small farming endeavors whose wares are sold in farm stands by the road. Crisscrossing the entire community is a preponderance of streams. Throughout the land that is so clearly interrelated to the watershed, soils and vegetation characteristic of wetlands, vernal pools and bubbling brooks break up the areas between residential developments and the few remaining agricultural ventures.

The intention of this study is to increase the amount of protected open space within the Town of Berlin. Contrary to the open space goals within the 1992 Plan of Development, this study is targeted at lands that meet a carefully constructed set of criteria that contribute to the natural and cultural resource base of the community. While there is some interest in increasing the active recreational space in the community, this evaluation focuses on what some call 'the working landscape.'

At present, a well-planned array of formal recreational areas currently exists, based on the 1959 Plan of Development that embraced linking parks and playgrounds to schools to maximize open space in larger quantities, in addition to maintaining a few large parks for town recreational purposes. Complementing this Berlin-owned land,

some of which [like Bicentennial Park] offers passive recreation and resource protection, is land owned by New Britain and Meriden. They use the land for reservoirs and protective buffer zones, creating an unusually large amount of municipally owned land within the community; however, it is not uniformly available for even passive recreational purposes such as hiking.

Yet, in-between these areas and within some prime development zones are open lands that are owned privately. Some of these lands offer qualities that merit community consideration for some level of protection as legacies for the future.

**Given the renewed community and statewide emphasis on open space as critical to resource management and community character, the Town and its people will be well-served by a plan to protect and preserve the key features of the lands which so define the character of the community. This plan is not a plan of acquisition, but a plan to:**

- ❖ **Identify spatial relationships and attributes of current vacant land within the Town**
- ❖ **Embrace a series of goals for open space and resource-based land use planning**
- ❖ **Articulate the need for a full range of strategies that can enhance linkages and promote vital goals among key properties**
- ❖ **Identify critical areas that should be preserved while encouraging the Town to direct development to areas most able to accommodate it**
- ❖ **Set up the framework for maintaining a level of protection using various planning and outright acquisition techniques**
- ❖ **Confirm the key open space configurations that will ultimately serve to endow the people of Berlin with open space lands over the next century**
- ❖ **Create a process for the people of Berlin to make collective decisions on valuing different goals for open space and development so that future open space decisions may be made as part of a community-resource-based process.**

## *Introduction*

The people of Berlin have been granted an environment with ongoing agricultural ventures, stunning scenic vistas, and extraordinary recreational opportunities. The unique sense of place is fostered not only by a heritage of cultural traditions [such as the Berlin Fair] and historic sites like the earliest settlers' homes or Worthington Ridge, but by the truly spectacular open space inherent in its meadows, woodlands, ridges, and farms. Linked partly by a series of publicly owned lands generally used to buffer reservoirs, as well as by unique uses such as the State Fish Hatchery and scouting camps, vacant lands in the community already create fragments of what looks like a greenbelt. So far, this informal series of linkages can be enjoyed visually and, to a lesser extent, recreationally, by Berlin's residents.

Yet as development pressure increases, amidst new needs for water supplies and new priorities for water resource protection, it becomes imperative for the Town of Berlin:

- ❖ to agree on goals for open space,
- ❖ to create a system to prioritize parcels for a variety of protections, and,
- ❖ to identify clear strategies to protect and enhance community resources.

It was a mere four decades ago, at the time of Berlin's first Plan of Development in 1959 that over 13,000 of its 17,000 acres [exclusive of water supply areas] were vacant. This vacant land, shown in the map in the Appendix titled Figure 1, was evaluated and estimates made for complete build out by the end of the century. While Berlin has not come close to the 53,700 population estimated in 1959 to be possible with full build-out [using household sizes far in excess of those common today], the past decade has seen the level of growth in Berlin accelerate. Concurrently, the private lands that contributed to open space within the community have diminished.

As early as 1948, considering the future and the pressures of development, town fathers placed 10,702 acres of land, over half the community, in the residential zoning category termed farm zone, revalidated with the 1959 plan. *In many ways, open space planning for today should be looked upon as a continuation of the community values set by these forefathers considering the impacts of Berlin's earliest zoning.* In fact, the 1959 map of physical features within the community -- slope in excess of 20 percent,

watercourses and swamps -- echoes the characteristics analysis that helped define areas identified in this study 42 years later [see Figure 2 in Appendix].

Within the 2001 inventory of vacant land, over [FILL IN WITH FINAL TALLY] acres were identified that could be eligible for some protection under new, innovative packages of acquisition and landowner-based protection. While standard protection mechanisms such as lands ceded for open space in subdivisions or the Public Act 490 legislation on tax assessment have been implemented over the years, *the inventory that is the base of this study demonstrates that Berlin needs to focus efforts on a proactive rather than a reactive approach to land protection.* In concert with the landowners, many of whom seem to have indicated various levels of interest in seeing land protected for future generations, the Town of Berlin needs to assess how best to protect lands that meet other goals of the open space program.

More than forty years after the high growth scenario, population growth even with a diminished household size can be seen to affect the community fabric. The ongoing search to replenish property tax revenues to maintain the high standard of services within the community dictates a new mission for today's leaders. Community character includes legacies for future generations: leaders must determine how best to balance the preservation and/or development of remaining vacant lands amongst a tapestry of property owners' rights, water and natural resource protection. One way to do that is to establish a clear procedure based on natural resource science and community values.

This study comes at a time of heightened awareness throughout the state and the region of the value of open space. Municipalities who have access to fiscal impact studies on land development have also helped further the interest – the Southern New England Forest Consortium study of 1995 demonstrated that for each \$1 in property taxes paid by open space, towns provide only \$0.42 in services, a net gain. A few years after that study, with the Governor's backing, the Connecticut General Assembly set a goal of protecting 21 percent of the state's land by the year 2023, offering matching grants to communities to further these goals. Early indications show that the race to protect lands may be won long before that date. The time is ripe, as more communities realize that open space is that which most communities take for granted until it disappears under development.

By inventorying the vacant and open parcels in the community, including key agricultural and historic land uses, this study has identified a series of areas that naturally create contiguous zones embodying the concept of open space. This report will serve to reference the extensive database and mapping completed as part of this project. But, more important, it will set out the goals, objectives and parameters of the work the Town of Berlin must undertake to prioritize, protect, and plan for the continuing contribution of open space to the essence of the community.

This report does not include all the strategies to be incorporated; instead, it directs town staff and committee members towards the variety of land use planning tools available while establishing the broad goals of open space. While cognizant of the tools already in use by the town development staff, this plan should help to further legitimize their use in certain residential and commercial development scenarios. There are many ways in which open space values can become a part of a community without jeopardizing development. Critical to that is the recognition that open space serves a multitude of purposes in addition to its legacy of land for future generations.

## *Methodology*

Before describing the results of the work, the methodology is important to document for full comprehension of the recommendations. The inventory of vacant land derives from the computerized assessors list, with some corrections made by hand as has been necessitated. Properties on the assessor's list were culled in two different phases.

In 1999, an evaluation was completed of vacant commercial and industrially zoned lands in excess of 1.5 acres. These were mapped using a GIS-based system at the Connecticut Economic Resource Center [CERC] and maps overlaid with known environmental constraints, including wetlands soils, floodplains, and slope. While some of those lands have been developed since, and many of those lands remain as targets for tax-revenue generating development in the future, this evaluation identified a select number of parcels that could offer more open space potential than development potential in the future.

With the inception of the 2000/2001 Plan of Development process, a new list of vacant residentially zoned land in excess of 5 acres was generated, and placed in Microsoft Excel format. Additional queries were run of almost vacant properties in excess of 5 acres [which identified some of the farms, lands with isolated or abandoned structures, etc.], and of vacant properties less than 5 acres, to identify any of the small but critical links in looking at the creation of 'greenbelt' areas within the community. Key properties identified through these lists were added to the base worksheet. Also integrated into this worksheet were a few of the commercial and industrially zoned properties identified in the earlier study.

The properties were then mapped by hand on a copy of the Town of Berlin map of publicly owned lands, to visualize the links between these privately held vacant lands and existing properties. At the same time, the Conservation Commission was contacted and maps of possible open space that were created as part of a CCSU intern project, in addition to their current thoughts on key properties, were used to check against the assessor-based property list.

This process revealed some unusual gaps within the database – properties that should have been identified in the inventory that were not, as well as properties identified as vacant or nearly vacant by the Conservation Commission that also did not appear in

any of the lists. The process of seeking validation and making these corrections revealed that the assessor lists seemed to omit some of the major properties in the community that were eligible for PA 490 tax abatement based on farm and forest uses. A separate list was then generated to try to document all PA 490 properties. The 288 properties included in that list were then evaluated and missing properties inserted into the Excel database.

From this, a map was generated by hand that identified the parcels deemed by geographic proximity and resources to be crucial to consider as part of Berlin's planning process. This was to be mapped using GIS software at the Central Connecticut Regional Planning Agency. Since they had also completed GIS based maps of environmental constraints, these could be overlaid to assess key characteristics of the land, which were then noted in the Excel spreadsheet.

From this process, a striking picture of Berlin's assets and open space potential began to arise. It would be fair to say that far more properties were identified with some potential than had been anticipated at the start of this study. Given that earlier work on open space goals with the Plan of Development Committee recommended setting goals for open space based on community values and natural resource based land use planning principles, it seemed prudent to keep a large number of the properties on the map. Then, using the established goals identified below, particularly that of maximizing open space benefits by linking properties, the consultant and staff worked together to create the map shown as Figure 3 that identifies the critical areas that should be considered for open space protection using a combination of land use tools.

Ultimately, this map and the inherent recommendations can be evaluated against the qualities of particular parcels that could be open space to test their validity. The net result will be a process that will help guide land use planning in the Town of Berlin.

## *Characteristics of Open Space*

According to the University of Connecticut's NEMO program, six functional types of open space include:

- ❖ Natural Resource Protection Areas
- ❖ Passive and Active Outdoor Recreation
- ❖ Resource Management [forests, fisheries, farmland...]
- ❖ Protection of Public Health and Safety [aquifers, watershed, wetlands, floodplains...]
- ❖ Areas that Shape Community Character or Design
- ❖ Historic or Archaeological Sites

*Important to note is that the cultural landscape inherent in the last two categories is absolutely considered to be a valid, and in many cases a critical use of open space planning -- whether it be a defining town green such as Clark's Grove in East Berlin or the new park celebrating historic industrial uses besides Paper Goods Pond. Within the Town of Berlin it is evident that all six of those open space qualities are present many times over within many of the lands in the community.*

According to the University of Connecticut, the backbone of open space planning is water quality and its preservation. Besides Berlin's dominant role in the Mattabesset Watershed Area, the majority of Berlin's water supply is provided by contract with the New Britain and Cromwell municipal water departments, the Metropolitan District Commission and the Elton Road wellfield with a smaller portion from private wells. Given that Berlin hosts prime AA [superior level of purity—only AAA is higher] reservoirs for two other communities, Meriden and New Britain, the pristine nature of Berlin's resources and the imperative to protect them are crystal-clear. With considerable lands within the town lying over bedrock aquifers, water quality should be a primary consideration within the community.

Yet the other open space characteristics, notably that of natural resource protection such as habitat for flora and fauna, deserve weight. To comprehend the extent of the resources within this community, the reader is referred to several documents, listed below and incorporated by reference:

- ❖ Management Plan for the Mattabesset River Watershed, June 2000
- ❖ Watershed Protection Study: Merimere Reservoir/Kenmere Reservoir/Hallmere Reservoir, February 1993 by CCRPA
- ❖ Lamentation Mountain Tri-Town Project: Land Use Plan, June 1994
- ❖ Study of Town-Owned Open Space, Berlin, Connecticut by Berlin Conservation Commission, October 1994
- ❖ Map by the State of Connecticut Department of Environmental Protection, Town of Berlin Water Quality Classification, Leachate and Wastewater Discharge Source, map printed 3/28/01, source DEP Bureau of Water Management, Planning & Standards Division [tel: 860-424-3555].
- ❖ Map by DEP on Endangered Species, updated annually [*get actual name*]

Notwithstanding the importance of scientific/natural-resource based planning, it should be acknowledged that the citizens and officials of Berlin are bound to hold differing definitions of open space. To some, it means ballfields and playgrounds. To others, it means contemplative space found far from the clamor of highways and houses. To some, it is a hiking trail that offers new vistas with each passing season.

Hence, as Berlin considers this new venture in open space planning, it should be understood that open space has a psychological benefit besides the concrete benefit of helping property values and achieving a net positive effect on a community tax base. In many subtle ways, open space as a concept is starting to redefine recreation both physical and of the contemplative nature as a way to link people to something outside their busy world. This sentiment underlies many of the community open space designations across the state in recent years.

**Whatever the precise qualities of the space, when looking at a map of Berlin that integrates publicly owned lands with vacant lands, a clear image arises of a network of green areas that ultimately defines most images of a quiet New England town.** It seems that the citizens of Berlin recognize this subtlety of benefit from green space. In addition to documenting the planning and scientific rationale inherent in open space as a community priority, it is important to note that the 2001 Community Survey conducted by the Center for Public Policy documented with statistical validity the following observations by the citizenry of Berlin.

- ❖ “Very large majorities of respondents want open space corridors along streams and rivers preserved [95.8%], increased efforts to protect underground water [94.0%], and efforts to clean the Mattabesset River [90.8%]. ...
- ❖ “Large majorities also call for acquiring more open space [81.3%] and preserving Berlin’s farms [89.8%].”

The survey also asked respondents to identify from a list each project that would entice them to increase taxes by \$75; the top category with 58.4% of respondents agreeing to increase taxes was farmland preservation, with bike and walking paths sixth at 50.6 %. Open space acquisition prompted 47.1% of respondents to agree to increase taxes by \$75.00. Apparently the people have spoken.

### ***2001 Goals of Open Space***

In concert with the Plan of Development Committee, the following goals for the Town of Berlin's Open Space Program have been articulated:

***Goal 1: Preserve and protect the natural resources, unique topographic features and scenic beauty intrinsic to Berlin.*** These include: the traprock ridgelines; open meadows and fields; woodlands and forests; wildlife habitat, refuges and corridors, including that of rare and endangered species of flora and fauna; wetlands [including vernal pools] and watercourses; and the scenic vistas within several parts of the town.

***Goal 2: Protect lands identified as intrinsic to public health and safety, including surface and subsurface water resources used by Berlin and adjacent towns.*** These include aquifer recharge areas; drainage areas for current and proposed wellfields; water company lands; and, the Mattabesset watershed area. In addition, flood hazard areas including the floodways and floodplain areas as designated for 100 and 500 year storms should be protected whenever possible, particularly when the sites coincide with other open space values.

***Goal 3: Preserve and protect key features of Berlin's cultural landscape.*** Examples of features with cultural importance include: the historic district of Worthington Ridge; Clark's Grove in East Berlin; historic industrial structures such as the Main Street complex by Paper Goods Pond; the train depot; the Berlin Fairgrounds; remaining agricultural lands even if not actively farmed; and, the unique features of historic church and parish life in old Berlin, including cemeteries and greens.

***Goal 4: Adopt natural-resource-based planning that integrates Smart Growth principles with the information on Berlin's natural and irreplaceable features to determine how best to channel development towards other lands within the community, to avoid conflict with open space that should be protected in perpetuity.*** By identifying the lands that should not be developed, that would be a priority for protection and by encouraging development in areas with existing

infrastructure, this goal supports concentrating resources on those lands that will be most appropriate to develop/redevelop.<sup>i</sup>

***Goal 5: Emphasize the natural beauty of Berlin’s historic, geologic and topographic features by linking them with a series of green corridors and contiguous greenbelts.*** Berlin is ideally suited to maximize benefits of open space planning by using open space acquisition and easements to link already existing and unique open spaces to create green corridors within and surrounding the community. These corridors, shown on Figure #4 in the Appendix, would include:

- ❖ The Western Ridge-North Area [including the Metacomet Trail north of Southington Road]
- ❖ South Kensington Agricultural Area [both sides of the Chamberlain Highway south of High Road]
- ❖ The Western Ridge-South Area [particularly along Edgewood Road south of Southington Road]
- ❖ The South Ridge/Silver Lake Area [including the property anticipated as part of the Power Company donation]
- ❖ Lamentation Mountain
- ❖ The East Mattabeset Corridor [including the Fairgrounds]
- ❖ The Brickyard Ponds Area
- ❖ Stream Corridor #1: Mattabeset stream and tributaries, from the Hart Ponds through to Paper Goods and Railroad Ponds
- ❖ Stream Corridor #2: Hatchery Brook-Crooked Brook-Swede Pond streams and tributaries
- ❖ Stream Corridor #3: Silver Lake-Belcher Brook and tributaries
- ❖ Stream Corridor #4: Spruce Brook –Mattabeset River East

---

<sup>i</sup>As recommended by the University of Connecticut’s NEMO program [Nonpoint Education for Municipal Issues], given this unique resource base, the Town of Berlin would be best served by using *natural resource-based planning* techniques. Natural resource-based planning starts with a community’s natural resource base and works ‘backward’ to development potential: “open space and development should complement rather than compete with one another.” Details are available from UConn Cooperative Extension Service at 860-345-4511.

## *Status of Current Open Space and Land Development Efforts in Berlin*

During the past decade, the town of Berlin has increased its focus on open space. Several tracts of open space have been added, often as unconnected pieces of land carved from the edge of subdivision developments. Until recent commitments to finance the purchase of open space by bonding, the town has not actively sought to acquire or otherwise affect development rights on prime parcels.

As this study is underway, two prime acquisitions of space are pending: the [FILL IN #] acres south of Bicentennial Park in three parcels known as the Bradley property that will be acquired directly, and the pending acreage currently held in trust to be donated as part of the Meriden Power Plant plan. Each of these acquisitions relate to key open space parcels. The Bradley property abuts Bicentennial Park, as well as a farm and the Girl Scout Camp, which also display key open space values. The power plant lands embrace a critical ridge area to the west of Silver Lake, creating a corridor that would seem to enhance ridge protection as well as the wildlife habitat. For the purposes of this study, these properties were mapped as likely to become a part of the town's land assets.

It should be noted here the current method of open space acquisition that combines a general knowledge of open space attributes and opportunities and a reaction to parcels that come available for sale has periodically resulted in good land preservation practices. Given the strength of the natural resource base in Berlin and the high potential for loss of prime lands to development, a more systemic approach is suggested to truly meet crucial community goals.

Current open space lands are characterized by several diverse ownership patterns. The map of municipal lands illustrates extensive holdings in the Town of Berlin by Meriden and its water company [approximately 880 acres] and by the City of New Britain [approximately 670 acres], including reservoirs and buffering lands adjacent. Meriden's holdings include the reservoirs known as Hallmere, Meremere, and Kenmere (with Elmere Reservoir lying just outside the town boundary but with buffering lands within Berlin.) New Britain's holdings are the two Harts Ponds, with the lower Harts Pond mapped as AA quality on the state DEP map [the lower Harts Pond is not on that

map despite being considered a Class I reservoir by New Britain. In addition to these lands owned by other towns, Berlin owns 1100 acres of large parcels. The State of Connecticut owns park land by Silver Lake as well as several parcels elsewhere that have the potential to contribute to open space within the community. Also listed in this inventory is land owned by the Shuttle Meadow Golf Club and by scouting organizations.

The Berlin Land Trust owns two parcels, one on Orchard Street and the other at the end of Overbrook Road, and it has a conservation easement on property to the east of the subdivision on Oak Ridge Drive.

For the purposes of Berlin's planning, these publicly owned properties should be categorized as either committed open space or as uncommitted open space. Committed open space should be those lands which are open and for which land control mechanisms are in place that would preclude development. Most of these are part of the comprehensive inventory of town-owned open space lands by the Conservation Commission in the table on the next page.

Uncommitted open space should be those lands, often privately held, which have been used mostly for commercial and private recreation, including public utility lands. These must be considered to be uncommitted because they are not guaranteed to remain open – witness the Meriden Water Company's current policy restricting use in their property off Edgewood Road. [In Berlin's situation, given the presence of AA reservoirs, most of the water company lands held by the two municipalities can be seen as open in perpetuity, although they may not be open to the public.] Another example of uncommitted open space is the large undeveloped tract owned by Shuttle Meadow Golf Club that is contiguous to the town park at Ragged Mountain. Absent an agreement for use, utility line rights-of-way should also be part of this category.

Berlin is in a unique situation given the open lands, unique geologic formations and critical habitat that encompass the perimeter of the community. The majority of these lands are shared across community borders which is a *key criterion* for state funding for further acquisition and development rights. As evidenced by multi-town partnerships in the Mattabeset study, the Lamentation Mountain Study, and the Metacomet Ridge Conservation Compact endeavor, ultimately, Berlin will have great

opportunity to secure open space with multi-town protection. Yet, in the meantime, it is critical to link parcels to existing open space.

In 1994, the Berlin Conservation Commission inventoried Berlin’s committed open space parcels, documenting uses and resources. With the exception of some minor parcels that have been ceded to the town since, the list is as follows.

PARCEL NAME	ACREAGE	PURPOSES [per Cons. Comm. Study in 1994]
Sportsman’s Pond	46	Dynamic wetland, passive recreation incl. boating
Mattabeset/Beckley Mills Rd.	15.3	Flood hazard area, wetland, northern end of major wildlife corridor
Webster Park	50	Wetland, flood hazard zone, integral part of wildlife corridor, archaeological, closed [Route 9 cuts corner]
Chestnut Lane	7.8	Greenway along Mattabeset, flood hazard
Canterbury Road [Land Trust]	8.7	Flood hazard zone, southern end of wildlife corridor that culminates at Beckley Mill Rd.
Lamentation North	45	Basaltic ridge with steep cliff and talus slope, groundwater with possible aquifer
Lower Land and Briarpatch Road	18.1	Flood hazard zone, wetlands, wildlife corridor habitat for resident and migratory birds
Wildermere Road	19.8	Greenbelt, wildlife corridor, flood hazard zone, adjacent to playing fields
Lamentation South	25	Extraordinary view from traprock ridge, basalt outcroppings, important wildlife corridor
Treasure Field	5.3	Quiet site with trails used by neighborhood
Town Hall/Railroad Pond	38	Forested wetlands, wildlife habitat as oasis in suburbia, flood hazard zone, recreational boating
Elton Road Well Site	30.5	Little recreational value but key water resource site
Bicentennial Park	189	Regional park with limited access, wetlands, hardwood forest, over possible aquifer
Spring Street/Newton St.	2	Greenway on stream
West Lane Cemetery	2.4	Trailed area for meditative contemplation
Ragged Mountain	589	Inland wetland, watercourse, aquifer, historic and archaeological features, slopes/ridge.
Belcher Brook Greenway at Orchard Road	7.32	State stocked trout stream, hiking trails

In addition, in the context of cultural landscape, there are several noteworthy properties, with varying levels of protection. The list is included here because many of these are already assumed to have some level of protection. According to the Berlin Historical Commission<sup>ii</sup>, current assets of the cultural landscape include: Worthington Ridge Historic District; East Berlin's central, Victorian core; Peck King Building; Kensington Grammar School; Meeting House at Worthington Ridge; Paper Goods Factory [and pond]; 18<sup>th</sup> century homes and barns identified in Berlin Historical Society architectural survey; Augustus Moore home/property/stables on High Road; Pistol Creek site and bridge/dam on Spruce Brook; Seven Sisters Railroad Bridge; Berlin Train Station; Tower House on Farmington Avenue; Lustron houses on Tollgate Road, Westview Terrace, and Mountain View Road; all monuments; churches built before 1950; cemeteries; Selden School; Ledge School; and the farms of Fontanella Farm, Chotkowski Farm, DeMaria Farm and Krystopik Farm. Within the list are additional suggestions that should be considered within the final decisions on strategies for open space.

---

<sup>ii</sup> Letter dated March 15, 2001 from Kathryn Heffernan Kearns, President of the Berlin Historical Society to Brian Miller, Director of Development Services. This letter also included several key natural resource areas. In addition to the list in the text, the letter included 'scenic highway along Chamberlain Highway from Dr. Chotkowki's farm to Meriden Lane'; Timberlin Golf Course and Park; Sebethe River and banks.

## *Summary of Key Tools for Planning*

There are a number of options ranging from outright purchase of parcels for open space to the variety of regulatory mechanisms that effectively create open space. The list of methods herein is derived from the University of Connecticut's NEMO Project – Nonpoint Education for Municipal Officials. They have succinctly defined the majority of options available; a brief summary follows.<sup>iii</sup>

There are four primary categories of options for the protection of open space: land use regulations and plans; transfer of title options; nonprofit purchase and ownership entity options; and ownership options for government and nonprofits.

**Land Use Regulations:** This brief list of commonly used options references the tools that have been tested through communities, as well as some that offer potential for the future, such as Transfer of Development Rights. First, inland wetlands requirements have a track record within communities of effectively limiting development by prohibiting building in wetland soils. Zoning may further restrict and protect key areas by employing criteria for large lot zoning, net buildable area, soil-based zoning, cluster development, preservation overlay districts, and Transfer of Development Rights. Subdivision regulations such as those already promulgated in Berlin can require an open space dedication and payment in lieu of dedication. Crucial to note, however, is that none of these are of value without a land use plan.

**Transfer of Title Options:** Acquisition of land certainly affords the most protection. The most costly method may be the sale of potential open space land at fair market value. Bargain sales structured as part donation/part sale may offer tax benefits to the seller, depending on the capital gains tax situation, allowing the owner to achieve some return on their investment in the land. Obviously, and as has been done already with the Land Trust land on Orchard Road, an outright donation is possible, permanently protecting the land with tax benefits to the donor. Similarly, land may be donated at death, termed 'by devise,' although the donor receives no tax benefits. Donation with lifetime use as a 'reserved life estate' is another method where the donor actually receives

---

<sup>iii</sup> For more information, please see their open space fact sheet No. T-1, Techniques for Preserving Open Space.

tax benefits. Some communities have used land exchange, where public agencies or nonprofits exchange publicly held developable land for land with significant value as conservation land. Eminent domain is rarely used for open space. Tax foreclosure can occasionally lead to acquisition of land for public use but is rarely worthwhile and hardly a planning tool.

**Nonprofit Purchase and Ownership Entity Options:** A nonprofit can acquire land for future conveyance to a public entity or a land trust, allowing the nonprofit more flexibility in the finance and acquisition, holding the land until the public agency is in a position to purchase and manage it. Some nonprofits may acquire the land and manage it, as is done by the Berlin Land Trust, provided that they have the necessary endowment to manage the land over time. Some nonprofits may choose to sell or lease the land with restrictive easements or covenants, which can be used to write down the cost of land and convey it in an affordable manner to someone such as a farmer. Sometimes, of course, it is in the interest of the community ultimately to see a nonprofit sell acquired lands, sacrificing one to finance others, something that is finding more favor as certain long held lands appreciate in value.

**Government and Nonprofit Ownership:** Fee simple and fee simple/leaseback may be used to create permanent protection and full public access of lands. The leaseback option can be viewed as a form of land banking, restricting current uses to evaluate options for a later time. A less expensive option [and one that is eligible for matching grants under the state's open space program] is the purchase of development rights or conservation easements, where the ownership is maintained but use is restricted, limiting the taxes but expanding the owner's ability to maintain use of land. Unfortunately, despite great publicity in planning circles, the transfer of development rights [TDR] is the most complicated of all the options, and Berlin may not have the critical mass of either agriculture or more intensive development that is necessary to make this work. The state of Connecticut supports this and allows TDR to be eligible for state open space funding, but this does not at present have a valid track record in Connecticut communities. Its innovative nature keeps it on the agenda for many discussions on land preservation and current smart growth strategies.

The UConn program maintains a number of model ordinances and similar examples of regulatory and legal language that can address the use of many of these tools.

One tool not clearly articulated in this list is the use of the special tax assessment process known as PA 490. Based on the extensive list of properties within the Town of Berlin that seem to have taken advantage of this program already, the program will be briefly described. However, while it has been used for farm and forest designations within this community, it is also available for open space designation, as described below.

P.A. 490 was authorized in 1963 and allows the assessment of farm, forest, and open space land to be based on what the land is actually used for rather than its market value. The use value taxation model actually recognizes that open space with these qualities requires ‘little if any support from local government revenues.’ It was created also in hopes that high taxation would not force owners to sell lands.

Once an owner has signed up for 490 status, the designation remains until the land ownership is changed. For the first ten years of the designation, there is a penalty for selling the land and taking it out of use. After ten years, there is no economic disincentive to selling the land. There have been extensive court rulings on many aspects of this legislation, generally upholding broad definitions of the farming and forest operations. While Berlin property owners seem to have used these designations over the years, with many assumed to be well beyond the ten year penalty period, there are provisions that communities can add to their laws allowing for open space assessments on land which should be noted.

If land has been designated by the local planning commission and approved by the legislative body as open space, any owners of that land may apply for 490 designation. Open space for this purpose is defined by Section 12-107b© of the General Statutes as “any area of land, including forest land designated as wetland under Section 22a©30 and not excluding farmland, the preservation or restriction of the use of which would: (1) Maintain and enhance the conservation of natural or scenic resources, (2) Protect natural streams or water supply, (3) Promote the conservation of soils, wetlands, beaches or tidal marshes (4) Enhance the value of the public of abutting or neighboring

parks, forest, wildlife preserves, nature reservation or sanctuaries or other open spaces, (5) Enhance public recreation opportunities, (7) Preserve historic sites, or (8) Promote orderly urban or suburban development.”

At present, it appears that most vacant lands in the town of Berlin have already received some tax benefits under 490 provisions. However, limited use as a planning tool may be considered for those properties that appear to have open space qualities and could be temporarily benefited by the 490 designation. Unlike the stricter interpretations and state certification required within the farm and forestland designations, the use of this open space assessment can vary greatly from town to town. Berlin could structure an open space provision that would encourage protection of portions of lots; however, the protection is only limited to the first ten years and is a financial impediment only.

### ***Description of the State Grant Program to Fund Acquisition***

The Connecticut Open Space and Watershed Land Acquisition Grant Program enables communities to receive financial assistance for land for open space. Land acquired is to be protected in perpetuity either predominantly in its natural scenic and open condition or for the protection or provision of potable water or for agriculture.

When the state assists a community with the funding for acquisition, a permanent conservation easement is to be provided to the state to ensure that the property remains in a natural and open state for the purpose for which it was acquired. The easement also mandates that the property be open to the public for appropriate recreational purposes. This latter provision may be exempted if development rights were purchased under the program or if general public access would be disruptive to agricultural activities.

Grant awards are available to municipalities for open space in an amount not to exceed 50 percent of fair market value. Municipalities are eligible for grants up to 65 percent of fair market value for Class I and Class II water supply property. A nonprofit land conservation organization is eligible for up to 50 percent of fair market value for lands contributing to open space or to watershed protection, and water companies are eligible for up to 40 percent of fair market value for Class I and Class II water supply.

The criteria that the state is seeking for these lands is critical to understand and would appear to be quite likely to be met on some of the properties within Berlin. Connecticut's Open Space and Watershed Land Acquisition Grant Program [C.G.S. §§ 7-131d to 7-131k] sets clear goals for the characteristics of the open space land. These include land that is:

1. valuable for recreation, forestry, fishing, conversation of wildlife or natural resources;
2. a prime natural feature of the state's landscape;
3. habitat for native plant or animal species listed as threatened, endangered or of special concern;
4. a relatively undisturbed outstanding example of an uncommon native ecological community;
5. important for enhancing and conserving water quality;
6. valuable for preserving local agricultural heritage; or,

7. eligible to be qualified as a Class I or Class II watershed land.

The state also recognizes other features of how the lands relate to each other and to existing open space, including:

1. protection of land adjacent to and complementary to existing open space, preserved agricultural land or Class I or Class II water company land;
2. proximity to urban area;
3. land vulnerable to development;
4. consistency with the state plan of conservation and development; and
5. lands with multiple values, such as water supply protection and recreation.

It is important to note that Connecticut places high importance on the use of linkages, both between open space areas, and between adjoining towns. Cooperative projects between towns receive high marks in their consideration. They also seek evidence that applications comply with local and regional open space plans, or the appropriate conservation and development plans.

### ***Summary and Planning Actions: Strategic Objectives***

In order for the Town of Berlin to meet these goals for open space preservation, there are several detailed objectives that should be evaluated by the Plan of Development Committee and Development Services staff for eventual incorporation into the Open Space Plan. These can be seen as the framework for the community plan; they are the actions that will allow the goals to be attained. Although some relate solely to one of the five goals articulated during early deliberations of the committee, most of these concepts overlap the goals.

During this project, a number of suggestions have been made concerning various goals and strategies. The core of this work centers on the results of the mapping, which visualized the linkages that seemed evident from work that was underway. The results, the areas identified and reference in Goal 5, should be the backbone of any open space plan for the Town of Berlin. Until an accurate small-scale map can be generated, the list should suffice:

- The Western Ridge-North Area [including the Metacomet Trail north of Southington Road]*
- South Kensington Agricultural Area [both sides of the Chamberlain Highway south of High Road]*
- The Western Ridge-South Area [particularly along Edgewood Road south of Southington Road]*
- The South Ridge/Silver Lake Area [including the property anticipated as part of the Power Company donation]*
- Lamentation Mountain*
- The East Mattabesset Corridor [including the Fairgrounds]*
- The Brickyard Ponds Area*
- Stream Corridor #1: Mattabesset stream and tributaries, from the Hart Ponds through to Paper Goods and Railroad Ponds*
- Stream Corridor #2: Hatchery Brook-Crooked Brook-Swede Pond streams and tributaries*
- Stream Corridor #3: Silver Lake-Belcher Brook and tributaries*
- Stream Corridor #4: Spruce Brook –Mattabesset River East*

For the purposes of the Discussion Draft, the strategies have been listed without organizing by goals or in order, since so many of them overlap. These and other ideas should be carefully evaluated for adoption eventually with staff and committee input, including members of the Conservation Commission that has considered many similar concepts over the years.

A quick reiteration of the goals follows. It should be noted, however, that the broader language that clarifies each of the goals, for instance, identifying traprock ridges as a natural resource in Goal 1, must be carefully incorporated into the final adoption of the goals.

*Goal 1: Preserve and protect the natural resources, unique topographic features and scenic beauty intrinsic to Berlin.*

*Goal 2: Protect lands identified as intrinsic to public health and safety, including surface and subsurface water resources used by Berlin and adjacent towns.*

*Goal 3: Preserve and protect key features of Berlin's cultural landscape.*

*Goal 4: Adopt natural-resource-based planning that integrates Smart Growth principles with the information on Berlin's natural and irreplaceable features to determine how best to channel development towards other lands within the community, to avoid conflict with open space that should be protected in perpetuity.*

*Goal 5: Emphasize the natural beauty of Berlin's historic, geologic and topographic features by linking them with a series of green corridors and contiguous greenbelts.*

For the purposes of this discussion draft, it should be noted that there are more strategic concepts that should be on this list. Consider this to be a preliminary list of ideas. Evaluate each concept against its ability to meet the goals. Many of the ideas that came forward during a process such as this have merit.

- Set up a formal process for the Plan of Development Committee in concert with the Conservation Commission to complete a community-based open space plan, with appropriate public input.
- Develop a public presentation on open space, to use for various groups within the community to build understanding and support for this process. Include slides and other visuals that relate the open space to the character of the community, as well as to the protection of water supplies, etc.
- Create a plan to identify and ultimately assemble key sites within key areas that come together visually as a green corridor that can both connect and buffer key sites, functioning for wildlife and resource protection via links throughout the community.

- Identify and preserve through acquisition or regulation lands that contain key natural resources.
- Protect critical or threatened habitats, as identified by independent investigation as well as the state maps and planning resources that identify critical habitats for rare and endangered species.
- Preserve lands that are needed to buffer and protect surface and subsurface water resources.
- Protect groundwater within existing and potential public drinking water supply areas.
- Protect steep slopes to control soil erosion and water runoff, as well as maintaining scenic viewing areas open to the public able to achieve access.
- Preserve farmlands and similar agricultural uses that once typified the commerce of the Town of Berlin.
- Incorporate the multi-faceted elements of the Mattabeset River Watershed Plan into the open space provisions of the town.
- Preserve lands that link current and proposed open spaces to provide corridors and pathways for habitat, passive recreation, and community continuity.
- Develop non-acquisition based measures to further open spaces, including but not limited to regulatory provisions within subdivision, health and zoning regulations, incentive zoning for cluster development, density bonuses, design and property tax incentives to preserve meaningful open space within private development.
- Encourage site development sensitive to the area's natural characteristics, including large tracts of industrial/commercial space that can integrate open space, wildlife corridors, etc.
- Define the limits of Berlin using the natural greenbelts formed by the ridgelines to the south, southeast and west, and the open lands along the wetlands and watercourses to the north and east.
- Encourage growth in those areas capable of supporting it without major infrastructure investment and change, further preserving areas that have limited infrastructure and are less suitable for development.

- Provide recreational opportunities of an active [hiking, climbing] and contemplative nature for the citizenry of Berlin, in accordance with the fragility of the types of lands.
- Find new locations for active group uses such as field sports.
- Expand passive recreational opportunities throughout the town and in these areas, including the Metacomet and Mattabeset Trails and related trail systems, as well as other noninvasive hiking opportunities.
- Create walking trails, rail-trail pathways, etc. with appropriate points of access, including carefully designed parking opportunities where appropriate.
- Preserve meaningful open space within private development, including where feasible in areas of industrial and commercial development.
- Identify possible sites for a bikeway/pedestrian walkway – consider the existing right of way in the East Mattabeset Corridor.
- Contact Northeast Utilities to establish interest and procedures for obtaining access to the power company power line rights of way
- Work with the owners of other nonprofits that own key parcels, including the Girl Scouts Association and the Berlin Land Trust to communicate and ascertain how and if there are issues that could threaten their open lands.
- Use the base matrix below to create a town system of evaluating properties that offer open space opportunities.
- Carefully select the lands which you choose to apply for state funds.
- Consider reevaluating Berlin’s position on the unique ridgeline compact forged by the 19-town group known as the Metacomet Ridge Conservation Compact.
- Develop a financial plan, phasing in priorities for acquisition and other costly measure. Consider innovative concepts for funding of open space.
- Consider the town’s existing use of PA-490 and whether open space should be included.
- Prepare a brochure for key landowners identifying the variety of methods available to preserve large tracts of land.
- Contact landowners of all properties identified in the final maps to alert them the conceptual ideas behind the map, before the map is made public.

- Continue to enforce the open space provisions allowable in town subdivision regulations but work to connect those to the areas identified within the maps.

### ***Implementing and Evaluating Parcels: The Concept of Ranking***

As referenced within the text above, it is suggested that Berlin ultimately develop a ranking system that allows the community an objective procedure to give objective consideration to parcels that become available for community acquisition. The matrix that is included herein allows reviewers to give a weighted rank to each major parcel, considering each of the values you seek to achieve with preservation of open space. This technique is becoming generally accepted as communities across the nation deal with open space planning.

Such a matrix allows objective evaluation of a given property. By tallying each column, this system allows you to place extra weight on the multifunctional properties. Although when this project began, it was assumed that the matrix would identify goals, at this point in the study, it is clear the goals are too broad to allow a property-by-property analysis. Therefore, this proposed matrix isolates several of the key attributes that have been discussed during this process, ultimately allowing Berlin to rank the relative importance to the community of the elements of town open space goals.

<b>Open Space Goals</b>	<b>Community Weight of Goal</b>	<b>Site Evaluation Weight</b>	<b>Combined Weighted Rating</b>
Parcel within a linkage area			
Unique Topographic Feature [i.e. ridge]			
Water supply and buffering area			
Water quality [incl. Mattabesset Plan]			
Wildlife Habitat/Corridor, Rare Flora			
Natural Resource incl. flood hazard			
Agricultural Use			
Cultural Landscape/Historic qualities			
Unique but disappearing feature [i.e., meadows, scenic views]			
Tax-Generating Development Potential			

### ***Conclusion***

This draft for discussion is submitted as the basis on which the Town of Berlin can create its primary guide for future decisions on open space protection and land acquisition. In concert with the Plan of Development planning process now underway, this study can be used to chart the issues facing future development of all types within the Town of Berlin. Ultimately, however, this study is to allow the town to celebrate the features which have shaped Berlin visually and culturally since the time of the glaciers. When the continents separated and lands rose and fell and fractured, the rift of Pangaea was filled with erosion sediments and lava flows, out of which grew the traprock ridges which form the southern and western boundaries of the town. Forested lands, keen vistas, and rich hydrological areas followed.

As recommended by the University of Connecticut's NEMO program [Nonpoint Education for Municipal Issues], given this unique resource base, the Town of Berlin can protect these resources that have survived millennia by adopting a land use strategy that employs *natural resource-based planning* techniques. Natural resource-based planning starts with a community's natural resource base and works 'backward' to development potential: "open space and development should complement rather than compete with one another." Within that context, lands for open space will be as crucial to the essence of Berlin as those that are temporary hosts of buildings. This study offers the tools to make that possible.