

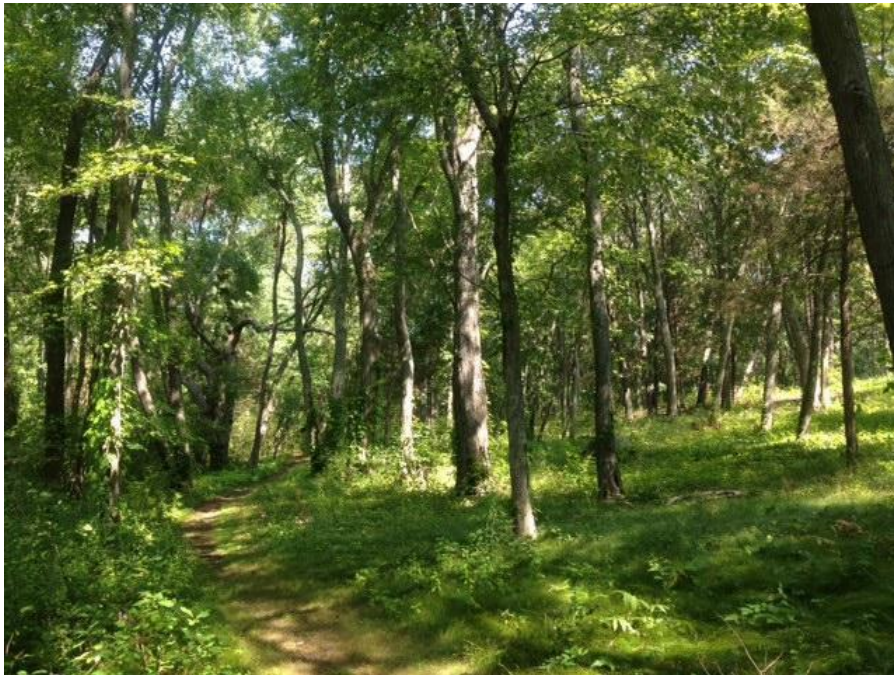
Approved by the Lexington Conservation Commission on Monday, February 23, 2015

LAND MANAGEMENT AND DESIGN PLAN FOR

COTTON FARM

IN

LEXINGTON, MASSACHUSETTS



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Mass Audubon Ecological Extension Service

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Mass Audubon's Ecological Extension Service (EES) assists cities and towns, land trusts, state and federal agencies, and other conservation partners with natural resource inventories, habitat restoration and management planning, and conservation planning. Through EES we can share the experience we have gained in managing our own network of wildlife sanctuaries across the commonwealth. For more information on EES, contact 781-259-2159 or jcollins@massaudubon.org

Introduction

This design plan for Cotton Farm was prepared for the Lexington Conservation Commission by Mass Audubon's Ecological Extension Service. The design builds off an existing land management plan as well as Lexington's newly drafted Land Management Principles and Policies. The plan provides guidance for ecological management of the property and recommends improvements to enhance the landscape for passive recreational use as it transitions from private land to a public open space.

Land Management and Design Plan

Site Goals and Challenges

The Cotton Farm Conservation Area was once part of a larger estate which was divided in two, with the western and northern portion becoming conservation land and the eastern portion remaining as a private residence. Access to the residence was retained for a time through Cotton Farm via an easement but is not a permanent arrangement. In time, the driveway easement will extinguish and the area will be transferred to conservation land.

The 4 acre parcel was acquired by the Town of Lexington in 2011 for its passive recreation value, the pastoral views along Marret Road, and the link it provides between two larger conservation areas: Upper Vine Brook to the north and west and Dunback Meadow to the south (Figure 1). The majority of the property is dominated by an extensive, largely inaccessible, wetland complex consisting of shrub swamp and Red Maple swamp. The eastern portion of the property consists of a gently sloping upland supporting cultural grasslands, an orchard, and a wooded glade – features which result in a pleasing park-like atmosphere.

A Land Use and Management Plan prepared by the Town of Lexington in 2011 identified several stewardship issues and outlined several goals for the property. These include: managing invasive species; restoring mowed lawns and landscaped areas; protecting wildlife habitat and wetlands; and preventing encroachment along the boundaries. The management recommendations and design plans we present here are based on that document, and on field work conducted by EES staff. We identify opportunities to meet management goals and objectives identified by the town and its Land Conservation Stewards in keeping with a vision of Cotton Farm functioning as a park rather than a "wild" conservation land, an approach which will increase the types of passive recreational uses at the town's conservation lands. Our management and design plans are presented in both the short- and long- term, given the changes that will occur when the driveway through the property can be converted to conservation land.

Management Goals for Cotton Farm

Short Term Goals

- Mark boundaries & install “green screen”
- Improve access
- Reconfigure trails
- Modify mowing regime
- Maintain orchard
- Restore pond shore
- Install viewing platform
- Manage invasive plant species

Long Term Goals

- Remove and restore driveway area
- Relocate parking
- Expand meadow
- Expand orchard

Short Term Goals

Short term goals are based on: land stewardship; improvements and modifications to enhance the visitor experience; restoration to return the property to a more natural condition; and the implementation of ecological management regimes that maintain and protect natural resources.

Mark Boundaries

We recommend that a split-rail fence approved by the Conservation Commission be installed along the boundary in the north east as shown in Figure 1 to better delineate the boundary between the newly planted meadow and the agricultural field on private property (Photo 1). This should help to alleviate concerns that have been raised about public entry onto the abutting private residence. Signs could indicate the nature of the abutting parcel as private and request visitors to stay on conservation land, such as “*Private Residence. Please respect our neighbors and remain on trails*”. We also recommend installing strategically placed evergreen shrubs, such as red cedar (*Juniperus virginiana*), to screen the view of the private residence east of the property from the trail.

Improve Access

Like many conservation lands, Cotton Farm would benefit from improved parking. Currently, visitors arriving by vehicle drive past the meadow and orchard, and park in a small lot located roughly in the center of the property. Although the original land management plan called for only three parking spaces, we believe two additional parking spaces would be beneficial, since the Cotton Farm property provides a critical linkage to Dunback Meadow to the south and trails leading to Highland Avenue and the town center in the north. A few additional parking spaces will not adversely affect the resources at Cotton Farm and will greatly enhance access to more of the town’s conservation lands. These additional spaces could be placed to the north of the kiosk and be bounded by boulders or logs similar to the existing parking spaces (Photo 2). We highly recommend modifying the trail entrance off of Marret Road. Currently, the trail emerges from the property at a low point in Marret Road, and it appears that storm-water collects at this point and washes down the trail causing a great deal of erosion (Photo 3). Additionally, a large patch of Japanese Knotweed on the roadside obscures view of the traffic: both conditions are potentially hazardous to pedestrians. We recommend that the Commission consult with

town engineers to properly site a crosswalk with appurtenant pedestrian crossing signs to improve visitor safety and access to the property. This may require relocating the trail alignment on both the Cotton Farm and Dunback Meadow sides of the road, re-grading the entrances, or installing storm-water structures. In addition to better protecting visitors, a visible crosswalk and trail entrance will have the added benefit of drawing the public's attention to the newly acquired conservation land. We also recommend rotating the existing sign so that it is perpendicular to Marret Road to increase the visibility of the property (Photo 4).

Reconfigure Trails

The existing trail enters the southern portion of Cotton Farm off Marret Road where there is a direct link to trails across the street at the Dunback Meadow Conservation Area. The Cotton Farm trail winds ~150 feet northward through a seasonally damp wooded area, straight on through the grassy lawn/meadow adjacent to the pond, and on along a portion of the driveway. Just south of the parking area, the trail splits with the western leg leading down-slope toward the tool shed and then north along the wetland edge, and the other taking a higher route northward through the glade and continuing into the woods of the Upper Vine Brook conservation area and on to Highland Avenue.

We recommend a slight reconfiguration of the trails, beginning in the grass area between the driveway and the pond. Here, we advise moving the trail so that it more closely follows the gentle slope of the land - winding through the picnic area and then joining back-up with the existing route along the driveway. As this trail is maintained through regular mowing, its relocation will be a simple matter of communicating with the individual responsible for site maintenance. (Photos 5 & 6).

This suggested reconfiguration would accommodate a small spur leading to the envisioned ponding platform, and the overall effect of the layout will draw visitors into the environment and direct their views to elements of the natural world. It also has more practical benefits as the direct line of the existing trail leaves it vulnerable and more prone to erosion, while a gently sloped and winding trail will be more resilient. Furthermore, allowing the pond edge to re-vegetate will provide a wider buffer to better protect water quality.

We recommend closing the western, or lower, trail through the glade, from the tool shed to the junction with the main trail near where it leaves the northern end of property (Photo 7). This lower trail lies mostly within the wetland buffer zone and is located on damp soils that appear to be periodically saturated. Closing this trail will help to protect important natural resources, and will allow for a portion of the wetland edge to be free of disturbance from visitors. Furthermore, given the open nature of the glade, the lower and upper trails are currently too close together, separated as they are by just a few hundred feet. Closing the lower trail will provide greater solitude for hikers who would otherwise see each other through the glade. The lower glade trail should also be allowed to re-vegetate naturally. The trail segment from the driveway to the tool shed should be retained to permit access to the shed.

The status of the closed trail can be indicated by placing sticks and branches across the trail, or relocating the existing trail marker at the trail junction approximately 15-feet north and placing it squarely in the center of the closed trail. This will distract visitors from noticing that there is a trail there,

and lead their eye away and down along the main trail. However, old habits die hard, and it may also be necessary to erect a sign such as *“Trail Closed for Ecological Restoration”* in the middle of the trail.

Modify Mowing Regime

The small meadow west of the main drive lies next to the pond shore and features a picnic table surrounded by a small lawn (see Photo 6). The grassy area adjacent to this rest spot are mowed less frequently and allowed to develop into a meadow. This management approach appears to be appropriate and allows for passive recreation use of the site. We support the use of the location as a picnic area, and the frequent mowing to keep the grass short. We also agree with the practice to mow other grasses less frequently, and recommend an annual late fall mowing (after October 15th) to promote the growth of a diverse wildflower meadow community to provide habitat for birds, insects, reptiles and amphibians. The taller vegetation of a meadow will also help to protect the water quality of the pond and discourage the growth of woody vegetation.

In addition to the grasslands, routine mowing also occurs in the glade in the northern portion of the property, which creates an aesthetically pleasing view of the gently sloping ground under the tree canopy. This management approach suits the site: not mowing the area would allow invasive plants to flourish and they would quickly dominate the landscape in a dense tangle of shrubs and vines. The alternative - treating and removing invasives, and restoring with native vegetation - would require annual or semi-annual treatment and be quite costly. Since the impacted area within the glade is not exceptionally large, nor of highly significant ecological value, we do not recommend treating invasive species there.

We recommend that annual mowing take place in the late fall (after October 15th), and that plants at the base of trees be pulled by hand to prevent their spread as many of these are invasive species. It will also likely be necessary to control Poison Ivy along the trails' edge to provide visitors with safer passage. Poison ivy can be controlled manually with great care, or with herbicide. Coarse woody debris, such as fallen limbs and trunks, should be removed from the glade to facilitate routine mowing operations.

While most of the current mowing regime is appropriate for the environmental conditions, and for meeting goals for use of the property, we recommend ceasing all mowing of the glade along the lower slopes, close to the wetland edge in the northwest corner of the uplands. This will help to protect wetlands, and complement our recommendation to close the lower glade trail. The termination of mowing will allow woody plants and trees to grow into the glen, and though the dominance of invasive Glossy Buckthorn may be inevitable, other native plants will become established too. To promote the restoration of the area to a more natural condition, we recommend that coarse woody debris in the unmown section of the glade be allowed to remain in place. Though some may view this material as “unsightly”, downed wood provides important wildlife habitat: decaying bark attracts insects which in turn attracts birds. And holes in dead wood can provide nesting cavities for animals such as squirrels, raccoons, and owls.

Maintain Meadow Habitat

A native meadow seed mix was planted in the northeast corner of the property in an area formerly used for agricultural production. The meadow enriches the site with increased biological diversity, providing habitat for birds, insects, reptiles and amphibians and small mammals. It is also aesthetically pleasing, and although it is not easily visible from the trails, we recommend maintaining it for the ecological value it provides the landscape. The meadow should be cut annually to prevent woody vegetation from becoming established. We recommend mowing in the late-fall (after Oct. 15th) with the use of a sickle bar mower set to a height of 18-inches. This will help to prevent thatch from being dispersed widely throughout the site, and to ensure winter cover for over-wintering insects and mammals.

Maintain and Expand Orchard

The orchard on Marret Road provides pastoral views for passersby and is a reminder of the community's agricultural past. It has tremendous aesthetic values, and provides citizens with the opportunity to enjoy outdoor spaces in different ways. The current mowing regime should be maintained in the orchard to keep the grass low and prevent the encroachment of woody plants. Efforts to skillfully prune the trees and ultimately restore fruiting should be encouraged. The opportunity to expand the orchard will arise when the driveway easement extinguishes, and we detail these recommendations in the *Long Term Management* section below.

Restore Pond Shore

Glossy Buckthorn, Shrub Honeysuckle, Multiflora Rose and Phragmites are all found at the wetland edge of the pond. We recommend that the Commission treat the invasive species along the open areas of the pond adjacent to the picnic area and lawn, meadow, and near the existing tool shed. We view this as the first step in the installation of a viewing platform, which is discussed below. Invasive plant treatment should follow Principles and Policies adopted by the Conservation Commission. Once invasive plants are treated and properly removed, we recommend re-planting the area with native wetland vegetation that is readily available commercially: shrubs such as high-bush blueberry (*Vaccinium corymbosum*), sweet pepperbush (*Clethra alnifolia*), elderberry (*Sambucus canadense*) and perennials like Joe-Pye-weed (*Eupatorium maculatum*), cinnamon fern (*Osumndastrum cinnamomea*), or spotted touch-me-not (*Impatiens capensis*). To protect newly planted material, we recommend installing signage such as "Ecological Restoration Area. Please Keep Out". If necessary, the area can also be roped off with symbolic fencing.

While it will be important to treat invasives along the pond shore, we do not recommend treating invasive species in the glade, due to the high cost of treatment and restoration, and the nearly inevitable reinvasion from the adjacent forested areas. Treatment of invasive species along the wetland should follow methods detailed in the Commission's *Principles and Policies for Management of Lexington Conservation Land* document, including adherence to all local and state regulations regarding the treatment of invasive plants in a jurisdictional wetland area, and regulations regarding the use of herbicides.

Install Viewing Platform

The easternmost portion of the extensive wetland complex at Cotton Farm contains a pool of open water lying adjacent to the picnic area and is perhaps the most attractive visual feature of the property. As noted in the existing Cotton Farm management plan, this area would be greatly enhanced by the installation of a platform extending out into the open water (Photo 9).

The design specifications of the viewing platform should consider the size and contour of the opening along the shoreline, water levels throughout the season, the number of visitors expected on the platform at a time, and the activity expected (i.e. dip-netting and fishing versus nature study). It is important to note that the design and installation of the platform should comply with all applicable local and state regulations, such as building codes and wetlands bylaws and regulations.

Placing several smaller nest boxes on tree trunks along the pond shore and in the nearby wetlands of Upper Vine Brook will attract cavity nesting species such as Tree Swallows (*Tachycineta bicolor*). Additional wildlife habitat enhancements that will also provide wildlife viewing opportunities include the maintenance of perches overhanging the water or larger-diameter logs on which turtles and water fowl can rest.

Long Term Goals

Long term goals are focused on capitalizing on the extinguishment of the driveway easement, restoration of this area to a more natural condition, and a reconfiguration of the parking area so that it is more visible from the road and does not penetrate so deeply into the property.

Remove Landscape Plantings

Currently, several ornamental plantings from the former estate remain near the entrance to the private residence. In the short term, we recommend taking an adaptive management approach and maintaining them for the time being. However, when deeded access through the property extinguishes, we recommend removing the non-native trees and shrubs that make up the majority of the plantings. Some of these plantings may be commercially valuable, such as a few small Japanese Maples, and the Commission could work with a local contractor to carefully extract these trees with root-balls intact, and relocate them elsewhere in town or sell them at a profit.

Remove Driveway and Restore Area

Once the driveway easement has extinguished, we recommend closing and restoring the existing driveway, loop, and parking area. This will significantly increase the amount of land on the property that is in a natural scenic and open condition. This is perhaps our most intensive recommendation for the property and ideally will include the removal of pavement, sand, and gravel.

It may be possible to simply close the road and blockade it with logs or large boulders and allowing “father time and mother nature” to restore the area: this will likely result in a thicket of shrubs and saplings, consisting mostly of invasive species seeding in from the adjacent woods. Therefore, we advise a more proactive approach to fully realize this property’s potential and the expansion of the meadow along the eastern boundary (see below). We recommend closing the property during operations to

restore the driveway area, and installing silt fences to delineate a limit of work line on the property to protect both the public and natural resources during driveway removal operations.

Relocate Parking

Relocating the parking is important for the restoration of the property and for improved public access. Currently, the parking area is difficult to see, and to many passersby the area looks like private property, not conservation land open to the public. Additionally, cars backing up from the existing parking spaces have to negotiate a curve which drops off steeply into the glade: this presents a potential danger to visitors and the property.

We advise moving the parking area closer to Marret Road so that it is more visible and welcoming to visitors. There are two clear options for parking: the grassy area to the west of the drive, and the orchard to the east. The grassy area is located largely in the wetland buffer zone where development is limited. Furthermore, locating a parking area here would disrupt the flow of foot traffic coming from the trail head off Marret Road, and impinge on the restful picnic spot. The orchard is much larger and could more easily accommodate parking. It is also out of the wetland buffer zone, and further away from the trail and picnic area, and thus is the preferred location for relocated parking.

Working with the contours of the land, the natural location for this new parking area lies in a broad, flat area alongside the driveway where it runs past the orchard. We advise using road base material excavated as part of the driveway restoration to create a flat space large enough to accommodate five, angle-in parking spaces (~120 feet long). While the driveway appears to collect some water in this location, the excavated material could be used to redirect drainage away from the parking area. That material could also be re-purposed and used to re-grade the driveway and provide surface material for the new parking area. The addition of a bicycle rack in the parking area would also promote visitation to the property.

Expand Meadow

Once the driveway is removed, we advise restoring its former route with the effect of expanding the meadow along the eastern portion of the boundary. The Commission should consult with local soil conservation resources to test underlying soils, as they may need to be amended to ensure that they can support native vegetation. Once the desired soil composition is achieved, we recommend planting a native seed mix to expand the extent of the current meadow down to the orchard. We also recommend planting a few trees or shrubs (such red cedar) across the driveway to provide a screen between the two properties.

Expand Orchard

One or two apple trees may need to be removed to accommodate the suggested reconfigured parking plan. These losses could be off-set by planting more apple trees as part of the landscape restoration process. Currently, there are several large Norway spruce (*Picea abies*), a smaller Japanese maple (*Acer spp.*), and black cherry (*Prunus nigra*) trees between the current parking lot and the entrance to the private residence. Once the driveway easement is extinguished, we recommend removing these trees and planting the southern portion with additional fruit bearing trees, such as apples or pears, to expand

the orchard and compensate for trees lost to the new parking configuration, should it be implemented. Additional information on care for the orchard can be obtained from the Fruit Advisor at the U Mass Amherst Agriculture and Landscape Program: <http://extension.umass.edu/fruitadvisor/> or the Tree Fruit & Berry Program Work Team at Cornell University: http://www.fruit.cornell.edu/tree_fruit/.

Priorities and Cost Estimates for Recommended Projects

Recommendation	Priority Level	Cost Estimate	Variables
Mark boundaries	High	\$100-\$15k	Cost ranges from signage only installed by volunteers to installation of split-rail fence by contracted laborers
Improve access	High	\$2k	Installation of cross walk, improved trails
Reconfigure trails	High	\$0-\$100	Volunteer effort to install sign post and sign
Restore pond shore	High	\$2k	Initial treatment of invasive species and installation of native vegetation.
Manage invasive plant species	High	\$2-3k	Higher initial cost expected to decline over time as plants are controlled. Upper cost reflects use of larger woody plants & plugs.
Install viewing platform	Medium	\$24k	Cost could be lower with volunteer labor (i.e. scouts)
Install "green screen"	Medium	\$500 - \$200k	Costs dependent on number and size of plants and use of volunteer labor, including watering during establishment period
Modify mowing regime	Medium	\$0	No additional cost from current operations expected. Potential cost savings from cessation of mowing in glade
Maintain orchard	Low	\$0	Annual mowing by volunteers
Remove and restore driveway area	Low	\$5-\$10k	Cost ranges based on amount of material to be removed and extensiveness of plantings (i.e. hydroseed v. installation of woody vegetation)
Relocate parking	Low	\$5k	Cost could be lower with use of re-purposed paving material
Expand meadow	Low	\$0	May require initial treatment by heavy machinery if woody vegetation becomes thick
Expand orchard	Low	\$500 - \$2k	Installation of new fruit trees, cost ranging from number and size of trees

Schedule of Maintenance Activity

Yearly Ongoing Activities

	Winter	Spring	Summer	Fall
	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov
Monthly Property Visits	x	x	x	x
Annual Work Plan with Staff and Stewards		x		x
Safety Meeting with Staff, Stewards, Police and Fire Dept.		x		
Trail Walk/Clean Up (downed limbs, drainage issues, signage)		x		
Building Projects (kiosks, sign posts, etc.)		x		x
Invasive Plant Management			x	x
Mow Meadows				x
Clean out nest boxes				x
Boundary Walk (monitoring for encroachments, signage, etc)				x

Conclusion

The Cotton Farm property provides a critical link in the town's trail network and has great potential for ecological restoration as the property continues to transition from private land to public open space. The property would benefit from modest improvements to enhance passive recreational use and protect natural resources. Slight modifications to the trail network will improve the flow of foot traffic through the landscape and will afford sensitive wetlands better protection. While current management approaches in the meadow and orchard areas should continue, minor modifications to management of the wooded glade will allow for more natural conditions to develop there. The greatest opportunities for fully realizing the property's potential are restoration of the existing driveway and installation of a viewing platform along the water's edge. The installation of a cross walk across Marret Road to improve the link between Cotton Farm and Dunback Meadow to the south would also enhance the property and draw visitors in.



Figure 1. Cotton Farm Locus Map



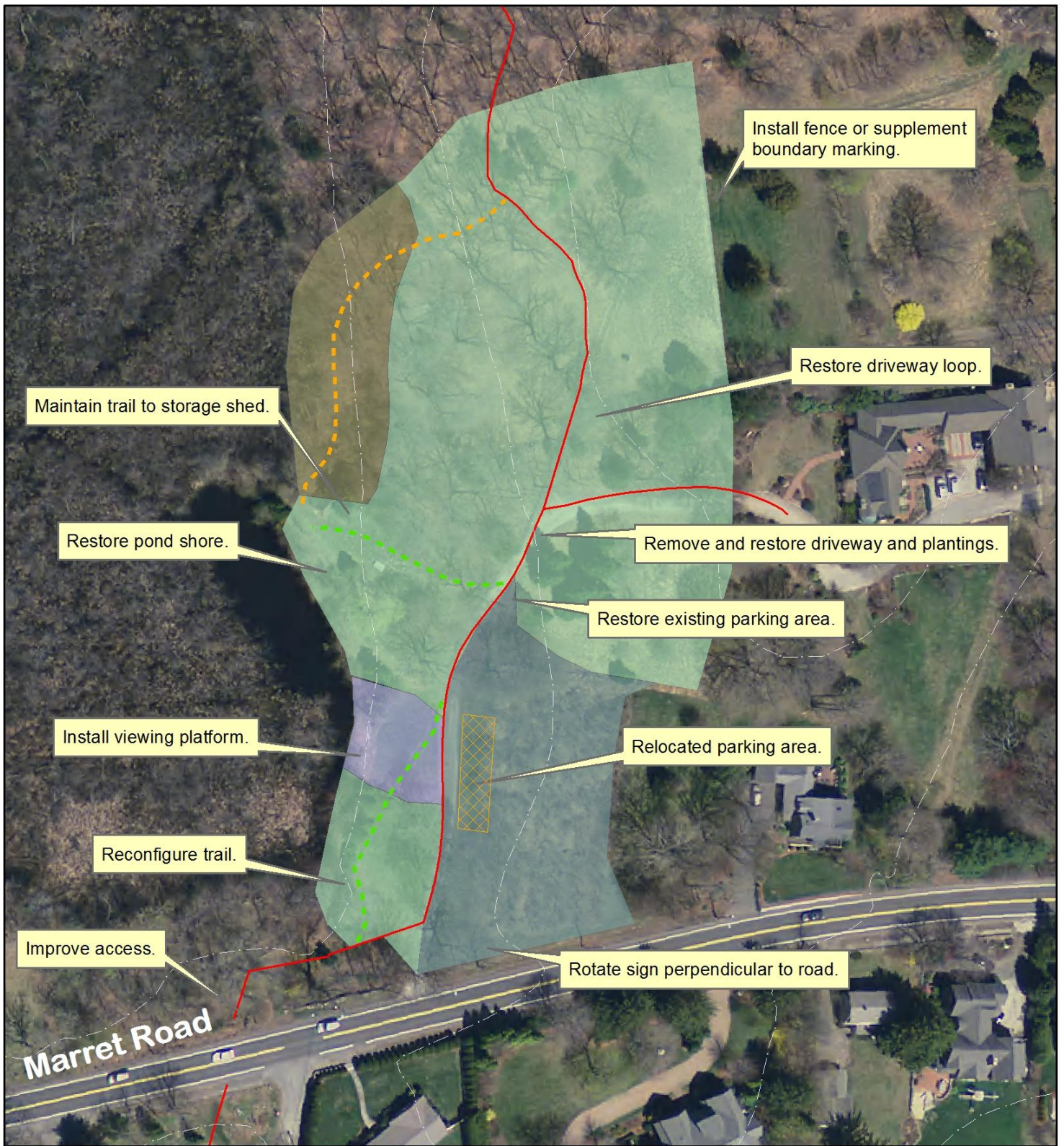


Figure 2. Cotton Farm Design Plan

- Existing trail
- - - Proposed trail relocation
- - - Proposed trail closure
- Topographic contours
- Conservation land
- Open space
- Mow late fall
- Mow monthly
- Cease mowing
- Mow weekly

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Cotton Farm, Lexington MA
Land Management and Design Plan



Photo 1. Meadow on northeast boundary. Install split-rail fence and evergreen shrubs to the identify property line and screen residence to east.



Photo 2. Existing parking for two cars to right of kiosk. Adding two spaces to left of kiosk as indicated by arrow will improve access and enhance visitation.



Photo 3. Unmarked crossing at Marret Road between Cotton Farm and Dunback Meadow. Work with town engineering department to locate a marked and signed pedestrian crossing, improve drainage, and relocate trail heads as necessary.



Photo 4. Existing sign on Marret Road. Rotating sign so that it is perpendicular to the road will increase visibility of the property and enhance visitation.

Cotton Farm, Lexington MA
Land Management and Design Plan



Photo 5. White flags marking trail leading from Marret Road to trails in Cotton Farm. Relocate trail to follow contours of the land and wind its way towards picnic area as shown by white dashed line.



Photo 6. Lawn area and picnic table near pond shore. Relocate trail behind trees to follow contours of the land as shown by dashed white line.

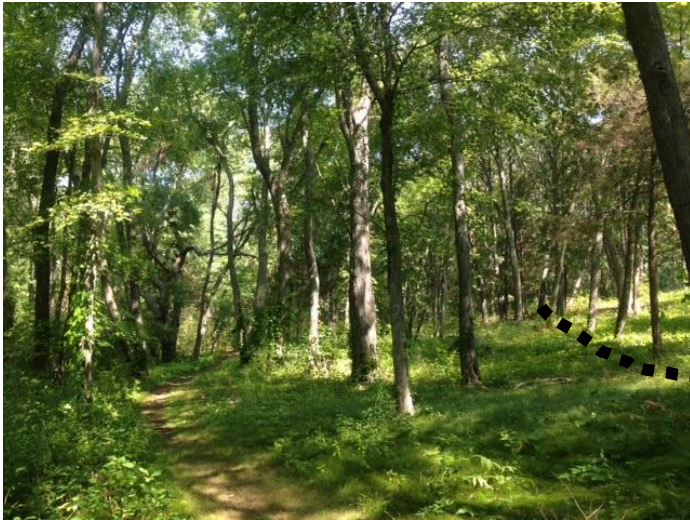


Photo 7. Trail in glade at base of slope. Close trail to protect wetlands and promote seclusion. Maintain annual mowing in upper glade but abandon mowing in lower glade as shown by black dashed line.



Photo 8. Broad, flat area along drive adjacent to orchard proposed for relocated and expanded parking area.



Photo 9. Location of proposed viewing platform adjacent to picnic area.



Photo 10. Example of ponding platform envisioned for the Cotton Farm property.



Photo 11. Example of ponding platform envisioned for the Cotton Farm property.

Appendix A - Management of Invasive Species

Several species of invasive plants are currently found within the Cotton Farm property and we have described their management as it pertains to specific goals and objectives outlined in this plan. In general, we recommend that the stewards assess threats from invasive species during annual monitoring, and implement treatment according to specifications outlines in the town's *Principles and Policies* document. This includes the removal of Oriental Bittersweet climbing on several trees near the trail head of Marret Road, and in the extreme southeast corner of the orchard. Below we provide treatment recommendations for invasive species identified at Cotton Farm.

Glossy Buckthorn

Manual, mechanical and chemical means are effective in controlling glossy buckthorn, and is most effectively controlled by recognizing its appearance early and removing isolated plants before they begin to produce seed. With large infestations, remove the largest seed-producing plants first. At this time no means of biological control is available for controlling glossy buckthorn. Hand pulling is effective in small infestations. Remove the entire root section or resprouting will occur. Weed wrenches can be very effective in uprooting buckthorn.

Chemical treatment is also an option. The type of herbicide determines the best time of year to apply. Triclopyr herbicides are much more effective early in the growing season. Glossy buckthorn retains its leaves late into the fall, so you can apply a glyphosate herbicide to fairly late in the season. However, the application should not be too late or the leaves will no longer be photosynthetically active (or minimally so) and will easily fall from the twigs. During the growing season, cut the stems near ground level and apply a 20%-25% glyphosate mixture to the stumps. Resprouts should be cut and treated again, or sprayed with a hand sprayer of 1.5%. Foliar applications over non-water sites can also use 2% triclopyr solution or 2 oz. Escort® and surfactant mix. Foliar application of herbicides using a backpack sprayer is effective, but less selective.

Common Reed

Control with herbicides is effective for controlling areas with large, established, populations of Phragmites. Other options include mowing and prescribed burning. New stands of Phragmites commonly occur when new wetlands are created or the soil is disturbed. Minimizing land disturbances and water pollution helps deter this invasive species. Land management practices that guard against erosion, sedimentation, fluctuating water levels, and nutrient loading in wetlands are the best long-term solution.

Control of Phragmites is difficult. Repeated cutting can slow its growth and possibly hinder its spread, but will not eliminate it altogether. The best method to eliminate Phragmites is the foliar application of a systemic herbicide when the plants are actively growing. At this time no means of biological control is

available for treating Phragmites infestations. Manual or mechanical cutting or pulling has been used successfully to control Phragmites. Treatments usually need to be repeated annually. The best time to cut Phragmites is at the end of July. Cutting at other times may increase stand density. Phragmites stems should be cut below the lowest leaf, leaving a 6" or shorter stump. Hand-pulling is an effective technique for controlling Phragmites in small areas with sandy soils.

Repeated mowing is effective at slowing the spread of established stands but is unlikely to kill the plant. Excavation of sediments may also be effective, but root fragments left in the soil may lead to reestablishment. Prescribed burning after the plant has flowered, either alone or in combination with herbicide treatment, is also effective. Burning after herbicide treatment also reduces standing dead stem and litter biomass which may help to encourage germination of native plants in the following growing season. Do not burn plants in the spring or summer before flowering as this may stimulate growth. Chemical treatment includes the use of Glyphosate-based herbicides (such as Rodeo®) are effective in controlling established populations. If a population can be controlled soon after it has established the chances of eliminating the infestation are much higher because the below-ground rhizome network will not be as extensive. Herbicides are best applied in late summer/early fall after the plant has flowered either as a cut stem treatment or as a foliar spray. Repeat treatments are required for several years to prevent any surviving rhizomes from resprouting.

Multiflora Rose

Mechanical and chemical methods are effective methods for managing multiflora rose but may need to be combined with chemical in large or persistent infestations. The most important steps to controlling multiflora rose are to destroy existing plants and begin a yearly program to control seedlings as they appear. Biological control is not yet available for management of multiflora rose. However, researchers are investigating several options, including a native viral pathogen (rose-rosette disease), which is spread by a tiny native mite, and a seed-infesting wasp, the European rose chalcid.

Manual and mechanical control consisting of frequent, repeated cutting or mowing three to six times per growing season for two to four years is effective in achieving high mortality of multiflora rose. In high quality natural communities, cut the individual plants to minimize habitat disturbance. Herbicides are successful in controlling multiflora rose but follow-up treatments are required because of the long-lived stores of seed in the soil. Apply systemic herbicides (such as glyphosate) late in the growing season to freshly cut stumps or to regrowth. In wetlands, where multiflora rose may occur, make sure to use a wetland-formulated glyphosate product such as Rodeo or Accord Concentrate. Use an active ingredient concentration of 25-35% when you apply herbicide to the cut stem. Plant growth regulators control the spread of multiflora rose by preventing fruit set.

Bush Honeysuckle

Mechanical and chemical methods are the primary means of control of exotic bush honeysuckles. To minimize reinvasion of treated habitats, begin control methods before seed is dispersed during late

summer and early autumn. No biological control agents are currently available for these plants, and any potential agents that might be considered would have to be specific to these exotic honeysuckle species. Manual and mechanical methods include removing seedlings or small plants by hand for light infestations, taking care not to disturb the soil. In shaded forest habitats, cut to ground level at least once every year during the growing season. Tools such as spades, digging forks, and Weed Wrenches can be effective in removing all but the largest honeysuckles.

Prescribed burning can be effective for controlling exotic bush honeysuckles growing in open habitats. Application of a systemic herbicide like glyphosate (such as Roundup®) is effective in controlling seedlings of exotic bush honeysuckles. Spray a 1 percent solution onto the foliage or apply with a sponge. For larger shrubs, cut the stems to ground level and immediately paint or spray the stumps with a higher rate of glyphosate (25-35%).

Oriental Bittersweet

A combination of cutting followed by application of concentrated systemic herbicide to rooted, living cut surfaces is an effective approach for removing Oriental bittersweet. For large infestations spanning extensive areas of ground, a foliar herbicide is recommended over manual or mechanical methods, which would create soil disturbance to minimize soil disturbance. Manual, mechanical and chemical control methods are effective in removing and killing Oriental bittersweet. A combination of methods often yields the best results and may reduce potential impacts to native plants, animals and people. The method selected depends on the extent and type of infestation, the amount of native vegetation on the site, and the time, labor and available resources. No biological controls are currently available for this plant.

Manual Control of small infestations can be achieved by hand-pulling but the entire plant should be removed including all the root portions. If fruits are present, collect, bag, and dispose of them in heavy garbage bags. Always wear gloves and long sleeves to protect your skin from poison ivy and barbed or spiny plants. Plants can also be controlled by cutting climbing vines near the ground at a comfortable height to kill upper portions and to relieve the tree canopy. Vines can be cut using pruning snips or a pruning saw for smaller stems, or a hand axe or chain saw for larger vines. Minimize the damage to the bark of the host tree. Rooted portions will remain alive and should be repeatedly cut to the ground or treated with herbicide. Cutting without herbicide treatment requires vigilance and repeated cutting because plants will resprout from the base. Begin treatment early in the growing season and repeat the treatment every two weeks until autumn

Systemic herbicides like triclopyr (such as Garlon® 3A and Garlon® 4) and glyphosate (such as Accord®, Glypro®, Rodeo®) are absorbed into plant tissues and carried to the roots, killing the entire plant within about a week. This method is most effective if the stems are first cut and herbicide is applied immediately to the cut stem tissue.

Fall and winter applications will avoid or minimize impacts to native plants and animals. Repeated treatments will be required. Any herbicide applications should be carefully targeted to avoid damage to

native, non-target species. If native grasses are intermingled with the bittersweet, triclopyr is better to use than glyphosate because it is selective for broad-leaved plants and will not harm grasses. Follow-up monitoring is required to ensure effective control. Glyphosate products referred to in this fact sheet are sold under a variety of brand names (Accord[®], Rodeo[®], Roundup Pro[®] Concentrate) and in three concentrations (41.0, 50.2 and 53.8% active ingredient). Other glyphosate products sold at home improvement stores may be too dilute to obtain effective control. Triclopyr comes in two forms – triclopyr amine (such as Garlon[®] 3A, Brush-B-Gone[®], Brush Killer[®]) and triclopyr ester (such as Garlon[®] 4, Pathfinder[®], and Vinex[®]). Because Garlon[®] 3A is a water-soluble salt that can cause severe eye damage, it is imperative that you wear protective goggles to protect yourself from splashes. Garlon[®] 4 is soluble in oil or water, is highly volatile and can be extremely toxic to fish and aquatic invertebrates. It should not be used in or near water sources or wetlands and should only be applied under cool, calm conditions.

Appendix B – Cotton Farm Baseline Documentation Report and Land Management Plan

**BASELINE DOCUMENTATION REPORT
and
LAND MANAGEMENT PLAN
Massachusetts Executive Office of Energy and Environmental Affairs
Local Acquisitions for Natural Diversity (LAND) Grant Program**

Property name: Cotton Farm – Upper Vine Brook

Municipality: Lexington

Acquisition date: January 6, 2011

Book/page: Book 58239 Page 482

Registry: Middlesex South Registry of Deeds

LAND #: 61

Date of report: April 19, 2011

Property location: 121 Marrett Rd

Acreage: 4.2 acres

Interest held by city/town: Fee Conservation restriction

Other interest holders: None

Table of Contents

Section I: Property Information

1. Property description
2. LAND grant program regulations
3. Legal protection
4. Contact information
5. Land Use and Management Plan (if fee owned by town) and/or Copy of Conservation Restriction (if CR) or

Section II: Maps

1. Locus map
2. Resource map
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2. List of photographs
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Section I: **Property Information**

I.1. Property description

The **Cotton Farm – Upper Vine Brook** property, located at 121 Marrett Road, Assessors' map 31, lots 60B and 90B, is owned by the **Town of Lexington**, under care and control of the Conservation Commission, for the purposes of conservation and passive recreation, in perpetuity. The deed was recorded on **January 6th**, Book **56239** Page **482** in the **Middlesex South** Registry of Deeds.

The property is subject to a temporary driveway easement between Cotton Farm Realty Trust and the Town of Lexington, dated January 6, 2011 and recorded in Book **56239** page **494** in the **Middlesex South** Registry of Deeds. The easement terminates automatically when Robert and Edythe Cataldo vacate the adjacent house, or when Robert and Edythe Cataldo are no longer living, or at the end of 25 years from the easement date, whichever occurs first.

I.2. Local Acquisitions for Natural Diversity (LAND) grant program regulations

This property is permanently protected open space, for conservation and passive recreation only. It is subject to the standards and guidelines in 301 CMR 5.00: Self-Help and Urban Self-Help Programs, of the Division of Conservation Services, Executive Office of Energy and Environmental Affairs (EEA). Excerpted here are some of the major points:

- 5.06(4): Under the care and control of the **Town of Lexington** Conservation Commission
- 5.09(1): The property must be used at all times for open space conservation and passive recreation purposes only, in accordance with MGL Ch. 132A, Sec. 11
- 5.09(1): The property is permanently protected under Amendment Article 97 of the Massachusetts Constitution, and may not be converted to other uses. Municipalities must pursue all feasible alternatives to conversion of grant-funded land. If conversion is finally determined to be the only possible choice, *all* of the following must occur: municipal approval of the conversion; a two-thirds majority vote of both houses of the state legislature; replacement of the land with new conservation land that is of equal or greater fair market value at the time of conversion, and of equal or greater acreage, ecological value, and usefulness, to be approved or disapproved by the Secretary of EEA.
- 5.09(2): If this property ceases to be used in whole or in part for conservation and/or passive recreation purposes, all interest in the property shall revert to the Commonwealth,

unless the Secretary demands specific performance of the grant contract. The **Town of Lexington** Conservation Commission must notify the Secretary of EEA of a change or potential change to an inconsistent use, or, the Secretary of EEA may notify the Conservation Commission that an inconsistent change in use has occurred. The Conservation Commission has 90 days to rectify the use to the satisfaction of the Secretary, or it will revert to the Commonwealth.

- 5.08 (2) and (3): Open to use by all members of the public without discrimination
- 5.08(1): In accordance with the LAND program regulations, the **Town of Lexington** Conservation Commission may impose reasonable limits on the type and extent of use of this area and facilities acquired, as necessary for maintenance or preservation.
- 5.06(1): Off-street parking may be required
- No private enterprise may occur on properties for which the fee simple or encumbered fee is owned by the municipality, except that which contributes to and does not conflict with appropriate public use and benefit.
- Structures are prohibited on properties for which the fee interest is owned by the municipality, except those that further conservation or public passive recreational use of the property.

I.3. Legal protection

Through receipt of funding through the LAND grant program, this property is permanently protected under Amendment Article 97 of the Constitution of the Commonwealth of Massachusetts.

- *Ch. 132A, §11 – Act establishing the Self-Help (now LAND) grant program*
- *Ch. 40, §8c – Authority of conservation commissions to hold land for conservation purposes*
- *Article 97 – Prohibits conversion of the property from conservation and recreational use*
- *LAND Project Agreement – Prohibits conversion of the property from conservation and recreational uses. Requires mitigation in the event of conversion. Requires appropriate public access. Recorded with deed.*

I.4. Contact Information

Provide contact information for property monitor or manager, landowner (if CR), and any other people or organizations involved in the property.

Name (person or organization)	Title (eg. property monitor)	Mailing address	Phone
Karen Mullins	Director of Community Development/Conservation Administrator	Community Development Department, Room G-8 1625 Massachusetts Ave Lexington, MA 02420	781-862-0500 x227
Emily Schadler	Conservation Assistant	Community Development Department, as above	781-862-0500 x 240
Keith Ohmart Bonnie Newman Mike Tabaczynski Tom Whelan	Board members, Lexington Conservation Stewards (volunteer organization for the Conservation Commission)	Community Development Department, as above	781-862-0500 x 240

I.5. Conservation Restriction and Land Management Plan

5(b) If the Property is owned in fee:

Land Management Plan:

Purpose:

Cotton Farm connects conservation lands and wildlife habitats and also adds scenic value to a publicly visible area.

- With this acquisition, it is possible to walk from Highland Avenue (in a neighborhood near the center of Lexington) through the Cotton Farm and Upper Vine Brook Conservation Area to the Dunback Meadow Conservation Area across Marrett Road to the south.
- The upland habitat on the Cotton Farm connects with protected upland habitat to the north and borders protected wetland habitat to the west. The pond shore on the western border of Cotton Farm is a prime location for viewing wildlife and the wetlands to the west, which are part of the headwaters of Vine Brook.
- The apple orchard on the property, visible from Marrett Road, is an attractive visual asset to the town.

Property Uses:

Note: These should be posted at the property entrance(s).

Passive recreation

Permitted Uses:

Walking, jogging, bird watching and other wildlife observation, cross-country skiing, picnicking, bicycling (on specified trails), and other forms of passive recreation.

Prohibited Uses:

Without permission of the Conservation Commission, it is forbidden to:

- Be in or on conservation land between the hours of 1/2 hour after sunset and 1/2 hour before sunrise.
- Possess or consume alcoholic beverages.
- Commit any disorderly action, or disturb the peace, or conduct oneself in such manner as to interfere with the rightful enjoyment of the public upon these grounds.
- Hunt, trap or shoot.
- Remove, cut or damage any flowers, plants, shrubs, trees or rocks.
- Operate a motor vehicle (the term "motor vehicle" includes, without limiting the generality of the same, any car, truck, bus, motorcycle, motorbike or snowmobile) on conservation lands except to access the designated parking area
- Make a fire except in designated fireplaces with permission of the Fire Department.
- Discard litter except in designated receptacles or post, paint, affix or display any sign, notice, placard or advertising device.
- Dump materials of any kind.
- Build any structures.
- Dam any stream.
- Park a motor vehicle except in designated parking areas.
- Possess, be in control of, or be responsible for more than 3 dogs per person.

Structures:

Shed (formerly a pump house, 13' x 13'), which may be converted to a storage location for Conservation tools and equipment in the future. Other structures on the property include a dock, a fence, and an arbor, but these are scheduled for removal (see Stewardship plans below).

Known stewardship issues:

Managing invasive species, restoring formerly maintained areas to a more natural state (specifically a landscaped driveway island, a tilled field, a driveway, intensively mown areas, the area around pond shore), managing public use in a way that also protects habitat and wetlands, monitoring and preventing encroachment from abutting private property owners.

Stewardship plans:

See the Monitoring Map for more details on the following:

- Construct a trail from Marrett Road across the subject property. The new trail will connect with an existing trail on other conservation land that leads to Highland Avenue.
- Install boundary signs along the property line between Lots C-6 and C-4 (now or formerly of Cotton Farm Realty Trust) and the subject property; install a trail sign at trail entrance
- Establish a parking area for no more than three vehicles off of the driveway from Marrett Road (see Monitoring Map for location). When the driveway easement has expired, this parking area may be moved.
- Install an entry sign near the driveway entrance from Marrett Road and a kiosk in an appropriate location.
- Install signage along the driveway to discourage people from parking along the edge of the driveway.
- Add a picnic table near the pond and a mown path to the pond from the picnic area for wildlife viewing.
- Mow grassy areas in the vicinity of the apple orchard, parking area, picnic area, and trails frequently during the growing season and as needed elsewhere to maintain the open look of the property, subject to the availability of mowing resources.
- Remove invasive species along the pond perimeter, the landscaped island, and elsewhere on the property; monitor other areas for invasive species colonization and remove them where it is feasible.
- Restore the agricultural tilled field on the northeastern edge of the property to more natural conditions.
- Restore other areas that were intensively managed when the property was a single-family home lot to more natural conditions.
- When the driveway easement expires, restore the main driveway to more natural conditions.
- Close off access to the dirt drive that leads to the back of the agricultural tilled field.

Action on stewardship plans is the responsibility of the Lexington Conservation Commission with the help of volunteers.

The following structures are planned for removal under a Request for Determination of Applicability (RDA) submitted by the Lexington Conservation Stewards to the Lexington Conservation Commission. The structures are all on the perimeter of the pond on the western side of the property:

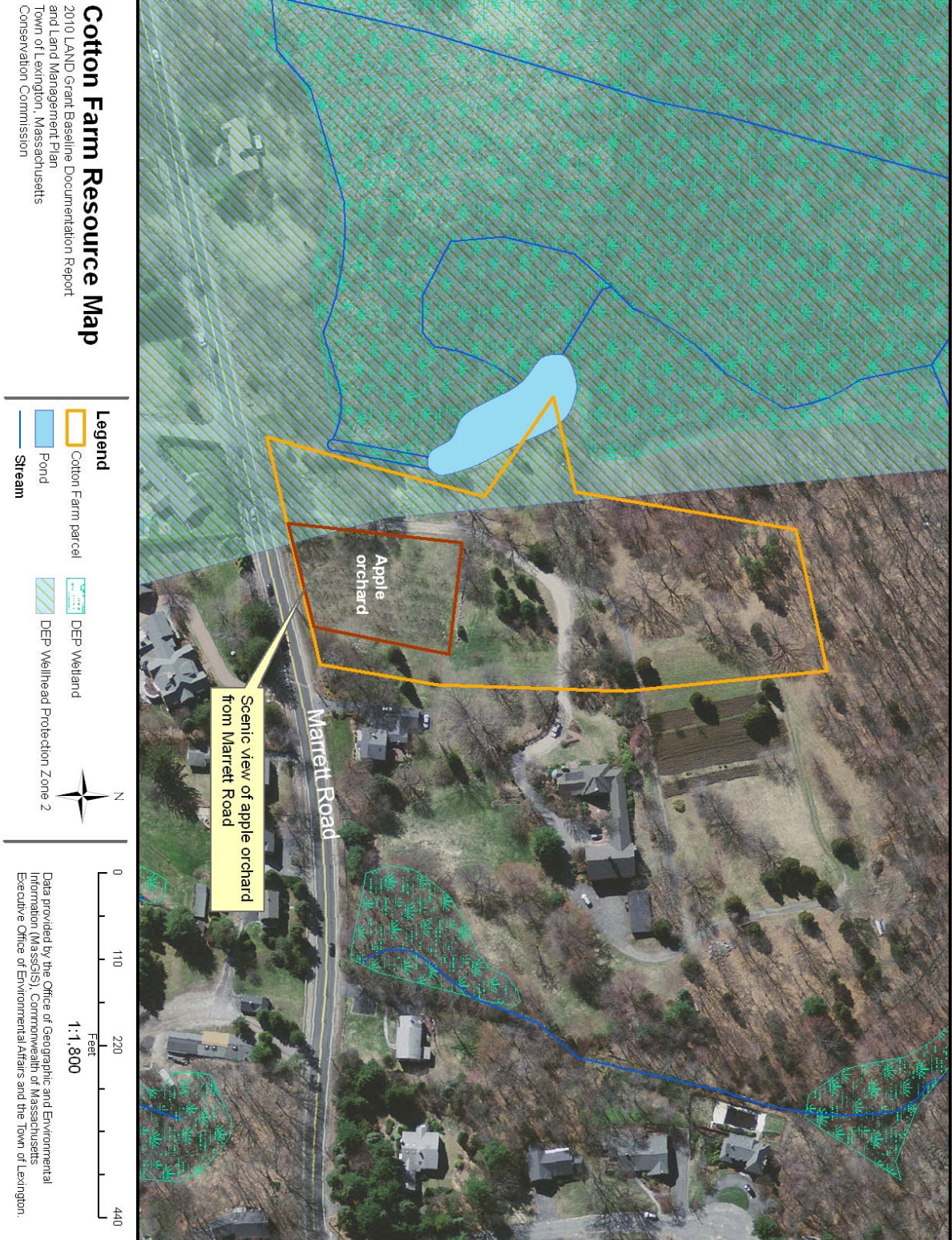
- Arbor
- Docks
- Fence

Active Management Plans:

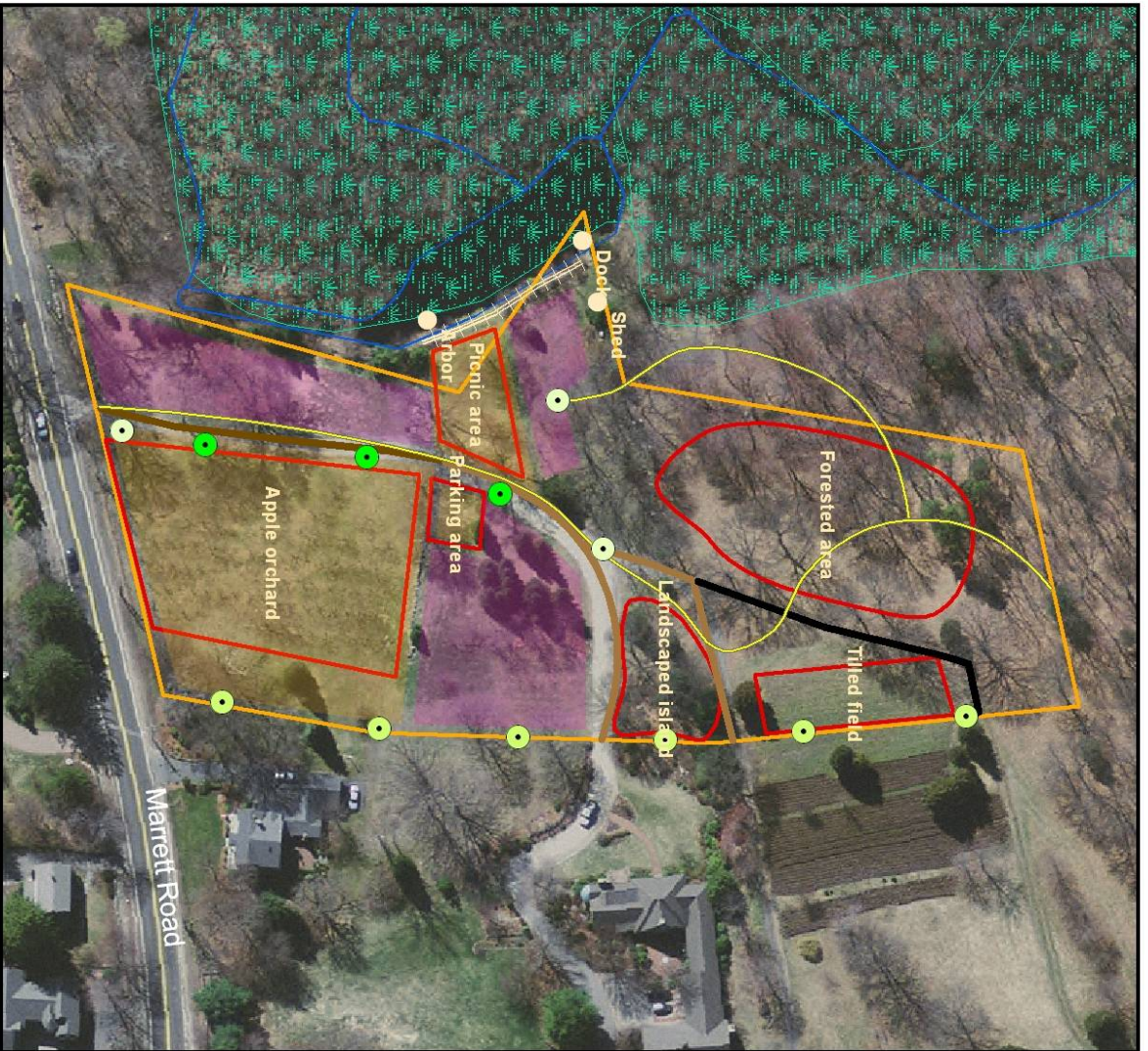
None.

Section II:
Maps

II.2 Resource map

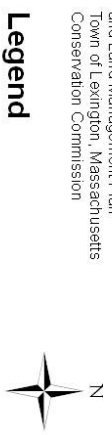


II.6. Monitoring map



Cotton Farm Monitoring Map

2010 LAND Grant Baseline Documentation Report
and Land Management Plan
Town of Lexington, Massachusetts
Conservation Commission



Legend

- Trail (to be installed)
 - Stream
 - Cotton Farm parcel
 - Management area
 - Fence (to be removed)
 - Management points
- Mowing Area/Regime**
- To be mowed annually or as needed/as resources allow
 - To be mowed frequently (throughout growing season)
- Signage**
- "No parking" sign (to be installed)
 - Boundary sign (to be installed)
 - Entry sign (to be installed)
- Driveway sections**
- Driveway (to close in future)
 - Driveway (to close now)
 - Driveway (to keep)



Data provided by the Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs and the Town of Lexington.

Section III:
Site Visit Report

III.1. General information

Date of inspection: March 27, 2011

Time spent on property: 2.5 hours

Who was present on the site visit? What is their association with the property?

For the Lexington Conservation Stewards, Bonnie Newman, Gerald Paul, Tom Whelan
For the Conservation Commission: Stew Kennedy

III.2. Current property conditions

Note: This section may summarize some provisions of the CR or Management Plan. The entire CR document must be read in order to understand its terms.

A. Conditions of the property relevant to the purposes of the CR or Management Plan:

Purpose	Condition	Photo
Passive recreation	The mostly dry, upland location makes the property ideal for public trails. The pond and orchard enhance the scenic appeal of Cotton Farm. Although the adjacent land to the west is also conservation land, it is too wet to be passable for public trails. The trails and the vicinity of the parking area require frequent mowing during the growing season. Other open areas, such as those to the north of the driveway area, will be mowed as needed. See the Monitoring Map for mowing and trail locations.	15
Wetlands conservation	Cotton Farm is the eastern border of a wetland that is the headwaters of Upper Vine Brook. The wetland and pond fall under the jurisdiction of the Wetlands Protection Act and Lexington's Wetland By-law.	17
Orchard maintenance	Volunteers and Town employees will maintain the orchard using organic methods. The orchard grounds will be mowed frequently during the growing season. Trees will be pruned as necessary to preserve tree health, but not for specifically for fruit production at this time. The intent is to maintain the orchard primarily for scenic rather than agricultural value at this time due to lack of resources for active agriculture. See the Monitoring Map for mowing locations.	3, 5, 8

B. Conditions of the property relevant to Permitted and Prohibited Uses:

Activity	Condition	Date built/ changed	Photo
Permitted			
Walking on trails	An existing trail leads into the property from the north. The stewardship plan calls for extending that trail across higher elevations and making a fork in the trail running closer to the western boundary skirting the wetlands area. Trails require periodic mowing and maintenance during the growing season.		14
Wildlife observation	The stewardship plan includes removing invasive species and restoring the pond shoreline to improve the pond ecology as well as to give better observation sight lines. A mown path from the picnic area to the pond will also be provided.		17
Orchard	No active agriculture is planned for the orchard at this time. The orchard will be maintained using organic farming principles. The orchard area requires		3, 5, 8

	frequent mowing during the growing season. See the Monitoring Map for mowing locations.		
Shed use	The Lexington Conservation Stewards and/or the Conservation Division may use the shed on the site as a storage site for conservation tools and/or equipment in the future, but the shed roof would need to be repaired and other modifications made for access and safety.		18
Motor vehicle access for parking	The stewardship plan calls for installation of a parking area for no more than three vehicles. The parking area requires frequent mowing during the growing season. See Monitoring Map for the parking location and mowing locations.		16
Prohibited			
Motor vehicle access beyond parking area	Motor vehicle access is prohibited, excepting any right to pass or maintain the gravel driveway under the driveway easement between the Cotton Farm Realty Trust and the Town of Lexington dated 1/6/2011 and recorded in Book 56239, page 494, MSRD, or access for conservation purposes. There is evidence of motor vehicle access beyond the easement area, on a dirt drive around the tilled field. This use is prohibited, and this drive will be closed.		7
Agriculture	With the exception of the orchard, no agriculture is permitted. The tilled field in the northeastern portion of the property will be restored to more natural conditions.		8
Structures	The dock, fence, and arbor at the pond edge will be removed.		19,20, 21
Landscaped driveway island	There is a landscaped driveway island along the eastern property border near the Cataldo house. Some of the plants are prohibited non-native species, such as burning bush. The invasive plants will be removed.		9

C. List of prohibited uses for which there were no relevant observed conditions:

No evidence of the following activities was observed:

- Be in or on conservation land between the hours of 1/2 hour after sunset and 1/2 hour before sunrise.
- Possess or consume alcoholic beverages.
- Commit any disorderly action, or disturb the peace, or conduct oneself in such manner as to interfere with the rightful enjoyment of the public upon these grounds.
- Hunt, trap or shoot.
- Make a fire except in designated fireplaces with permission of the Fire Department.
- Discard litter except in designated receptacles or post, paint, affix or display any sign, notice, placard or advertising device.
- Dump materials of any kind.
- Dam any stream.
- Possess, be in control of, or be responsible for more than 3 dogs per person.

D. Additional remarks regarding the present condition of the property:

The gravel driveway will be removed once the easement is terminated; see the terms of the easement dated 1/6/2011 and recorded in Book 56239, page 494, MSRD.

III.3. Boundary Conditions

- A. Do the boundaries on the ground clearly correlate to the legal description found in the CR document or property deed (i.e. can you follow the boundary after reading the description)? If not, how did you locate the property boundary?

Boundaries are marked by surveyors and correlate with the plans of record for the subject property (easement plan, Plan 12 of 2011 and the lot plan for the deed to the Town, Plan Book 2010, Page 775, MSRD).

- B. (If CR): Are portions of the property which are excluded from the Restriction marked or otherwise evident on the ground?

N/A

- C. Describe the condition of the boundary markings at all other points (i.e. stone wall, flagged, signed, unmarked):

- **SW corner near Marrett Road:** Well-marked with six foot granite bound at the end of a stone wall.
- **SE corner near Marrett Road:** The corner is at a stone wall on Marrett Rd, opposite a stone bound on the other side of Marrett Rd indicated on the plans. Not currently monumented, this corner needs a marker.
- **Boundary along land now or formerly of DeAngelis and Cotton Farm Realty Trust:** marked by survey flags corresponding to points on the plans (to be replaced by granite/concrete markers).
- **NE corner:** marked by survey flag (to be replaced by a granite/concrete marker)
- **NW corner:** marked by survey flag (to be replaced by a granite/concrete marker)
- Concrete bound on the western boundary near the end of the stone wall.
- No remaining bounds on the western side are monumented until the SW corner, but this border is already Lexington conservation land (Upper Vine Brook Conservation Area)

D. Describe the use of abutting properties, focusing on uses close to the boundary line:

DeAngelis land: A house lot with structures close to the boundary line. Ornamental plantings along Marrett Road go over the property line. There is no plan to remove these plantings except for those that are invasive.

Cataldo land: The boundary line is dense with ornamental plantings that obscure the boundary line. The Cotton Farm property is subject to a temporary easement that gives access to Marrett Road from this house.

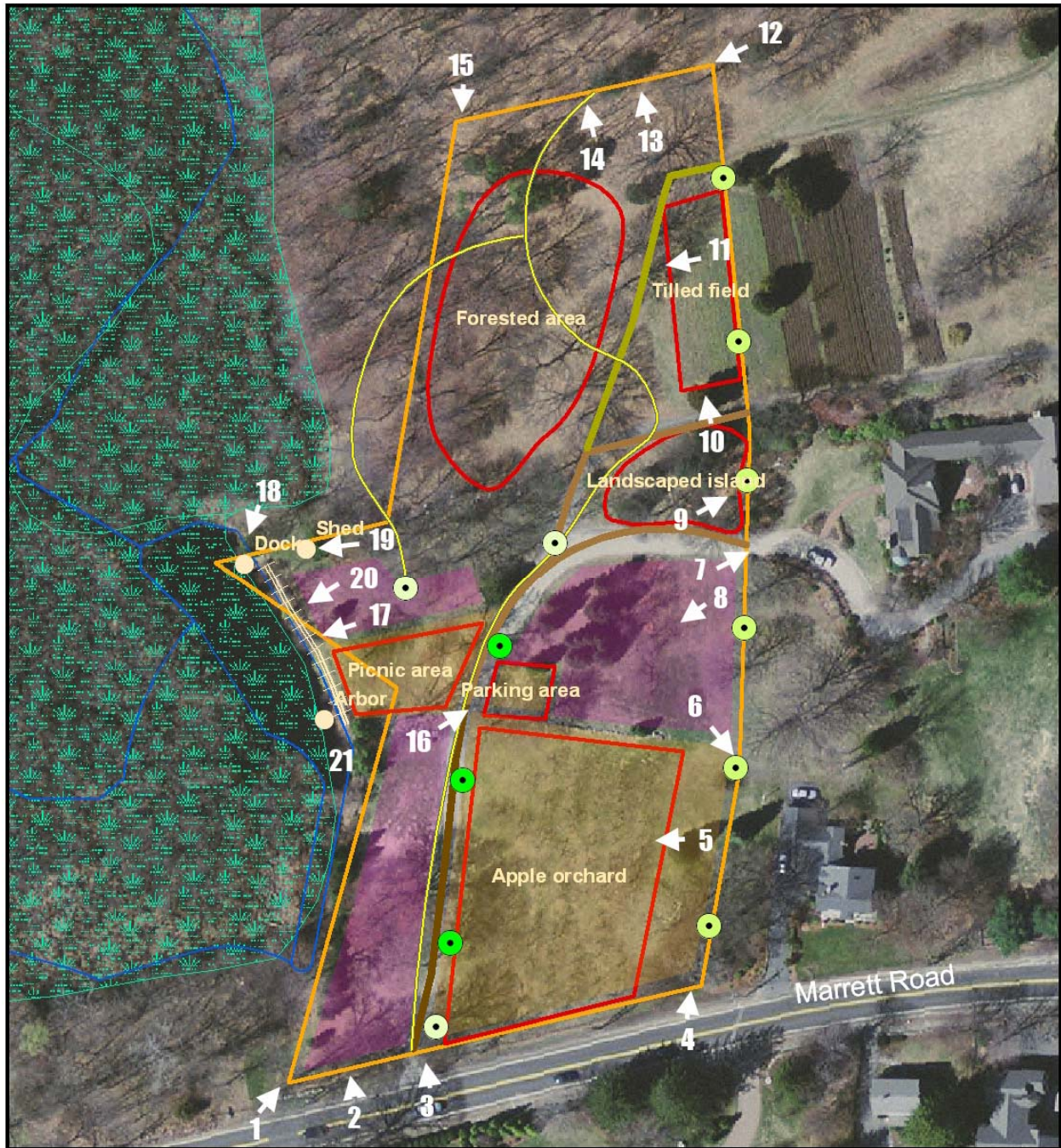
Agricultural tilled field: Along the boundary line beyond the driveway is a cultivated field; a portion of the subject property is currently tilled. There is a prohibited dirt drive that goes around the field; this drive is not named or described in the driveway easement.

E. Any other comments on boundaries?

None.

Section IV:
Photographs

IV.1. Photo location map



IV.2. List of documentary photographs

Photographer(s): Tom Whelan, Emily Schadler

Date	Photo #	Location description (where the photographer was standing)	Cardinal direction	Description of photo subject
3/27/11	1	SW property corner	NE	View of Western corner of property on Marrett Rd
3/27/11	2	Street scene at Marrett Rd	N	Stone wall and entrance at Marrett Road
3/27/11	3	Gravel road (easement area) at Marrett Rd	N	Easement area in Driveway easement 56239/494 and public access, and orchard
3/27/11	4	SE property corner	N	Property bound at Marrett Road and at DeAngelis house lot
3/27/11	5	Orchard	W	Orchard viewed from eastern side
3/27/11	6	Property line at DeAngelis lot	S	Property line facing south towards Marrett Rd
3/27/11	7	Property line at Cataldo house	E	Shows end of driveway and Cataldo house
3/27/11	8	Property line at Cataldo house	W	View of orchard
3/27/11	9	Property line at Cataldo house	N	View or plantings obscuring property line
3/27/11	10	Property line at field	N	View of tilled field bisected by property line
3/27/11	11	Property line at field	W	View of eastern boundary and woods from field
3/27/11	12	NE corner bound	W	View of woods along northern boundary
3/27/11	13	Northern boundary	N	View of woods to north (other conservation land)
3/27/11	14	Trail entering property	N	View of trail from conservation land to north
3/27/11	15	NW corner	S	View of eastern boundary and other conservation land
4/18/11	16	At driveway and stone wall north of orchard	SE	Proposed parking area
4/4/11	17	Pond view	W	View of the western shore, bittersweet in the foreground
3/14/11	18	Near pond	W	View of the dock to be removed
3/14/11	19	Shed	NW	View of the current condition of the shed
3/14/11	20	Near pond	W	View of the fence to be removed
3/14/11	21	Near pond	W	View of the arbor to be removed

IV.3. Documentary Photographs



1. SW Corner, looking east along Marrett Road



2. Street scene, SW corner looking north



3. Driveway and orchard in background on right



4. SE corner at DeAngelis lot



5. Orchard, looking west from DeAngelis boundary



6. Property line, bound at DeAngelis house lot



7. Cataldo house, end of driveway at property line and staked bound



8. Orchard, driveway facing west near Cataldo house



9. Border plantings near house, obscuring property line (stake circled)



10. Tilled field, north of Cataldo house; property line bisects field



11. View of eastern boundary and woods from field



12 NE bound and woods



13. View of woods to north (other conservation land)



14. View of trail from conservation land to north



15. NE bound and eastern boundary



16. Parking area



17. Pond, facing west, bittersweet in foreground



18. Dock (to be removed) at the pond edge



19. Shed



20. Fence (to be removed) at the pond edge



21. Arbor (to be removed) at the pond edge

Section V:
Amendments

V. 1. How to amend this document

This property is permanently protected as open space for conservation and passive recreational use only. For this reason, it may become necessary in the future for portions of the Land Management Plan to be revised.

The following sections of this document may be changed:

I.4. Contact information

I.5. Land Management Plan sections:

Permitted uses/activities

Prohibited uses/activities

Structures

Stewardship plans

Active management plans

Any changes to these sections must still adhere to the LAND grant program regulations, Project Agreement, Article 97 requirements, and any other pertinent Massachusetts regulations.

Procedure for amending this document:

The Conservation Commission will hold a public meeting in order to make any amendments to this document.

Requests from the public to amend the Land Management plan sections listed above must be made in writing to the Conservation Administrator at the address listed in Section I.4.

Section VI:
Signatures

I certify that the above Baseline Documentation Report and Land Management Plan is accurate and complete.

I understand that this property is permanently protected open space under Article 97 of the Massachusetts Constitution, for conservation and passive recreation uses, under the care and control of the Conservation Commission. The property may not be sold, subdivided, altered, or used for any other purposes, except by securing all of the following: approval of the Conservation Commission; approval of the municipality by town meeting/city council vote; approval by both houses of the Massachusetts State Legislature; approval by the Governor of Massachusetts; mitigation by replacement with an unprotected property of equal or greater size, value at the time of disposition, ecological value, and passive recreational value, subject to approval by the Secretary of Energy and Environmental Affairs. Additionally, any change in use must adhere to all relevant environmental laws and regulations, including but not limited to the Massachusetts Environmental Protection Act and Endangered Species Protection Act, the Wetlands Protection Act, the Rivers Protection Act, and Global Warming Solutions Act.

_____	_____
Preparer	Print name
_____	_____
Municipal Chief Executive Officer	Print name
_____	_____
Conservation Commissioner	Print name
_____	_____
Conservation Commissioner	Print name
_____	_____
Conservation Commissioner	Print name
_____	_____
Conservation Commissioner	Print name
_____	_____
Conservation Commissioner	Print name
_____	_____
Conservation Commissioner	Print name

Date