How to Manage Williamstown's Public Lands



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Project Objectives

Client and Project Goals

Our Williamstown Land Conservation Commission, would like us to come up with more specific and detailed plans for the use of four properties owned by the Conservation Commission. Based on the groundwork that the 1998 Environmental Planning (Envi 302) project group did, we will provide here a detailed description of the sites, their histories, and the problems associated with them and will try to come up with more specific conclusions, as well as instructions for implementation. In the following, we provide such information on the sites as well as examples and background research in the field of land conservation. We hope this information serves to guide the planning process behind improving these sites.

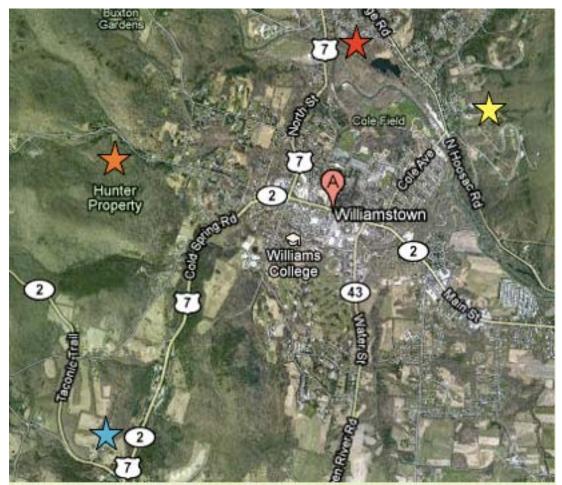


Figure 1: Aerial image of Williamstown with locations of four properties marked in blue=Margaret Lindley, red=Bridges, orange=Hunter, yellow=Pine Cobble. Image from Google Maps.

In the image above the locations of the four parcels are marked on a map of Williamstown. Margaret Lindley is the blue star which lies to the southwest of Williamstown at the intersection of Route 7 and Route 2. The Bridges Property is to the north, marked with a red star. Hunter is marked with an orange star to the west of town. And Pine Cobble woodlot is located to the north east with a yellow star (Figure 1).

From a theoretical standpoint, we paraphrase Tom and Katherine Daniels. The proper way to manage land must be "comprehensive and holistic" taking into account how a community should "look, function, and grow over the next 10 to 20 years (Daniels and Daniels 2003)." In undertaking this project for the Williamstown Conservation Commission, we understand that we must consider an enormous range of factors in determining how changes will affect the community not only now, but years down the road. Our goal is to maximize the benefit that these four public spaces bring to the town, so our recommendations must incorporate a broad vision for the future of this community.

Background

The most important piece of background information that we will use is the 1998 Environmental Planning class report, Management Plans for Conservation Commission Lands (Cook et al, 1998). This report reviewed 9 different properties in Williamstown, including the four that we are looking at in our project. It provides baseline information for each parcel, including a map, a history of the land, a site description, current structures and developments, current site uses, and a general evaluation of neighboring areas. It also includes options for courses of action at each parcel of land based numerous considerations, such as environmental impacts, the goals and capabilities of the Conservation Commission, preferences of residents, etc. The options covered an extensive range. For the Bridge's Pond site, for example, potential ideas varied from doing an intensive pond clean up to leaving things the way they are. The report also included a final recommendation for each site, keeping in mind what would be best for the town, the site, and the Conservation Commission.

The report identifies three common issues that arose in examining each site: access, public information, and maintenance. One great point from this report is that unused land is unappreciated land, and it is likely to gain unwanted use or no use. Further, promoting use can actually improve the environmental condition of the plot. It is important that the townspeople know and care about the land. The conclusion from this is that better marketing of these public lands needs to occur. The report finally makes a number of suggestions for overall improvement, ranging from the creation of bike and hiking trails, to enhanced outdoor education programs, to community outreach and strategic partnerships for maintenance.

As our clients pointed out, however, this original report did not go far enough. While it identified potential courses of action, it did not provide specific plans for implementation. Our major goal moving forward will be to address this shortcoming. We must focus on evaluation of options, strategic planning, and understanding and mobilizing available resources, in order to ensure that our recommendations are clear and doable.

Williamstown Community Profile

Williamstown is a small town in the northwest corner of Massachusetts. The population of permanent residents is approximately 4,577 (48% male; 52% female). There are also approximately 2,047 college students who attend Williams College from September to May each year. The median resident age is 22.1 years, as opposed to the state median age of 36.5 years. The median household income is \$48,727, while the state median \$62,365. The estimated per

capita income is \$27,580, and the state per capita income is \$32,822. The composition of race in Williamstown is quite homogenous: 84.8% White, 3.8% Black, 3.6% Hispanic, and 8.2% other. The population density is low: 1,338 people per square mile (City Data 2009).

Ninety-two percent of residents over the age of 25 have attained a high school degree or higher; 60.1% have attained a bachelors degree or higher. 9.1% of residents are unemployed. Fifty-two percent of residents have never married, and 35.6% are currently married. Only 324 residents are foreign born and 12.2% were born in Massachusetts. The most common industries for males are educational services (50%) and professional scientific and technical services (8%) (City Data 2009).

The average household size is two people, compared to the state average of two and a half. Seven percent of residents live below the poverty income level, as opposed to the 9.3% state average. The median house value is significantly above the state average (City Data 2009). Because our project deals with Williamstown Properties it is important to know who the residents are to provide the best recommendations for them.

Research Tools

Our main research tool is a two page survey that gauges public awareness, use, and suggestions for improvement for each of the four properties that our project covers. The survey is divided into four parts, one focusing on each property. We ask similar questions about each piece of land, except that we offer different options for possible improvements depending on the property. The complete survey is appended (Appendix 1).

In designing and using this particular survey, we are seeking to accomplish three major goals:

1. Gauge public awareness of the properties;

2. Gauge use for the properties;

3. Determine what improvements residents might envision for each property.

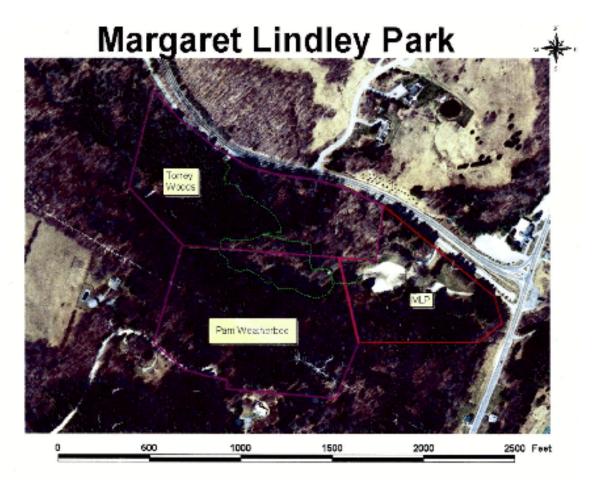
When administering the survey, we are present and provide the participants with a map of each property and a brief description. We surveyed outside of Stop and Shop, Wild Oats, and two Williams College Center for Environmental Studies events.

Because the overall goal of this project is to make these public spaces the best possible assets to the Williamstown community, we have limited our surveys to Williamstown residents only. Our sample size was 48 Williamstown residents. Our typical survey technique in public areas is to simply approach everyone that comes by with an introduction along the lines of, "Hello Sir/M'am, are you are a Williamstown resident? (If yes) Would you mind giving up a few minutes to take a survey for the Williamstown Conservation Commission?" We then proceed to explain our project and our goals, and give a brief description of each property. We answer any questions that participants may have, but we refrain from saying anything that may bias their responses. Once collection is complete, survey data will be analyzed qualitatively, and if possible, quantitatively.

We used a weighted cost/ benefit analysis for our evaluation tool. We set up a matrix grid for all 4 properties in which we weighted each option within its property. For benefits, each option was scored on public recreation and town revenue. For costs, each option was scored on maintenance, implementation, and environmental impacts. The options were weighted on a 0-5 scale; 0 being least important, 5 being most important (v = weight of benefit, -c = weight of cost). Then each option was scored on a -5 to 5 scale; -5 being least helpful, 5 being most helpful

(B = actual benefit, X = actual cost). The weighted benefit/cost of each option times the actual benefit/cost gave a raw score for each options benefits and costs (v^*B = weighted benefit, $-c^*X$ = weighted cost). Then the weighted benefits and the weighted costs were summed. The result is the S score. A negative S score indicates the costs outweigh the benefits; while a positive S score indicate that the benefits outweigh the costs. We considered all positive S scores for our final recommendations. See Appendix 2 for the complete matrix.

For all properties, the benefits and costs were the same. For benefits, public recreation was weighted a 5 because our job is to come up with ways to use the land that will most benefit Williamstown residents. Revenue was weighted a 2.5, because although it is important to try to raise revenue for the town, realistically there wouldn't be much revenue and that is not the main focus of this project. For costs, maintenance was weighted a 2 because for all projects, once in place, the town wouldn't have to pay much to keep them running. For implementation, the cost to the town would be more significant, so it was weighted a 4. Environmental impacts were weighted a 3 because the environmental impact should be a great concern for this project, seeing as it is an environmental planning class.



Margaret Lindley Park

Site Description

The most heavily used of the nine parcels under consideration, Margaret Lindley Park, has relatively easy access from Rt. 2, although the entrance is rather hidden. This entrance is south of a truck escape ramp at the base of eastbound Rt. 2 on the Taconic Trail. There is a grass parking lot immediately west of the entrance to the park, with room for approximately twenty cars. A nature cabin and concession facility accompany the pond.

The whole park is quite near Rt. 2; the road is partially visible and audible. The land is at a fairly low elevation, lying at the base of the slope down from Rt. 2, and has variable topography, from the depression formed by the pond, sloping up to the south to the slight hill where the nature cabin is located. The area would probably be protected from most severe weather and, because of slopes and large trees, partially shaded at all times of day (Cook et al, 1998).

The soil at the base of the slope, near the swimming area, is Hero loam, a moderately well drained deep soil; the soil on the slope itself is Copake fine sandy loam, a "somewhat excessively drained soil". The swimming area in Margaret Lindley Park is created by diverting

Hemlock Brook's water through a pipe to a collection area, and across a plastic-lined channel. The water drains out through an opening in the wall on the other end of the pond where the lifeguard chairs and lights are situated. At present (late Fall 2009) there is no water in the pond, and one could walk on the sandy bottom. Typically the pond has water from after Memorial Day to Labor Day. The swimming is no longer chlorinated however it had been previously because a 1991 report by Heather Stoll found high levels of coliform contamination in the swimming pool after heavy rains, indicating that bacteria build up in the warming pool and then are swept into the swimming area (Cook et al, 1998).

Footprints in the sand indicate that the area is used by deer and other animals. The pond is surrounded by forest, many of whose trees are quite large. Hemlock, yellow birch, swamp milkweed, quaking aspen, ash, chicory, and Queen Anne's lace are a few of the species on the site. Hemlock Brook is perhaps 2 feet across with a good flow of water even after a dry summer. Lush vegetation grows on both sides, and a bridge has been built over it near the diverting pipe. At least one trail follows the brook in a westward direction, towards Torrey Woods. Adjacent land uses include roads and some houses and stores along Rt. 7 and Rt. 2. None of the land directly around the park is heavily developed (Cook et al, 1998).

Current structures include the nature cabin and restroom facilities, as well as picnic tables and trash receptacles. There are also two horseshoe pitches. The swimming area takes up most of the cleared land on the property (Cook et al, 1998).



Margaret Lindley Pond, off season

History

The Taconic Restaurant owned Margaret Lindley part in the 1940s. They diverted Hemlock Brook into a dammed depression to create a swimming hole for locals and visitors. Williamstown bought the parcel from the restaurant in 1967 for \$35,000 with help from a Massachusetts state grant. The Conservation Commission (CC) was given charge to maintain the land. Similarly, they chose to divert Hemlock Brook into a pool. In 1971, the CC began chlorinating the water due to high levels of bacteria and a later study done in 1991 by Heather Stoll at Williams College confirmed three sources of coliform contamination upstream from the pond (Cook et al, 1998). Discovery of some of the points of contamination came from a change in septic system regulations that required inspection of septic tanks in the nearby watershed. The inspections found either inadequate or complete lack of septic systems to be the cause of such high levels of coliform bacteria in the waters of Hemlock Brook (Client meeting-Hank Art 10/15/2009). At its peak, Margaret Lindley pond hosted up to 300 swimmers a day in the summer of 1972. Management of the park switched to the Williamstown Recreation Commission in 1984 through the present (Cook et al, 1998). Problems and Scoping

There are two main problems with this site. The first is the lack of potable water that meets MA criteria for public water supplies. The site has had problems with fecal contamination in the past when a cesspool leaked down the Taconic Trail and dumped into Hemlock Brook, which flowed into the pond. At one point the coliform level was too high, so they chlorinated the water, which probably had negative effects on the plants and animals living in the water. For the amount of use the pond gets, the water has to be clean, ideally without the use of chemicals. More chemical testing could be done at the site to determine the level of pollution. Solutions would depend on how much and what is polluting the pond. Currently, the site lacks any water available for drinking, although it is frequently populated in the hot summer months. Also, there are no facilities with running water for families to use, which might lead children to go to the bathroom in the pond, polluting it further. A facility with clean running water would be a great asset to the site.

The second main problem is that aside from the swimming hole, there is plenty of forested land surrounding the pond that could be utilized for recreation like hiking trails. An improved trail system would allow families to take a walk in the woods after swimming. The current trail system extends behind the pond and is marked by yellow diamonds nailed to trees along the pathway. Presently, the path is short and the path itself is hard to distinguish from the surrounding forest. On a hot day, a nice long walk in the woods before or after swimming would be very enjoyable. The trail system could also be used for educational purposes with signs like those in Hopkins Memorial Forest discussing local flora and fauna. However, the land surrounding the pond is owned by many different people and organizations, which provide many problems of consent. One possibility for the town is getting an easement from the owners for use of paths through a certain property. For the trail system to be put in place, all of the owners of the land would have to agree to the terms. A better trail system would improve the recreational value of the site, gaining more public support.

Alternatives

For Margaret Lindley Park, our research suggested that possible options for use would include changing rooms, a source of running water for the park, a skating pond, or improved trails. Providing changing rooms at Margaret Lindley would give patrons a place to change in and out of swimming attire in the summer and provide a sheltered area near the pond as a place for shade or refuge from the weather. A structure already exists on site that contains old changing rooms and bathrooms. The rooms would need to be unlocked, cleaned, and maintained throughout the summer months when the park is open and the rooms would be used.

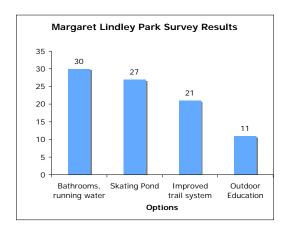
For years, Margaret Lindley has not had bathrooms or running water for the summer patrons. The public would benefit from having rest area (rather than Port-A-Potties) and running water to drink during the hot summer months. The well that was there had been contaminated and abandoned and since then the permit for the well has expired and the well has structurally collapsed. Therefore, in order to provide running water for the site, the town would have to obtain a new permit to drill a new well or replace the old one (which depends on the state of the collapse). In addition, water quality tests would have to confirm that the water at that site is potable and clean enough to use as a public water source which is a more extensive process than drilling a private well. The plumbing systems are still in place from the previous well and connections would have to be made to link that system up with the new well.

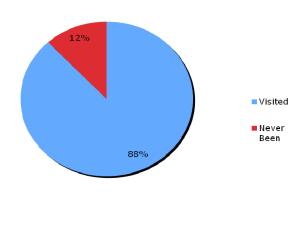
Another option is to create a skating pond at Margaret Lindley over the winter. Williamstown does not have a place to skate for just the town and would greatly benefit from a community space for recreation during the winter. In order to create a pond, water must be left in the pond, not drained for the winter which is the present protocol. The water level would need to remain relatively constant which relies on the dam and the rate at which water may naturally leak from the pond. To ensure such measures, the dam may need to be reengineered to be strong enough to hold the level constant and the bottom of the pond would have to be made impervious. Guntlow Associates, a local environmental engineering firm, said that while an estimate is very difficult to make, it would certainly cost over \$100,000 if a new dam were required. Even reinforcing the current dam could run up a similar bill. Even more costly (and more important) would be making the pond floor impervious. A clay or bentonite layer would have to be added to reinforce the floor. The cost of this is approximately \$5,000 per acre, though this is highly dependent on the contractor. However, actual construction is only a minor cost in comparison to permitting. Such a project would deal with the Wetlands Protection Act and would a notice of intent to change this wetland area would have to be filed to ensure the project does not harm the ecosystem. Additionally, the pond and parking area would have to be cleared when it snowed and generally maintained as a public space (places for trash, clean up, dam maintenance, etc.).

Another option for Margaret Lindley is improving upon the current trail system. The current trails extend behind the pond and provide a nice place for swimmers to take a break and enjoy the forest. It would improve the trails to provide more clear pathways and perhaps extend the trails further into the woods. A project is currently underway through the Williamstown Rural Lands Foundation who is working with neighboring land owners to the Margaret Lindley site to obtain easements that would allow them to extend the current trails starting at Margaret Lindley towards Harmon Pond and westward along the brook. It would be necessary to ensure that there is a plan for trail maintenance so the trails do not become overgrown and unusable over time.

Survey Results

Most of the residents surveyed said they had visited Margaret Lindley Park. Eighty-eight percent had been to the site while 12% said they had never visited. For Margaret Lindley Park, four options were considered: running water with a new well, changing rooms, a skating pond, and improved trails. The survey results show that 30 people would like better bathrooms with running water, 27 people would like a skating pond, 21 people would like improved trail systems, and 11 people would like outdoor education (see graph below).





Interviews

Pam Weatherbee, a botanist and a retired Conservation Commissioner. She thought Margaret Lindley Park could be improved with more outdoor education. The trail system around the park is on her property, and she thought they could be expanded further. Leslie Reed Evans, the executive director of Williamstown Rural Lands Foundation said that currently, landowners around Margaret Lindley Park are undertaking a project with Rural Lands Foundation to expand the trail system. One trail goes through Pam Weatherbee's lot to hook up with Harmon Pond and the other goes west along the brook through a neighboring parcel. Although the existing trails are marked and cleared, she thinks if the trails are expanded they will be better used and more enjoyable.

Drew Jones, manager of Hopkins Forest thought a skating pond would be a really great asset to the town, if feasible. He pointed out that the town would have to plow the parking lot and the pond would have to be cleared as well. He also recommended an honor system for parking passes. Parking could cost \$3 or so and there could be a ticket dispenser somewhere close to the lot. An officer could come by every once and a while to make sure that everyone had a ticket. The dispenser would be an expensive investment but given the busy summer months, it could be paid off quickly and then the town could be making revenue.

Jeff Kennedy, Williamstown's Conservation Agent, was a great source of information for the park. Most importantly, he gave us realistic assessments of the potential for both a skating pond and developing a water source. Unfortunately, this was mostly bad news, as he told us that a substantial cost would probably prohibit either option. A new well could cost \$100,000 due to permitting, and a skating pond would require extensive engineering.

To understand the engineering costs that Mr. Kennedy mentioned, we interviewed Rob Van der Kar of Guntlow Associates, a local environmental engineering firm. He confirmed that a significant amount of work would be required for a skating pond. There would likely be improvement needed for the dam, or a new dam altogether, and the floor of the pond would have to be sealed with clay or bentonite to prevent leakage. While he stressed that estimates were difficult to make, he told us that we could expect costs to range from a few thousand for dam alterations to over \$100,000 for a new dam. Sealing a pond floor generally runs around \$5,000 per acre. Finally, Mr. Van der Kar also told us that a comprehensive engineering survey by Guntlow Associates to assess such problems usually costs in the range of \$5,000.

Evaluation Tool Results

For Margaret Lindley Park, there are four options. For running water benefits, we gave public recreation a score of 4 because the survey results show that there is a high demand for running water, and we gave revenue a score of 2 because the town would probably be able to charge an entrance fee if there was running water. For costs, we gave maintenance a -2 because the well water would have to be monitored. We gave implementation a score of -5 because it would be extremely expensive to put in place, and we gave environmental impact a score of -2 because the constructors would have to dig around the area to install a new well, disturbing the surrounding habitats.

For changing room benefits, we gave public recreation a score of 3 because the survey revealed a need for them, and we gave revenue a score of 1 because the town probably wouldn't be able to charge much, if at all, for opening the changing rooms. For costs, we gave maintenance a score of -2 because they would have to be kept clean. For implementation, we gave a score of -2.5 because they would have to be renovated to look nice. For environmental impacts, we gave a score of -1 because the only environmental cost would come from implementation.

For skating pond benefits, we gave public recreation a score of 5 because the survey shows there is a large demand for a skating rink there, and for revenue, we gave a score of 1.5, because the town would probably be able to ask for a little payment to use the pond. For costs, we gave maintenance a score of -3 because the town would have to pay for someone to plow the parking lot and for someone to officially test the ice to open and close skating each year. For implementation, we gave a score of -5 because it would extremely expensive to prepare the current pond with dam for frozen ice. For environmental impacts, we gave a score of -2 because the implementation would most likely have a large negative impact on the surrounding area.

For improved trail benefits, we gave public recreation a score of 3 because families would be able to wander around in the summer months before or after a swim: the public showed support for this idea in the survey results. For costs, we gave maintenance and environmental impacts a score of -1 because neither of them would be costly monetarily or environmentally. For implementation, we gave a score of -2 because someone would have to put in a lot of work to clear and clean up the trails.

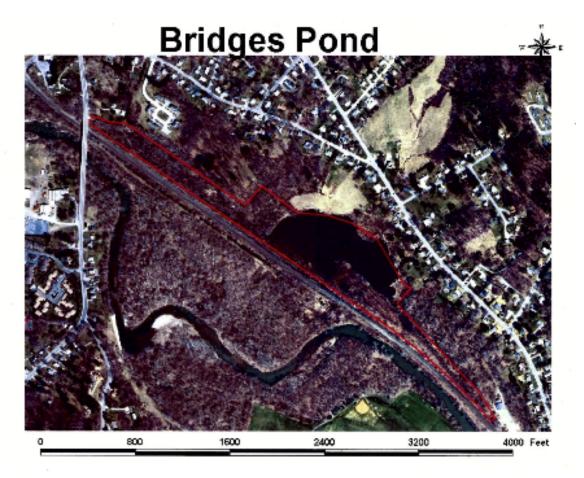
Analysis of Alternatives

The evaluation tool results show that running water with a well has an S score of -5, changing rooms has an S score of 0.5, a skating pond has an S score of -3.25, and improved trails has an S score of 4.5 (Appendix 2). Our interviews revealed that a new well and skating pond would be extremely expensive—way out of the current conservation commission price range. Our interviews also revealed that the Rural Lands Foundation is already working on an improved trail system around the park.

Recommendations

We recommend that Margaret Lindley Park be left as it is for now but that the Conservation Commission and Williamstown community consider future improvements like building a skating rink and providing running water in future projects if the funds were made available. The Rural Lands Foundation is currently building an extension to the trail system at the site which executive director Leslie Reed Evans says provides a nice step in developing Margaret Lindley Park. Improved trails scored a 4.5 in the evaluation tool indicating that the benefits of such a project would outweigh the costs. This is especially true because Rural Lands, not the Conservation Commission, is putting in the time to building these extensions. Additionally, the public surveys indicated that 21 people supported an improved trails system at Margaret Lindley and several noted they did not know a trail system even existed. Improving and extending the trails can call attention to their availability and improve public use of the site.

In the future, we recommend that the Conservation Commission explore the option of building a skating pond at Margaret Lindley Park. Although such plans scored a -3.25 in the evaluation tool, such a project would definitely be beneficial to the community once built and operating as it would provide a use for the site in the winter and a place for the community to gather and recreate. The skating pond was a very popular choice in the public surveys and interviews with local conservation experts and community advocates like Drew Jones and Pam Weatherbee indicated that allowing the pond to freeze would be a creative and exciting option for Margaret Lindley. In order to implement this plan, further siting would be required to get an exact estimate of the costs for such a project. Environmental engineering firm, Guntlow and Associates said they would provide a detailed estimate for a skating pond for \$5,000. If their estimates seemed like a reasonable amount to get funding for and community interest was high perhaps the Conservation Commission should pursue the skating pond project. The town would most likely need to fundraise or seek grant money to fund the project or write a grant proposal to the Community Preservation Act which will provide money for projects that promote community open spaces and recreation, such as a skating pond.



Bridges Pond Property

Site Description

The entrance to the Bridges Pond property is marked by a yellow hanging sign most easily seen when driving south on Route 7. Traveling north on Rt. 7, the entrance is immediately on the right after crossing the bridge which spans the Hoosic River and the railroad tracks. The Northeast corner of the road is on town land, but, at the bottom of the ramp from Rt. 7, it merges with the railroad access road following the tracks. The entrance is blocked off and there is no designated parking space on Rt. 7. Bridges Pond is located in a depression south of Hoosic Road and north of the Hoosic River. It is part of the Hoosic River drainage. Though the 25-acre property has wooded areas on its narrow ends, it is dominated by a 7-acre pond created by the diversion of Henderson Brook. The pond is located at a relatively low elevation, on flat land that slopes up to North Hoosac Road. The pond is somewhat protected from the wind since it is in a depression, and is exposed to fairly continuous sunlight throughout the day since trees are generally not directly on the water's edge (Cook et al, 1998).

Henderson Brook enters on the upper west corner and exits on the lower east side. The northern side has a small border of cattails. A field lies between the cattails and the lawns of the houses on North Hoosac Rd bordering that area. Near the Northwest corner in an outcrop of

cattails, a large culvert dumps road drainage directly into the pond from North Hoosic Rd (Cook et al, 1998).

A soft grassy and vegetated bank steeply slopes the few feet down to the water on the western side. There is a trail following the western perimeter from the tracks to the field on the north side. It crosses a very wet area that can be traversed using a crude bridge made from rough pieces of wood from crates. The southern side has an almost flat slope with cattails in the shallow water and thick vegetation on dryer margins. A wide muddy area that could be used as a boat ramp cuts through the vegetation between the railroad tracks and the water. A peninsula covered with birches extends out cutting off the sight of the entrance of Henderson Brook from the boat ramp. This south eastern peninsula is the location of the picnic knoll. It has a trail clearly visible from the railroad tracks. The knoll itself is little more than a slightly cleared area on the edge of the pond with a number of mature trees. There is a fire circle and a small bench constructed from old logs. There are no other trails leading to the picnic knoll (Cook et al, 1998).

Dead logs and various water plants are distributed throughout the pond. An old landfill lies on the adjacent land to the east while the town's phase II landfill is across the tracks to the south. Beyond the Phase II landfill lies the Hoosic River. Most of the land is covered by trees and scrub growth including maples, paper birch, quaking aspen, sumac, and alder except the grassy border between the houses and the pond. Trash litters the ground around the pond, especially near the railroad tracks (Cook et al, 1998).

Both human and wildlife activity is apparent. Ducks and geese use the pond while other birds can be heard in the trees. Evidence of beavers is obvious in the chewed quaking aspens around the picnic knoll and south of the tracks. To the north, there are eleven visible houses and cars passing on North Hoosac Rd. are both visible and audible. The surrounding lands are predominantly privately owned. To the north west of the pond, the Spring Meadows housing development has a small round pond at a high elevation. Currently, there is a trail that extends south from this parking lot and crosses Bridges to meet the tracks (Cook et al, 1998).



Bridges Pond

History

Much of this history of Bridges Pond is provided by a research project done in 1998 to evaluate possible land use options for Bridges Pond. In 1850, this parcel was part of the

Bridges' family farm. The family sold ice from pools of water around the marshes of Henderson Brook. At some point, the Boston and Maine Railroad Company created the pond to divert Henderson Brook away from the tracks and provide water to power the steam engines. In the early 20th century a steam powered sawmill was located on the pond. The mill was abandoned and by mid-century the pond's use was mainly recreational including ice-skating, fishing, and swimming (Cook et al, 1998).

Williamstown bought the parcel in 1969 from Boston and Maine Railroad for \$2,750. Reportedly, "half the sum was paid for by state self-help funds". The land was put under the jurisdiction and protection of the Conservation Commission. Over time the water became increasingly polluted and by 1972 contained high levels of chloride and phosphates. Levels of chloride were 122 times higher than natural drinking water and phosphates were 48 times higher than natural drinking water. Studies done by undergraduate students found higher concentrations of chemicals in fish and sediments in the pond. Different projects have attempted to propose ideas for access and use of the land (Cook et al, 1998). However, the railroad company, Gilford, prevented these groups from gaining a legal access point to the site. Recently, the railroad has changed hands from Gilford to PanAm Railway perhaps signaling a change in land use policy between the Bridges Pond site and the railroad (Client Meeting-Hank Art 10/15/2009).

Problems and Scoping

This site does not currently get much attention from the town. There are two main issues with this site. The first is that is has poor access. The legal access site is unusable and the nearest road (North Hoosac Rd.) is blocked off by private houses, so a driveway through their property is unlikely. If no one can get to the site, no one can use it. The second issue is use— the pond water is contaminated. For it to be used for swimming or other recreation purposes, the pond would have to have an expensive, serious clean-up. Such clean-up would require removal of contaminants from the pond itself as well as removal of pollution sources upstream from the site. This kind of project would require extensive research and surveying as well as implementation of policies preventing such pollution from occurring. There is currently catch and release fishing; to get fish safe to eat, there would have to be an extensive clean up. The site itself is beautiful; if it had a better use of public space, and access, many people would use it. Some possible future uses could be bird watching, canoeing, and picnicking. Bridges Pond is a beautiful asset to Williamstown that is not currently being used.

Alternatives

Our options for the Bridges Property are to provide access to the parcel through the purchase of the Wylde Property, general recreation, clean up the pond, or build a skating pond. In order to clean up the pond or build a skating pond, Bridges needs safe, easy, and legal access to the property. A property that abuts Bridges is up for sale by Wylde for approximately \$150,000. Purchase of the land would provide access to the site via trails leading in and out of the parcel and provide a place for parking. The property is rather expensive, however, the funds may be available through the Massachusetts Community Preservation Act. The act places a tax on purchases over \$100,000 which goes into a fund which is used to support affordable housing and preserve historic sites and open spaces in a community. To receive a grant for Bridges, the Conservation Commission would need to write a proposal to the Conservation Preservation Act

Committee which would review the plans and determine whether to provide a grant and how much money to give towards the purchase of the Wylde property. In the past, local organizations such as the Rural Lands Foundation have been awarded nearly \$100,000 for work on their properties.

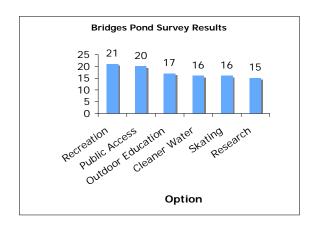
Access to the site through the Wylde property could create trails leading into the property and along the pond where other trails could connect and lead a hiker around the pond or through the woods. A small area with picnic tables or benches could provide a nice spot to sit, play, or eat on a sunny day. Such plans would require access to the property, building trails, and purchasing table and benches.

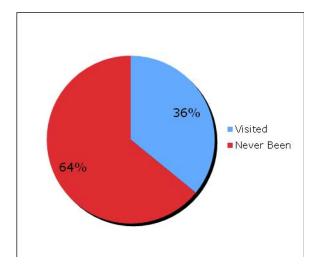
Another option for Bridges after gaining access is water clean-up which would provide safe water in which to fish, swim, or boat. Local town manager Jeff Kennedy explained that clean-up would involve dredging the pond to remove the silt and sediment that has collected in the bottom of the pond making it shallow and spreading. The heavy metal contaminants remaining from past industrial uses of the site would also need to be removed which would require intensive treatment and purification of the water. Continued maintenance of the water quality would require neighboring properties to prevent soil, salts, and other compounds from eroding and leaching down into the pond.

In the winter, Bridges Pond could be turned into a skating pond, similar to the idea for Margaret Lindley Park. A skating pond would create a site for winter community gathering and recreation. Freezing the ice would not involve working with a dam like at Margaret Lindley but it is possible the bottom of the pond would need to be reinforced to ensure that the water level remains constant. Costs for such a project would probably be similar to those estimated for a skating pond at Margaret Lindley. In addition, a clear edge to the pond would need to be made to provide a clear entrance to skating. Currently, a dense thicket of reeds cattails lines the edge of the pond which blocks entrance to the water and would also weaken the ice in those areas. The vegetation would have to be removed before a skating pond was built. However, we would need to obtain access to the site, possibly via the Wylde property, before any such project could be undertaken.

Survey Results

Of the people surveyed, 36 % had never been to the Bridges Property and 64% said they had visited. Five options were considered for the parcel: buying the Wylde property, cleaning up the water, a skating pond, recreation, and access. The survey results show that 21 people would like more recreation, 20 people would like better public access, 17 people would like outdoor education, 16 people would like cleaner water, 16 people would like a skating pond, and 15 people would like the site to be used for research (see graph below).





Interviews

For Bridges, Leslie Reed Evans talked about a piece of land that is for sale near the intersection of Cole Ave and North Hoosac Road. There is a right of way off of North Hoosac Road and the site could be bought and used as a parking area and trail head for trails to go around the pond. Right now the Williamstown Rural Lands Foundation is exploring an affordable housing complex along with the Affordable Housing Committee and Habitat for Humanity at the Wylde site but she thinks either way they could provide access to the site. The land is for sale by "Wylde" for \$150,000. In general she said the big issues there as access and heavy metal contamination of the water.

Jeff Kennedy, the town conservation agent, provided information on Bridges concerning the sources of pollution in the pond and access options. He provided maps of the site describing where there could be possible points of entry. Lawyer and Conservation Commission chair, Phil McKnight, took us to the Wylde property to show us that specific access option.

Evaluation Tool Results

For Bridges Pond, there are four main options. For clean up benefits, we gave public recreation a score of 4 because then people could swim in the pond and eat the fish they catch! For revenue, we gave a score of 0 because the town wouldn't make any revenue from the site. For costs, we gave maintenance a score of -3 because there would have to be the regular cost of filters from road run-off. For implementation, we gave a score of -3 because it would be fairly expensive to dredge the water of heavy toxins and to get a filter system in place. For environmental impacts, we gave a score of -1 because the implementation may upset the pond life quite a bit, but after the implementation, clean up would have a positive effect on the environment.

For skating pond benefits, we gave public revenue a score of 5 because the surveys show that there is a great demand for a town skating pond. For revenue, we gave a score of 1.5 because the town might be able to charge residents a little bit for skating. For costs, we gave maintenance a score of -3 because the town would have to pay for someone to plow the parking lot and for someone to officially test the ice to open and close skating each year. For implementation, we gave a score of -1 because if the town wanted to get revenue from the site, a system would have

to be put in place. For environmental impacts, we gave a score of -2 because there would be more people on the site during the winter months, which may disturb the wildlife.

For buying the Wylde Property benefits, we gave public recreation a score of 5 because it would solve the access issue. For revenue, we gave a score of 0 because the town wouldn't make any revenue from this option. For costs, we gave maintenance a score of -1 because someone would have to make sure the area was clear for people and cars. For implementation, we gave a score of -5 because it would be extremely expensive to buy the site. For environmental impacts, we gave a score of -1 because the only harm that would come would be the pollution of cars and people to the site.

For recreation benefits, we gave public recreation a score of 4 because the public would enjoy picnicking and canoeing a lot. We gave revenue a score of 1 because the town may be able to charge residents a little bit for visiting with this option. For costs, we gave all costs a score of -1 because it wouldn't cost much to keep the area clean, to buy picnic tables, and it wouldn't have a large impact on the environment.

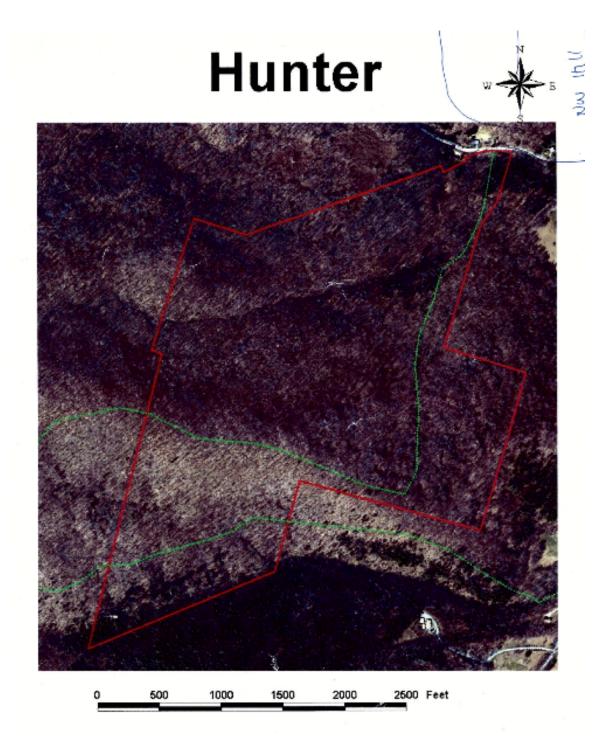
Analysis of Alternatives

The evaluation tool results show that buying the Wylde property has an S score of 0, clean up has an S score of -1, a skating pond has an S score of 12.75, recreation has an S score of 13.5, and access has an S score of -3 (Appendix 2). Our interviews revealed that buying the Wylde property would be extremely expensive but extremely beneficial, because it would completely solve the access problem. Our interviews also revealed that clean up could be feasible—there are heavy metal toxins in the water left over from industrial times but a lot of the current pollution is from the road, which could be stopped by implementing a filter system. A skating pond is very feasible, but without access, there is no use. It is also a perfect location for more quiet recreation—flat areas for picnic tables and campouts, skating, and canoeing. However, by far the biggest issue with Bridges is access.

Recommendations

We recommend that the Conservation Commission seeks to purchase the Wylde Property for sale next to the Bridges Property in order to gain safe, easy, and legal access to the parcel. Access to Bridges is key to any further development of the site for public use. Purchasing the Wylde property had an S score of 0 in the evaluation tool which means the costs would match the benefits of such a project. However, other options such as making Bridges a recreation site or building a skating pond had positive and high S scores of 8.5 and 12.75 respectively. Also, the public surveys indicated high interest in outdoor recreation and skating. These projects can only be undertaken if there is access to the site. Therefore, purchasing the Wylde property makes the most sense as a first step in improving Bridges.

The Conservation Commission should investigate the current condition of the property more closely to determine whether the site will be appropriate and safe for public access. In the past, the location had been used as a dumping ground for the railroad which may have left pollutants in the area. Also, they should anticipate where trails could run through the property to avoid any marshy areas or places that may be subject to flooding. After thorough surveys of the property the Conservation Commission should determine whether the site is suitable for access and decide whether or not to purchase the land. We also recommend that the Conservation Commission should be in dialogue with the Affordable Housing Committee, Habitat for Humanity and Rural Lands about organizing the purchase of the Wylde property. If all four organizations are interested in the purchase of the land for affordable housing and access to Bridges Pond then perhaps a joint agreement could be made about purchasing the land and developing the site in a way that will benefit all parties. A grant proposal should be written to apply for funds through the Conservation Protection Act to help support the purchase of the property because such a purchase would involve an affordable housing and open spaces/recreation projects. Any money that was not covered by the grant could be split between the organizations involved lessening the burden of the cost to any one entity. After the purchase was made and access created to the site, other options like building a recreational site, cleaning up the pond water, and building a skating rink should be seriously considered as valuable additions to the Williamstown community should the time and money become available.



Hunter Property

Site Description

Hunter is a 176 acre woodlot; it is the largest piece of land the Williamstown Conservation Commission owns. The terrain on the Hunter Property is varied and interesting. Elevations range from 740 feet--near the boundary along Hemlock Brook and Petersburg Road-to 1480 feet (along the western property line adjacent to the Taconic Trail State Park). Overall, the property can be thought of as a large ridge running parallel to Petersburg Road. The low points of the ridge are Hemlock Brook and the Flora's Glen Brook, which forms the southern boundary. There are two areas of special interest with regard to topography. The first is the part of parcel near Petersburg Road, where a number of gullies, stream, stone outcrops, and what appears to be an old sunken road, spread out into the forest. The other major feature is on the western side of the property, where the side-slope of Birch Hill enters the land. The summit of Birch Hill is located on State land to the west. On the western side, the top of the Birch Hill ridge is fairly flat, but begins to descend towards Flora Glen Brook. The embankment of the Flora's Glen is generally steep (Cook et al, 1998).

Soils on the site include: the Taconic-Macomber association, the Lanesboro-Dummerstone association, and the Fullam-Lanesboro association. All of these soils are very stony, and occur on steep slopes of 15-45%. Permeability is moderate, the soil tends to be acidic, and the rooting zone is restricted by firm substratum. These soils are unsuited for cultivation, and erosion and wind-throw of trees is a moderate hazard. The Soil Survey of Berkshire County states that "Minimizing soil disturbance and retaining the sponge-like mulch of leaves helps increase absorption of precipitation, retain limited soil moisture, reduce run-off, and control erosion. Constructing access roads and trails on the contour and installing water bars helps to control erosion. Due to the elevation of most of the parcel, views of the surrounding mountains are expansive and beautiful (Cook et al, 1998).

Vegetation on the property has clearly been influenced by past land use. Tree species include ash, birch (yellow, black, and paper), red oak, bigtooth aspen, maples (sugar, red, striped), beech, hemlock, white pine, and a number of others. Understory vegetation is present in some areas, where it includes ferns, honeysuckle, and other brush and herbaceous plants. The vegetation in places indicates a shifting landscape; birch (early successional) have reached their maximum size and are dying out, while beech, hemlock, and other trees appear to be spreading out. The species composition is noticeably different, depending on one's location within the Hunter parcel. The parcel is good habitat for wildlife including a fair number of deer (Cook et al, 1998).

The parcel has had a variety of uses in the past, and evidence of these uses remains today. There are still traces of old logging roads and the old Boy Scout trail starting from the entrance bridge. The most defined pathways (trails or logging roads) occur on the southern side of the property. There is a path along the top of the Birch Hill ridge which leads into state land. There are also several old roads running parallel to the Flora Glen embankment, and one that goes down to meet the brook. The remnant paths and roads are not well defined, not marked, and there is no indication of where they begin or end; further investigation is needed before the actual routes can be determined. Other structures on the property include old stone walls in the gully near Petersburg Road, and fences along the western boundary of the land, some of which are quite substantial. Property boundaries have been marked with flagging, stone corner posts, and some "No Hunting" signs along the northern and western boundaries, and the Flora Glen delineates the southern boundary. However, the eastern side of the property is neither marked, nor posted with "No Hunting" signs (Cook et al, 1998).

Land bordering the Hunter Property is generally wooded. The parcel is adjacent to the Hunter house lot, several other residential lots on the Petersburg and Thornlibank sides, State

land, and Boy Scout land. The RRR Brooks trail runs along the Flora Glen at the southern end of the Hunter property. Access to the parcel can be gained from Petersburg Road; there is room for three to four cars to park along the road, and room for three more in the pull-off just up the road from the entrance bridge. Access to the parcel on foot is definitely possible; the land is within walking distance of several major Williamstown residential areas, and is within easy walking distance for Williams College students (Cook et al, 1998).



Hunter Property, Entrance

History

Once part of the Cole Porter estate on W. Main Street, the Hunter property has changed much over time but little is known as to who used the land, what for, or when these changes occurred. Aerial photographs from 1935 and 1970 indicate different cleared areas and changes in the forest and also show a cut made for telephone lines which have since been cut down. Road cuts and stone walls within the parcel indicate the site may have been used as a pasture and Conservation Commission files show that part of the land was logged at some point (Cook et al, 1998).

In 1976 the Berkshire Natural Resources Council worked out the conservation details and restrictions of the parcel's deed. The restrictions placed are as follows:

- 1) No hunting shall be permitted on said parcel.
- 2) No motorized vehicles of any nature or kind, including but not limited to cars, trucks, motorcycles, all-terrain vehicles, and skimobiles, shall be operated or permitted to operate on said parcel except as may be necessary for maintenance or to fight fires or the management and harvesting of forest products.
- 3) No activity shall be permitted on said parcel which will in any way impair, pollute, divert, diminish or otherwise adversely affect the present supply of ground or surface water emanating from the parcel. The public can enter the land for: hiking, snowshoeing, cross-country skiing, horseback riding, nature study, overnight camping, and other passive recreational activities, provided that trail markers, posted signs, and regulatory notices shall be erected and maintained. Property boundaries are to be clearly posted annually for the benefit of the grantors and general public.

4) The Conservation Commission may cultivate and harvest forest products in accordance with recognized forestry products and the performance of such work as may be necessary for forest fire prevention and control, insect pest and disease control, and the removal of damage caused by natural disaster, provided that all revenues from the harvesting of forest products shall be appropriated to an account entitled "The Conservation Fund" which was established by the town in October 1967 (Cook et al, 1998).

The Hunter family gave the parcel to Williamstown in 1978 for conservation and protection of open spaces. The same year a trail system was devised by Williams student Jacquie Glatz however there is no indication as to whether the project was completed. At some point, the Boy Scouts constructed a trail through the parcel and in 1996 an Eagle Scout project built an entrance bridge beside Petersburg Pass Road. The trails were marked until December 1998 when the sign was torn down (Cook et al, 1998).

Problems and Scoping

This woodlot has a couple of problems. There is very little parking and the trail in place is fine for a hundred yards or so, but then it disappears. You would have to be very determined to use the site in its current state. There are a few possibilities for future use. One is logging, done either sustainably or in patches. Another option is a public education site. For this to occur, a better trail system would have to be in place. The trail could be the link between Hopkins forest and the Taconic Crest Trail. Our clients think the improved trail system would be the best fit for the property.

Alternatives

Our options for Hunter include logging, creating/improving trails, and leaving the property as is.

Option one is logging. This option entails contracting with an area logging company to harvest the timber resources available on the Hunter Property. This would also necessitate a further survey of the resources available on the parcel, as there is no definitive tally as to what might be available. It is impossible to accurately assess the financial benefit of logging then until we know more accurately what resources are available. Following such a survey, if there are sufficient resources to make the initiative worthwhile, a Request for Proposal would have to be created soliciting a logging contractor. The town would then issue this RFP and bids would have to be taken. The Conservation Commission would then choose the best proposal. The benefits of this alternative include revenue for the town and, if done sustainably, improved health of the forest in the future. Costs include the very difficult and potentially expensive and destructive process of getting logging equipment to the timber resources.

Option two is creating or improving trails. This option entails restoring and expanding the current trail system within the Hunter Property. The main trail, the former "Bob Hatten Trail," has fallen into disrepair. This option would include rehabilitating this trail and potentially linking it up to other state and town conservation lands to create a new and improved trail system through Western Williamstown. Such a trail system would extend from Hopkins Memorial Forest (HMF) south through the Hunter Property and some Massachusetts state land, as well as possibly through Boy Scout or private land, finally ending at Margaret Lindley Park.

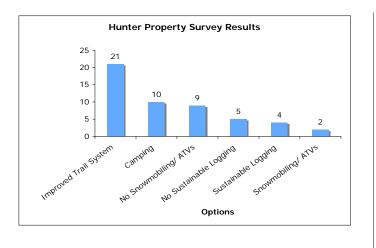
The trail would begin at either the Lower Loop Trail or the Upper Loop Trail in Hopkins Memorial Forest. From here, the trail must head south, through the Finnegan property. Discussion with the Finnegans regarding a possible easement must be completed. After crossing the Finnegan property, the trail would join the former Bob Hatten Trail through the Hunter property. While this trail has fallen out of use, Jeff Kennedy, Williamstown Conservation Agent, still has the trail mapped on GPS. The Bob Hatten Trail leads into a corridor of state land that extends all the way to the intersection of Bee Hill Road and Rt. 2. Our trail would cut south through this parcel and cross the intersection (in a westerly direction) to continue through the Taconic Trail State Park across Rt.2. A short time later, the trail would re-cross Rt. 2 (in an easterly direction) into another portion of the Taconic Trail State Park, through which it would head south into town land bordering Rt. 2. The trail will continue through this town land to the parcel's southernmost point. If an easement cannot be obtained from the Southwesterly neighbor, then at this point the trail will meet and follow the road east for approximately 160 feet. Following this short road hike, crossing the road in a southerly direction will put a hiker on the property of Margaret Lindley Park. The final stretch from this point to the swimming area will then have to be determined.

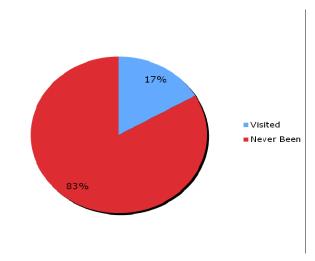
This option comes with the benefit of greatly improving Williamstown's public recreation space. It also could link up two of Williamstown's best public resources, Margaret Lindley Park and Hopkins Memorial Forest. The small cost of such a project would be the creating and maintenance of the trail, which could hopefully be worked out on a volunteer basis with the Boy Scouts or the Williams College Outing Club.

Option three is "Let it be." This option entails allowing the Hunter Property to remain unchanged. There would be no improvement projects undertaken and natural processes would be allowed to run their course. This option would bring the benefit of ensuring that there is protected conservation land in Williamstown, keeping to its rural character and maintaining the natural beauty of the town. There is also the benefit of allowing current ecosystems to function unaltered, This alternative would not incur any costs, except the opportunity cost of not implementing other measures. However, this seems to be outweighed by the financial costs of implementing other measures.

Survey Results

Of the people surveyed, 17% had visited the Hunter Property and 83% had never visited. There are three options for this parcel : logging, improved trails, and letting it be. Our survey results show that 21 people would like to see an improved trail system, 10 people would like to see camping, 9 people would not like to see snowmobiling/ ATV use, 5 people would not like to see sustainable logging, 4 people would be in favor of sustainable logging, and 2 people were in favor of snowmobile/ ATV use (see graph below).





Interviews

Drew Jones said that a trail could potentially complete a loop from the Hunter Property to Hopkins Forest if the Finnegan (the private land owners) between Hunter and Hopkins complied. Leslie Reed Evans also mentioned trails saying there was a trail from Hunter to Flora Glen Trail but it has been overgrown and they took off its status as a trail on hiking maps. It could provide a viable connection to Flora Glen Trail and RRR Brooks Trail. There is a whole network of trails around Route 2 (Petersburg Pass area) that could be connected. She also mentioned the possibility of connecting to Hopkins Memorial Forest but said it would be complicated because of the private lands owned there.

In our interview with him, Jeff Kennedy praised the idea of a trail between Hopkins Memorial Forest and Margaret Lindley Park (using Hunter Property as a go-between) as our best option. He provided us with assessor's maps with property lines overlaying an orthophoto image, which would later help us determine potential routes for the trail. Mr. Kennedy also told us that he has the GPS coordinates for the former 'Bob Hatten trail' that transects the Hunter Property, so that it can be easily re-created.

Evaluation Tool Results

For the Hunter Property, there are three main options. For logging benefits, we gave public recreation a score of 0 because the residents wouldn't recreate at a logging site. For revenue, we gave a 5 because the town would be able to earn a lot of money from logging. For costs, we gave maintenance a score of -2 because it would cost a lot to maintain a logging site. For implementation, we gave a score of -3 because although the access is good, it isn't amazing, and there is a steep slope on the site which would make logging difficult. For environmental impacts, we gave a score of -3 because depending on which type of logging system used, it could be very detrimental to the environment, including complete habitat destruction.

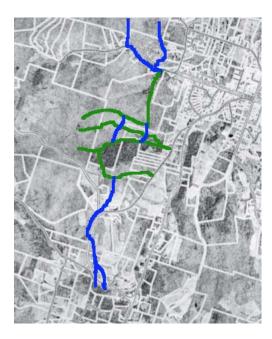
For trail benefits, we gave public recreation a score of 3 because this property could be used to connect other trails, creating a larger and more extensive trail system around Williamstown. For revenue, we gave a score of 0 because the town would not be making revenue from trails. For costs, we gave maintenance a score of -1 because it wouldn't cost that much to keep a trail clear. For implementation, we gave a score of -2 because there are already some whispers of trails on the site; they would just have to be cleared up. For environmental impacts, we gave a score of -1 because a trail would have minimal impact on the environment. For letting it be, all benefits and costs are 0.

Analysis of Alternatives

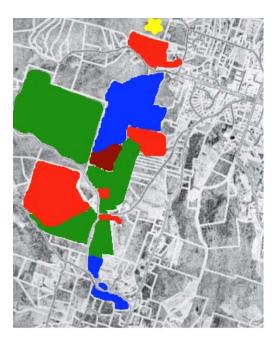
The evaluation tool results show that logging has an S score of -6.5, improved trails has an S score of 2, and letting it be has an S score of 0 (see above matrix). Our interviews revealed that logging could be an option because there is decent access and good lumber, however the property is on a steep slope, which would make it difficult. Our interviews also revealed that an improved trail system is feasible and could potentially connect a broader trail system, which might improve trail use.

Recommendations

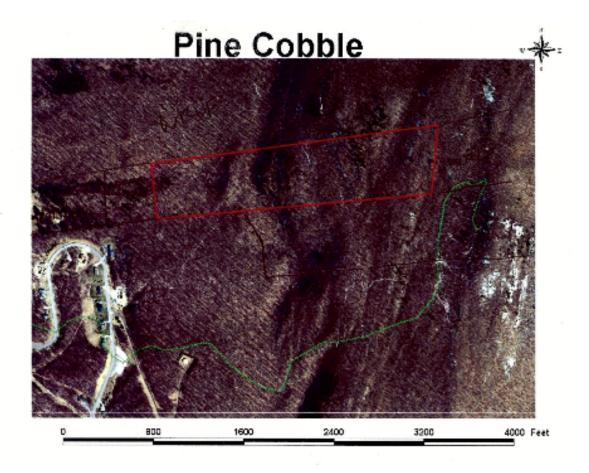
Our final recommendation for the Hunter Property is Option 2: Trails. Specifically, we recommend the creation of the HMF to MLP trail system. In our evaluation tool, this option was the only one in which benefits outweighed costs, as this project would bring enormous public recreation benefit while costing only a minimal amount. Public opinion seems to support this, as 21 respondents asked for improved trails. Interviews with town officials and experts on town conservation all seemed to suggest that this would be a worthwhile project to pursue. After examining the town assessor's maps, it also seem like a distinct possibility, as there are few barriers. One problem that remains is negotiating with a few private property owners in the area to ensure easements or other access agreements. There are a number of options available for the exact location of the trail. These options are mapped below, and should be more comprehensively compared at a later stage if the project is undertaken. For now, we recommend that the Conservation Commission begin gathering resources and establishing partnerships to create this trail.



Top map shows potential new trails in blue. Existing trails are shown in green. Bottom map shows private land in red, town land in blue, state land in green, and Boy Scout land in Maroon. The yellow star indicates Hopkins Memorial Forest and the beginning of the trail system.



In addition to creating this proposed trail, funds would need to be allocated to pay a trail crew to maintain the trail from year to year. It is possible such a project could be done by volunteers or the Williams College Outing Club. We recommend that the Conservation Commission inquire about the possibility of volunteers or the WOC assisting with the trail and then, if those options are not possible, create a fund to sponsor trail maintenance.



Pine Cobble Wood lot

Site Description

The Pine Cobble parcel is completely forested. The dominant trees include 5 species of oaks as well as hickory. The western portion of the parcel has a gentle slope of less then 15%, which transitions to a sharp, greater than 15% slope, to the east. This transition in slope corresponds to a change in soil composition. In the west the soil is primarily Peru-Marlow association which is typically found on the sides and crests of glacial till uplands. The soil is moderately to strongly acid, and is generally not suited for cultivation. On the steep slope on the east of the property the soil is composed of a Lyman-Tunbridge association which overlays the granite bedrock. Lyman-Tunbridge soil is strongly to slightly acidic and is not suitable for cultivation. This soil is unsuitable for logging because rock outcrops and steep slope makes it difficult to manage equipment, and erosion becomes a problem if trees are removed (Cook et al, 1998). And yet the slopes of Pine Cobble have been used for timbering since 1753 (Art).

The "Ledges" is a granite rock outcrop found along this transition line. This picture shows an impressive example of this beautiful feature of Pine Cobble. The Ledges span land on either side of the Conservation Commission going onto the land owned by Williamstown Rural Lands Foundation to the north and south. The new Class of '98 trail goes along these ledges and joins up with the Pine Cobble trail near Bear Springs (Cook et al, 1998). There are no structures currently on the property. It is currently used for hiking along the Class of '98 Trail.



Pine Cobble

History

Williamstown acquired the Pine Cobble woodlot in 1966 for non-payment of taxes on the order of \$24.97 by an unknown owner. In 1974, a party challenged the town's ownership of the parcel but the court ruled for the town. A Williams student, Chris Elkington created the Class of '98 trail in 1998 to connect the ledges of the Pine Cobble parcel to the Pine Cobble hiking trail (Cook et al, 1998).

Problems and Scoping

Pine Cobble, like Hunter, is an unused woodlot, and it has restricted access. Patch cutting or sustainable logging could be used on the old hickory forest. The Rural Lands Foundation owns the land on either side of the site, which makes access and trails problematic. The Appalachian trail runs along the ridge of Pine Cobble, so this site could be used for cabins or more trails, but then hikers would have to hike down and back up the mountain. Another option is to just let it be. Our clients are somewhat stumped by this piece of land.

Alternatives

Our options for the Pine Cobble Woodlot include logging, creating trails, and leaving the property as is.

Option one is logging. This option entails contracting with an area logging company to harvest the timber resources available on the Pine Cobble Woodlot. This would also necessitate a further survey of the resources available on the parcel, as there is no definitive tally as to what might be available. It is impossible to accurately assess the financial benefit of logging then until we know more accurately what resources are available. Following such a survey, if there are sufficient resources to make the initiative worthwhile, a Request for Proposal would have to be created soliciting a logging contractor. The town would then issue this RFP and bids would have to be taken. The Conservation Commission would then choose the best proposal. The benefits of this alternative include revenue for the town and, if done sustainably, improved health of the forest in the future. Costs include the very difficult and potentially expensive and destructive

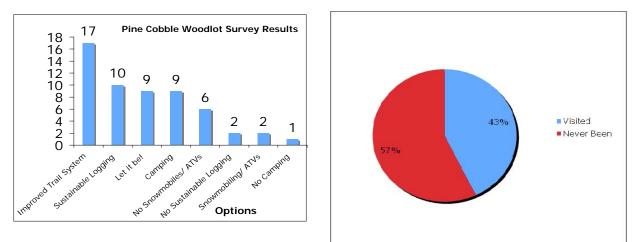
process of getting logging equipment to the timber resources. There is also the issue of protests from neighbors, as the property is surrounded by conservation land on one side, and a development full of homes for Williams College faculty and staff on the other. This option would additionally rule out any public recreation benefit.

Option two is Trails. This option entails restoring and expanding the class of '98 trail, or creating new trails within the parcel that connect to the surrounding conservation properties owned by Williamstown Rural Lands Foundation. Currently, the extent of existing trails is not great, and there is no clear access or parking other than the side of the road. The parcel is bordered on the north and west by other conservation lands, so there is the potential to link it with existing trail systems, including the Appalachian Trail. This alternative would come with the main benefit of improved public recreation. However, this option would necessitate providing better access to the land, which could prove costly. Additionally, it is questionable how much use this parcel would receive considering that it could not be accessed without a large detour from the Pine Cobble Trail on WRLF property, and it is quite a distance for AT hikers. Finally, there would be some cost involved in creating and maintaining the trails.

Option three is "Let it be." This option entails allowing the Pine Cobble Woodlot to remain unchanged. There would be no improvement projects undertaken and natural processes would be allowed to run their course. This option would bring the benefit of ensuring that there is protected conservation land in Williamstown, keeping to its rural character and maintaining the natural beauty of the town. There is also the environmental benefit of not disturbing the current ecosystems. This alternative would not incur any costs, except the opportunity cost of not implementing other measures. However, this seems to be outweighed by the financial costs of implementing other measures.

Survey Results

Forty-three percent of the Williamstown residents surveyed said they had visited the Pine Cobble Woodlot and 57% had never visited. However, we think that they may have confused the woodlot for the popular trail nearby rather than the actual woodlot. For Pine Cobble Woodlot, three options were considered: logging, trails, and letting it be. The survey results show that 17 people would be in favor of an improved trail system, 10 people would like sustainable logging, 9 people would like to see it left as it is, 9 people would like to use the land for camping, 6 people would not like snowmobiles/ ATV's, 2 people would not like sustainable logging, 2 people would not like snowmobiles/ ATV's, and one person was against camping (see graph below).



Interviews

For Pine Cobble, Drew Jones said he would have to go to the area to see if there are any unique or endangered species. If there are, he suggested letting the parcel remain as is. If there are no species of special interest, logging could be an option. He did not think that Williamstown needs another trail that does not get much use. Overall, for all parcels, Drew saw nothing wrong with leaving land the way it is now if the cost would outweigh the benefit. Hank Art, professor at Williams College and Conservation Commission committee member said there was no real scientific or scenic value and would perhaps be best left alone.

Evaluation Tool Results

For the Pine Cobble Woodlot, there are three main options. For logging benefits, we gave public recreation a score of 0 because the residents wouldn't recreate at a logging site. For revenue, we gave a 5 because the town would be able to earn a lot of money from logging. For costs, we gave maintenance a score of -5 because it would cost a lot to maintain a logging site without access. For implementation, we gave a score of -5 because to start logging, we would have to gain access, which would be extremely expensive. For environmental impacts, we gave a score of -3 because depending on which type of logging system used, it could be very detrimental to the environment, including complete habitat destruction.

For trail benefits, we gave public recreation a score of 2 because since Williamstown already has so many trails, another trail wouldn't be that great of an asset. For revenue, we gave a score of 0 because the town would not be making revenue from trails. For costs, we gave maintenance a score of -1 because it wouldn't cost that much to keep a trail clear. For implementation, we gave a score of -3 because the access issue would have to be resolved. For environmental impacts, we gave a score of -1 because a trail would have minimal impact on the environment.

For letting it be, all benefits and costs are 0.

Analysis of Alternatives

The evaluation tool results show that sustainable logging has an S score of -26.5, trails have an S score of -7, and letting it be has an S score of 0 (see above matrix). Our interviews revealed that sustainable logging is practically impossible due to the lack of any possible access

points. Our interviews also enforced the idea that more trails did not need to be forced upon Williamstown—there is no point in forcing a trail that no one would use. Our clients and other interviews suggest that there is nothing wrong with letting the property be for a few decades.

Recommendations

Our final recommendation for the Pine Cobble Woodlot is Option 3: Let it be. Using our evaluation tool, this is the only option that did not come out with a negative S score, meaning it is the only option whose costs do not outweigh the benefits. This is also corroborated through our public opinion surveys in which 9 participants wrote in the option "Let it be," indicating that citizens preferred to keep the parcels as it is. Finally, our interviews, particularly with Drew Jones, indicated that there was no obvious negative impact of letting the Pine Cobble Woodlot be, while other options could incur hefty costs.

Works Cited:

Appendix 1:

Williamstown Conservation Commission Land Management Plan Local Survey

Hello! We are Williams students working with the Conservation Commission collecting information to help create land management plans for four parcels of land. These management plans will allow the Conservation Commission to make these parcels better assets to you and the community.

Margaret Lindley Park:

Have you ever visited this site? If yes, how often and why.

In your opinion, could this land be used in a better way? (Y or N)

Improved trail system Skating Pond Outdoor education Bathrooms, changing rooms, running water Other

Given the above improvements, how often do you think you would use the land?

Hunter Property:

Have you ever visited this site? If yes, how often and why.

In your opinion, could this land be used in a better way? (Y or N)

- _____Improved trail system (connecting with nearby public lands)
- ____Camping
- _____ Sustainable logging
- _____ Snowmobiling/ ATVs

Other ____

Given the above improvements, how often do you think you would use the land?

Bridges Pond:

Have you ever visited this site? If yes, how often and why.

In your opinion, could this land be used in a better way? (Y or N)

 Public Access to the pond

 Cleaner water

 Recreation area including trails, picnic tables, fishing etc.

 Skating

 Outdoor education

 Research area

 Other

Given the above improvements, how often do you think you would use the land?

Pine Cobble Woodlot:

Have you ever visited this site? If yes, how often and why.

In your opinion, could this land be used in a better way? (Y or N)

Improved trail system, public access Camping Sustainable logging Snowmobiling/ ATVs Other

Given the above improvements, how often do you think you would use the land?

Appendix 2:

Costs and Benefits of Proposals for Each Property

KEY: v = weighted benefit, B = benefit, v*B= weighted benefit times benefit c = weighted cost, X = cost, -c*X = weighted cost times cost Scale for weighted values: 0 to 5. 0 = least important; 5 = most important Scale for benefits/costs: 5 to -5. Benefits have a positive value; costs have a negative value.

S Score = sum of weighted costs and benefits for each option. Positive scores indicate a higher benefit than cost; negative scores indicate a higher cost than benefit.

Margaret Lindley Park

		Running Water, Well		Changing Rooms		Skating Pond		Improved Trails	
Benefits	v	в	v*B	в	v*B	в	v*B	в	v*B
Public Recreation	5	4	20	3	15	5	25	3	15
Revenue	2.5	2	5	1	2.5	1.5	3.75	1	2.5
Costs	с	x	-c*X	x	-c*X	x	-c*X	X	-c*X
Maintenance	2	-2	-4	-2	-4	-3	-6	-1	-2
Implementation	4	-5	-20	-2.5	-10	-5	-20	-2	-8
Environmental impacts	3	-2	-6	-1	-3	-2	-6	-1	-3
	11111								
S Score			-5		0.5		-3.25		4.5

Bridges Pond

Buy Wyl		Buy Wylde	le Property Clean		Up Skati		Pond	Recrea	tion
Benefits	v	в	v*B	в	v*B	в	v*B	в	v*B
Public Recreation	5	5	25	4	20	5	25	4	20
Revenue	2.5	0	0	0	0	1.5	3.75	1	2.5
Costs	с	x	-c*X	X	-c*X	X	-c*X	X	-c*X
Maintenance	2	-1	-2	-3	-6	-3	-6	-1	-2
Implementation	4	-5	-20	-3	-12	-1	-4	-1	-4
Environmental impacts	3	-1	-3	-1	-3	-2	-6	-1	-3
S Score			0		-1		12.75		13.5

Pine Cobble Woodlot

	Logging		Trails		Let it be		
Benefits	v	B	v*B	В	v*B	B	v*B
Public Recreation	5	0	0	2	10	0	0
Revenue	2.5	5	12.5	0	0	0	0
						X/////////////////////////////////////	
Costs	c	x	-c*X	x	-c*X	X	-c*X
Maintenance	2	-5	-10	-1	-2	0	0
Implementation	4	-5	-20	-3	-12	0	0
Environmental impacts	3	-3	-9	-1	-3	0	0
S Score			-26.5		-7		0

Hunter Property

	Logging		Improved Tr	ails	Let it be		
Benefits	v	В	v*B	В	v*B	В	v*B
Public Recreation	5	0	0	3	15	0	0
Revenue	2.5	5	12.5	0	0	0	0
Costs	с	x	-c*X	x	-c*X	x	-c*X
Maintenance	-2	-2	-4	-1	-2	0	0
Implementation	-4	-3	-12	-2	-8	0	0
Environmental impacts	-3	-1	-3	-1	-3	0	0
S Score			-6.5		2		0