RETHINKING BURNET WOODS
BODIES - REST - MOTION

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Executive Summary

Burnet Woods embodies 90 acres of trees, water and grassland within the urban density of Cincinnati’s Clifton neighborhood. The Park Plan, *Bodies, Rest, Motion*, proposes a new systematic approach to Burnet Woods that incorporates design concepts, physical improvements and capital assets for the betterment of the Uptown Cincinnati ecosystem and Clifton Community. A calculated strategy towards water management, tree reforestation and social continuity is offered throughout the plan. The proposals come from a blend of socio-economic values and stakeholder values that produce a healthy, productive space.

Each of the proposals has been carefully designed to fit with the current character, function and purpose of the park. Tree reforestation strategies are creatively offered in the form of tree guilds that specifically address loss of canopy as well as the birth of productive systems. As the plan discusses, guilds will offer food provisioning and furthermore, the immediate creation of attractive park elements. The need to draw more people into the park has been a reoccurring theme among stakeholders and financial actors. The plan seeks to accomplish greater utility while ensuring the foundational needs of the park’s environmental functionality. To this purpose the plan will strengthen the park’s core by enhancing the trailside center, proposing a fish hatchery research center and out-door amphitheater.

For the capital improvements to be successful the park’s edges will need to be permeated and its barriers will need to be removed. Proposal for the MLK elevation resolves the fracture of Burnet Woods to the UC campus, increasing safety and free flow into the park. This also serves vital water management functions, delineated within the plan. Additionally intersections and pathways along the entirety of the park’s edges will ultimately increase utilization. The interior of the park cannot be utilized without the opening of the park’s edges.

Finally the plan proposes a loop for food trucks in Burnet Woods. The loop is considered a cost effective alternative to a restaurant that unquestionably prevents the endangerment of environmental assets. This is an example of the plan’s goal: to satisfy stakeholder interest in favor of the Clifton Community’s socio-economic health.
Introduction

Burnet Woods in Context

“Burnet Woods is an under-utilized gem in our parks system,” Cranley said in a statement. “It's nice now, but it could be great. I look at Washington Park for an example of what could happen in Clifton.”

– News-Record, April 3, 2014

With the declaration above, Cincinnati Mayor John Cranley brought renewed attention to Burnet Woods, a beloved but challenged park in the Uptown neighborhoods of the city. Its belovedness is born of the sense of a commons, a space set aside for the well-being of the urban inhabitants, a “people’s garden.” Its more recent challenges have come from institutional encroachment, primarily by the University of Cincinnati, paring away its acres, and from declining use for fear of crime.

Figure 1. Postcard of Burnet Woods Lake (no date established)

http://enquirer.com/editions/2002/05/11/tem_parksbring_power_to.html

Inspiration for the park has origins similar to many of the immigrants who settled here. By the beginning of the 20th, “Volksgartens”, urban lands set aside for the public good, were common place in German cities. By 1850, interests in this practice grew in Cincinnati, and it was soon realized that the city’s two urban parks – Washington and Lincoln – were insufficient for the needs of the rapidly growing immigrant population. Adolf Strauch, a landscape architect who had designed parks for many European capitals, was hired to
design Spring Grove Cemetery and was later appointed as the first Cincinnati park superintendent in 1872. Mr. Strauch embraced the concept that landscapes carry the power to inspire, rejuvenate, and positively affect lives, and, to address the overcrowded and poor conditions of Over-the-Rhine, he oversaw the purchase of more lands, including Burnet Woods (St. Claire 2002), named after the prominent Cincinnati lawyer Jacob Burnet.

However, the increasing number of public spaces was not welcomed by everyone. Not wanting the residents of Over-the-Rhine in their neighborhood, wealthy residents of Clifton launched a campaign that led to the city park board being abolished in 1875, and the land that had been designated for park expansion and connectivity was sold for development, fragmenting the original plan with roads and privatized properties. The University of Cincinnati received half of Burnet Woods (Figure 2), more than half of Lincoln Park was used for construction of the Union Terminal, and Washing Park was considerably whittled down in size. (St. Claire 2002)

![Figure 2. Insurance Map Surrounding Burnet Woods, 1904-1930](http://virtuallibrary.cincinnatilibrary.org/virtuallibrary/vl_maps.aspx?ResID=675)

It was not until the end of the century that the park board was reinstated, and while there was an initial vigor, such as with the ambitious Kessler plan (Figure 3) of 1907 (Park Commission of Cincinnati 1907), and periodical attempts through the years to reestablish natural and human connectivity through these public lands, pressures for their economic development have been steady.

“Shall Burnet Woods be a University or a Park?” This question was asked by Irwin Krohn, Cincinnati Park Director in 1945, before the first major proposal for the development of Burnet Woods (Stradling 2014). After several post-war edge acquisitions of the Woods, the inquiry was just as pressing then as it is now. The original 170 acres has been whittled down to just under 90, much of it by the University of Cincinnati. But other institutions have been pressing at the boundaries. Good Sam Hospital is to the west, Cincinnati Children’s Hospital and the Environmental Protection Agency to its east, and UC’s College of
Design, Art, Architecture and Planning (DAAP) sits to the south, in space that had been part of the Burnet Woods (Figure 4).

Three earlier proposals have called for a restaurant to be placed inside the park, and, so strongly does it feel about preserving the character of the Woods, each plan was blocked by the Clifton Community (Stradling 2014). The most current Park Plan, yet again, proposes the placement of a restaurant in the park (Figure 5), this time at the Clifton edge across from the Good Samaritan Hospital (Human Nature 2007). The discussion has Clifton residents nervous, fearful that the character of the Woods, of which they have
developed a great affinity, will be irrevocably altered, transformed into a commercial enterprise rather than a space for rejuvenation and respite from the strains of urban life.

Figure 5. 2007 Burnet Woods Park Proposal


In the context of this struggle over place making, we suggest a new conceptualization of Burnet Woods, one that invites use and enjoyment, one that retains – and repairs – its wooded character, and one that tempers and better purposes our rainfall.
Vision

Bodies - Rest - Motion

Bodies
Water, wind, humans, life, nutrients, sunlight – correcting, enhancing, improving, and employing their respective actions

Rest
Giving pause to excess stormwater, nourishing growth, provisioning life, cultivating community, lingering for education and recreation

Motion
Directing flow, streamlining movement, and beckoning entrance and exploration

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Project Values

- We value healthy and vibrant social and ecological systems
- We value humanity’s innovative and creative potential
- We value the power of place and its capacity to positively affect our health, creativity, and purpose
- We value green spaces as social connectors
- We value the ecology of water and its effect on human health and psyche

Vision

To reimagine Burnet Woods as a natural tool to create a broader socioecological system.

Burnet Woods will be an open space center of Uptown, providing public social connectivity, opportunities for life enhancement through education and healthy activity, and ecosystem services in terms of provisioning (yield), regulating (storm water), cultural (programs), and supportive (nutrient cycling) functions utilizing natural processes.

Goals and Objectives

Drawing from the law of inertia, we consider the bodies in motion or at rest and present opportunities to correct, enhance, or improve their respective actions (Figure 6).
Water

Rainwater would naturally move from the UC campus directly into Burnet Woods. However, much of this water is redirected into the Cincinnati sewer system, which lends to serious problems for its Combined Sewer Overflow (CSO).

Our proposal is to allow the storm water from campus to follow its natural path into Burnet Woods where it will be met with a series of structural mechanisms to slow down the flow, allowing for infiltration, catching in ponds for recreation and sustaining an aquatic
Bodies - Rest - Motion

ecosystem, and supplying plentiful water for new tree growth to replace the diminishing forest canopy.

Woods

Likewise, the woods, composed of mostly stationary elements, nonetheless are conduits for motion. Trees, and all plants, miraculously convert solar energy into chemical energy, providing food for the rest of life on earth. They take in carbon and release oxygen. They pull up water and transpire it into the atmosphere. They provide habitat and sustenance for wildlife.

We propose the establishment of tree guilds, both to replace declining ash trees that cannot be salvaged in an overall reforestation process. The tree guilds ensure that the woods will remain an ecological asset long into the future. The immediate purpose of the guilds relate to food provisioning, way-finding and water management. The purpose being to slow down and catch more storm water, to sequester more carbon and filter the air, and to provide more sustenance, for humans as well as wildlife.

Guilds are a collection of plants whose proximity to each other is symbiotic and mutually nurturing, lending toward a maintenance-free system. The tree guilds we suggest, because of their ability to reintroduce a vanished species, succeed in the given climate, and also yield fruits and nuts. The types of guilds include chestnuts, oak, walnuts, hazelnut, paw-paw, apple, pear, persimmon, and serviceberry.

Well Beings

For its design, implementation, and, most importantly, its enjoyment and utilization, people are an essential element to this system. We offer a design that will soften the edges of the park, remove its barriers from surrounding urban spaces and draw in the public, offering reasons to pause, enjoy, and rejuvenate.

Our design includes a partial elevation of Martin Luther King Drive, blending the UC campus with Burnet Woods, allowing for the unthreatened and unhindered passage of foot and bike traffic between the two as well as the free flow of water.

We propose that the Trailside Nature Center became a stronger center of activity, including education, recreation, and community based programming. Our design includes 1) an amphitheater, 2) a “Nut Hut”, for hulling, shelling, and roasting foraged tree nuts, and 3) a fish hatchery research center, for stocking the ponds and educating the public.

We also propose a slight redesign of the Fountain Plaza at the intersection of Clifton and Ludlow. This would open up the entry way and invite pedestrian traffic into the park. Currently, that portal descends into a dark and reportedly intimidating basin. In our plan, that area is to become a catchment pond to retain excess storm water. An elevated walkway around the periphery of that pond will beckon people along its pathway, offering a viewing platform for the aquatic system below as well as a secure route into the interior of the park.
Ecosystem Services

From a more utilitarian perspective, Burnet Woods offers multiple amenities. The Millennium Ecosystem Assessment (UNEP 2005) defines ecosystem services as the benefits that humans derive from ecosystems, and they organize such services along the following functions:

- **Provisioning** refers to the products that can be obtained, which include food, fiber, fuel, fresh water, genetic resources, and biochemical.

- **Regulating** refers to the regulatory processes that ecosystems provide, including water purification, pollination, erosion control, and regulation of the climate, disease, and water flow.

- **Cultural** refers to the non-material benefits which may be derived, including recreation, spiritual, aesthetic, cultural heritage, educational, and sense of place.

- **Supporting** services are those needed for the healthy function of other ecosystem services, and they include soil formation, nutrient cycling, and primary production through photosynthesis.

Burnet Woods is a terrific space for employing the above services, and our suggested applications would yield sustenance for body, mind, and soul (Figure 7).

Stakeholder Participation

The proposed plan requires a philosophic shift that calls for stakeholders to lessen private expectations in favor of the public interest. The success of community development is measured by the use and utilization of the park by Clifton and Cincinnati residents. Therefore the plan considers park users the primary stakeholder. Stakeholder ideology, formed in the financial stage will have to be overcome by the moral compulsion for public welfare, vested in the fact that Burnet Woods is a public park.

The stakeholder bridge (Figure 8) was developed from meetings with stakeholders, background research, and public accounts. This conceptualization of stakeholder interest was primarily formed by the interpretation of the 2007 Burnet Woods Park Plan. Though not exhaustive, research was contributory to a thoughtful and credible source of understanding park interests as they relate to stakeholders.  

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1 The studio class in which the plan was formulated was visited by three stakeholders directly involved in the park plan implementation: Beth Robinson (Uptown Consortium President) Marry Beth McGrew (UC Architect) and David Stradling (Historian). Furthermore, the student planning group met with Steve Shuckman (Park Board Senior Planner) and David Jenke (President of Cincinnati Zoo).
The design of the stakeholder bridge is to fill the gap between private and public interests and to elucidate how they respectively engage with this space. The left side of the diagram displays an ideology of private interests while the right side shows an ideological shift towards public welfare, as was the original intent for Burnet Woods and the Cincinnati park system. This oscillation is essential to the proposed plan.

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**Figure 7. Project-Based Ecosystem Services**

<table>
<thead>
<tr>
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<th>Regulating Services</th>
<th>Cultural Services</th>
<th>Supporting Services</th>
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<tr>
<td><strong>Products that can be obtained</strong></td>
<td><strong>Regulatory processes of ecosystems</strong></td>
<td><strong>Non-material benefits which may be derived</strong></td>
<td><strong>Needed for the healthy function of other ecosystem services</strong></td>
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<td>Recreation</td>
<td>Soil Formation</td>
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<td>Pollination</td>
<td>Spiritual</td>
<td>Nutrient Cycling</td>
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<td>Genetic Resources</td>
<td>Erosion Control</td>
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<td>Biochemical, Natural Medicines</td>
<td>Regulation of climate, disease, and water flow</td>
<td>Cultural Heritage</td>
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<tr>
<td>Ornamental Resources</td>
<td></td>
<td>Educational</td>
<td></td>
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<tr>
<td>Fresh Water</td>
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**Project Ideas**

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<td>Food - Fruits and nuts</td>
<td>Water Flow Regulation</td>
<td>Education - Species</td>
<td>Soil Formation</td>
</tr>
<tr>
<td>- Nuts: Chestnut, Apple, Oak</td>
<td></td>
<td>Water Purification</td>
<td>Identification</td>
<td>Nutrient Cycling</td>
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<tr>
<td>- Fruits: Walnut, Pawpaw, Hazelnut, Persimmon</td>
<td></td>
<td>Climate Regulation</td>
<td>Recreation</td>
<td>Primary Production</td>
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<tr>
<td>- Elms</td>
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<td>Erosion Control</td>
<td>- Foraging</td>
<td>- Photosynthesis</td>
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<td>Pollination</td>
<td>Cultural Heritage</td>
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<td></td>
<td>- Species</td>
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<td>Restoration</td>
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| | | - Passage of water to catchment basin | |%

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<td>Public Inclusivity in park</td>
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In the diagram above, stakeholders have been broken down into primary, secondary and tertiary categories: financier, steward, and user. The dark purple block represents the financiers, making up the outer portions of the diagram. Light purple represents the stewards and light blue represents the users. In areas where the purple block stands alone, the pure interests of the stakeholder are represented, as is the case with the light purple and blue blocks.

When colors begin to blend, the combination of stakeholder interest and influence is prescribed. Word descriptions accompany each cross section between blocks, where colors begin to overlay. For example, when the dark purple and light purple colors are overlaid, the word description is “restaurant.” This means that the compounded interests of the financier and steward result in the development of a restaurant or a project with similar characteristics. The “restaurant” description comes from the 2007 park plan, however, the terms used in the diagram are examples and act hypothetically.

Spatial distinction is also a source of information in this diagram. The distance between the private and public brackets represents how far each stakeholder group is from making an ideological shift. The financiers show the greatest “bridge distance,” as this...
group is most greatly thinking in the private mindset. The gap is smaller for the steward group because they are not making investments in the park, however this group seeks to gain from the park. The sole interest of the user group is to better utilize and enjoy the park and so this stakeholder group has the smallest private public gap. The plan is designed for the user so this group should be considered the prioritized stakeholder group.

The green bridge lines show a transformation of consumptive thinking into productive thinking. “Sustainability”, “community”, “participation” and “preservation” are value products of the plan. The bridge lines encourage financiers to develop a productive space that works in the public interest. Steward stakeholders are called to action, to manage and to maintain the park with respect to its current uses and those outlined within the park plan. Users are invited to participate in park activities and to enjoy its amenities. Designing better functionality will facilitate an increased patronage and a higher quality of user interaction. This will strengthen park perception and increase park safety. Burnet Woods will be a productive space that promotes health, ecological vibrancy, and social exploration.

Rather than a restaurant, which is, literally, defined as a consumptive space, we suggest a different capital project, the Fish Hatchery Research Center. This establishment fits with the character of the park and directly supports one of the recreational, and provisioning, opportunities in the park – fishing. An amphitheater and purpose enhanced trailside center will coincide with the Hatchery to make this part of a central activity hub.

The status change of stakeholders (Figure 9) delineates the financiers, stewards and users. Uptown Consortium, the City of Cincinnati, the Metropolitan Sewer District (MSD), the University of Cincinnati, Cincinnati Children’s Hospital, the Cincinnati Zoo, and the Environmental Protection Agency (EPA) make up the financiers.

Stakeholders are capable of serving two functions, such as the Cincinnati Zoo, which is a financier but also a very important steward. The Cincinnati Zoo is specifically placed between the financiers and the stewards. Generally, the ordering of stakeholder icons represents which stakeholders have a greater purpose as financier, steward or user. The Park Board should not be associated with financing.

The Zoo, the EPA, the Park Board, The Greater Cincinnati Community Development Corporation (CDC), Taking Root, AmeriCorps, Clifton Library, and Clifton Market are the most prevalent stewards. The user group includes, but is not limited to, the Clifton Cultural Arts Center (CCAC), University of Cincinnati Student Body, Cincinnati Public Schools, and Hughes High School. The president of the Clifton Community Council should be the first person to whom the plan is presented as this would better ensure successful implementation. Support of the Clifton Community, as well as other neighborhoods, will ensure plan ownership and contribute to future volunteer initiatives.
Figure 9. Stakeholder Status Change

The bar on the left (B) of the chart above shows stakeholder relevance, influence and function, as has been assessed. The right bar (A) shows the projected strength of the stakeholder as affected by the proposed plan. Uptown Consortium will remain relatively the same but concede influence and engagement to other stakeholders who will see their status grow. City Government/ MSD will see a slight elevation in status, as the plan will seek funding and involvement from this group. The University of Cincinnati will have a similar status, but its influence will lessen in favor of engagement. Financing in exchange for purpose will bring up the status of Cincinnati Children’s hospital. The Cincinnati Zoo peaks the diagram as the plan will seek funding but, more importantly, a management role from the Zoo. The hatchery and reforestation efforts make the Zoo one of the most important stakeholders. Taking Root and AmeriCorps will grow significantly in regards to relevance and engagement. These organizations are already partnering with the Zoo, and the combination of the three will make plan implementation and continuance a success.

Patronage will be guided and promoted by the Clifton Library, which will have a new location just north of the Jefferson edge of the park. The future Clifton Market, like the library, is seen as having great representation of the Clifton community. Community members are frequenting the existing library on Ludlow and organizing community
events. This community energy can be channeled into park programming and will serve as a crucial asset to event planning in the future Burnet Woods. The library also serves as an important information hub where park users will be able to learn about tree guild harvesting, reforestation, and programming at the proposed trailside center, fish hatchery, and amphitheater. The Clifton Market can also distribute this information, but more crucial to its purpose is mobilization. Shares that have been bought in this community owned store demonstrate the power of the market manifested in community organizing. Public support for our plan can also be won through the Clifton Market.

With the suggested capital improvements and programs, we anticipate a dramatic increase in patronage. The Clifton Cultural Arts Center will be able to utilize the amphitheater for park events, also encouraging dynamic trail oriented programs. The UC student body will have new purposes for using the park, including but not limited to fruit and nut picking, research, and community service. These purposes also give Cincinnati Public Schools a greater ability to utilize the park for educational initiatives. Hamilton County currently uses Burnet Woods for ecological tours, which will be greatly enhanced by the Hatchery Research Center. As well, the existing Zoo job-training program offered by Hughes High School will be strengthened.

Implementation of our proposed plan requires recognition of stakeholder roles. The chart below (Figure 10) shows which specific stakeholders will fund, program, manage, and maintain plan projects. Icons vary in size according to how much each stakeholder will contribute with each specific function. Stakeholders may serve several functions on project proposals, varying by relevance. Funding may come from grants sought through stakeholder networks or other sources.

Tree Canopy Repair
The tree canopy repair enlists the Cincinnati MSD and the Cincinnati Zoo for funding networks. The Park Board is not being asked for funding, however, a small funding icon is listed if funding becomes available through the park board. The University of Cincinnati will be asked for direct funding, as canopy repair will have a resounding impact on the campus, especially in regards to removal of the MLK barrier. UC will also have new educational opportunities based on the canopy repair and other project initiatives. For this reason, a funding icon is also included for UC, along with Cincinnati Children’s hospital and Cincinnati Public Schools.

Maintenance and management of canopy repair will be most important. A reliable, cost-effective source of labor comes from the AmeriCorps program. A capacity AmeriCorps member such as an AmeriCorps Vista member can be positioned at the trailside center to manage volunteer groups as well as direct service AmeriCorps members such as AmeriCorps NCCC teams that provide seasonal labor.² The Cincinnati Zoo currently

² AmeriCorps Vista members are contracted to work with a variety of public organizations that work on education and environmental initiatives. Vista members are paid by the government at no monetary expense to the participating public agency. AmeriCorps NCCC members come in teams of 10 and only require the site to provide housing.

manages two AmeriCorps capacity members and could oversee member placement at the Trailside Center. The Zoo could also manage the efforts of Taking Root, a non-profit organization dedicated to re-forestation. Like AmeriCorps, Taking Root is also currently working with the Cincinnati Zoo.

Figure 10. Plan Implementation by Stakeholder

Tree Guilds
Management and Maintenance of the tree guild initiative works in the same capacity to the canopy repair initiative. Funding and programming is also sought in a similar fashion. However, tree guilds will require less funding and more precise expertise in environmental management tactics. Therefore, Taking Root and the Cincinnati Zoo are the most important stakeholders for this initiative. Like the canopy repair, the Environmental Protection Agency should be called into action in regards to finance networking. The EPA should be a vital asset to the attainment of grants.

Containment Ponds and Boardwalk
Containment Ponds will need funding from stakeholders previously mentioned as well as stakeholders not directly invested in environmental practices. For instance, the Uptown Consortium is asked for funding under this initiative. This request is justified by uptown's
connection to the environmental health of the region. However, funding from the Uptown Consortium will primarily be sought for initiatives in which the uptown constituency directly benefits.

The University of Cincinnati will be extremely important to the engineering and management needs of the containment ponds. Specifically the biology department can design, implement, and monitor these containment ponds. Cincinnati MSD, taking root, and the Cincinnati Zoo can also play maintenance and management roles. Education stakeholders as well as the Clifton Cultural Arts Center will find containment ponds useful for programming. Users will also benefit from an enhanced social experience.

The ponds serve an environmental function but also provide a resounding aesthetic quality. An elevated boardwalk along the periphery of the north catchment pond is included in the plan, and this will improve access as well as offer opportunity for viewing and recreation.

**Fish Hatchery**
The Zoo and the University of Cincinnati will gain a significant programming asset by the Hatchery, and thus they are sought out for funding. Cincinnati Children’s Hospital will gain use, educational opportunity, and a gateway to the park. Management of the Hatchery will be held primarily by the Park Board, although technical duties will be designated to the Cincinnati Zoo and its partners. The UC student body, as well as Cincinnati Public Schools, can have a significant role in the creation of new education programs. In this sense, the Hatchery also functions as a research center and education site. The Hatchery will be a new asset for the Hughes High School/Cincinnati Zoo job-training program.

**MLK Elevation**
This initiative will require the most funding and create the greatest change in regards to the structure of the street network and surrounding areas of the park and University of Cincinnati. For this reason, the plan proposes that this initiative be sought long term. The elevation will open the park up to the University, removing the barrier of vehicular traffic, and integrating the park and the University. Funding will be sought by all financial stakeholders.

**Amphitheater**
The amphitheater will seek funding from the Uptown Consortium, UC, Cincinnati Children’s and the Cincinnati Zoo. These groups will directly benefit from having a venue for future programming or event planning.
Project Proposals

Water

In late 2003, the Metropolitan Sewer District (MSD) of Greater Cincinnati received a consent decree to remediate its combined sewer overflows (CSO) and sanitary sewer overflows (SSO) in order to be in compliance with the national Clean Water Act. With the aim of reducing the quantity of discharge, the MSD presented the Final Wet Weather Improvement Program (WWIP), which was approved in 2010 (MSD 2012).

Several large-scale projects to mitigate and redirect stormwater runoff have been unveiled to the public (Project Groundwork 2010), and work will soon begin. Burnet Woods provides a wonderful opportunity to assist in this effort. Located just to the north, and downhill, of the University of Cincinnati, the Woods is a natural recipient of the rainwater runoff that highly developed and largely impermeable campus. With an area greater than 1.48 million square feet, nearly 70% of that surface is impervious, lending to, with an average annual rainfall of 42 inches, almost 39 million gallons of storm water being sent yearly into an overtaxed CSO system. With just a 1 inch rainfall, nearly a million gallons is allowed into that system (Figure 11).

Figure 11. Surface Hydrology of the UC Campus

[Image: http://www.uc.edu/content/dam/uc/af/pdc/campus_heritage_plan/Campus%20Heritage%20Plan%2813mb%29.pdf]
Rather than allowing that water to flow into the CSO system, where it adds to pollution problems and requires money and energy to clean, we suggest capturing that water and putting it to good use. This would entail closing off many of the sewer intakes on campus, constructing cisterns that could be tapped for horticultural grounds keeping, and directing, through swales and shallow channels, surface water underneath an elevated Martin Luther King Drive, which would allow for free flow of water as well as pedestrians and bikers while vehicular traffic continues uninterrupted overhead. Within Burnet Woods, the water would be slowed through a series of catchment ponds, strategically placed swales and berms, and an increased quantity of deep-rooting plants to increase infiltration (Figure 12).

Figure 12. Proposed Water Flow from UC into Burnet Woods

After entry into Burnet Woods, water would continue to flow northward into a series of small lakes, overflowing from one into the other (Figure 13) and, for any excess, into a rain garden just west of Clifton Avenue (Figure 14), although this is likely to occur only under an extreme rainfall event.
To facilitate a healthy and vibrant aquatic ecosystem, we also propose the addition of a Fish Hatchery Research Center to the existing Trailside Nature Center, which is located in the park’s center (Figure 15). In addition to keeping the lakes well stocked with a variety of fish, it will monitor the health of the aquatic ecosystems and the quality of the water and it will offer educational programs to school groups as well as the public.
Woods

The very element that gives Burnet Woods charm, its forest canopy, is under attack. The emerald ash borer has cut a “swath of destruction” across the Midwest, already destroying more than a fifth of the ash trees in Cincinnati’s parks (Cincinnati.com 2011). While researchers are seeking a biological ally to stem the tide of this pest, the rate of ash tree deaths has accelerated and efforts, such as the Taking Root campaign (Taking Root 2014), are underway to replace the lost canopy.

We can help. As the canopy opens up, we propose replacing lost trees with a series of select tree guilds, preferably to be established on a hugelkultur swale and berm construction (Figure 16). Built along contour lines, the swales and berm will slow down and capture surface water. The berms, built downhill of the swale with soil placed atop downed limbs and timber, will add organic matter and carbon to the soil, which will act as a sponge and will absorb the water. The decomposing wood will add nutrients to the soil, feeding a collection of symbiotic plants, a guild that will yield a harvestable product. Each of the guild-member plants serves a function in the system, whether than be nitrogen fixing, mulch provision, bioaccumulation of trace minerals to feed neighbors, attracting pollinators, or delivering fruit. In addition to providing sustenance, this system will be nearly maintenance-free, and it will grander services, such as carbon sequestration, release of oxygen, absorption of water, transpiration of water vapor, and capture of nitrogen and placing it into the soil.

In addition to replacing fallen trees with this type of system, we suggest the placement of such guilds in existing fields and meadows. These will serve the same functions already mentioned; they will just add to the total amount provided. The guilds we recommend are as follows. For repair of the existing canopy, we suggest the following

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Figure 16. Operational Diagram of a Hugelkultur Tree Guild

nut tree guilds: chestnut, walnut, oak, and hazelnut. For the open spaces, we propose the following fruit tree guilds: apple, pear, persimmon, and paw-paw. We also recommend, for water catchment in persistently damp areas, a wet meadow guild, for edible way finding, bramble patches, and, for programing and aesthetic purpose, a three sisters garden, which is comprised of corn, beans, and squash, all assisting the other (Figures 17 and 18).

Figure 17. Tree Guild and Garden Placements

Figure 18. Tree Guilds, Brambles, and Three Sisters
Well Beings

Centrally located amongst the Uptown neighborhoods, Burnet Woods offers space for reflection, rejuvenation, education, and socializing. Our plan increases the openness of the park, beckons the public in, and gives people a reason to pause, enjoy, learn, and participate.

By eliminating the dangers of traffic and reducing the concerns of crime, we address the physical and perspective barriers to entry. Our intention is to create porosity in the woods and blur the restricted edges for Well Being by providing attractive design elements and appropriate activities.

Martin Luther King Drive

This road, which runs just to the south of Burnet Woods and which separates the park from the UC campus, serves as a main thoroughfare into and across the Uptown neighborhoods, the second largest area of employment for the city. Traffic projections indicate that vehicular traffic along this route will increase, and crossing it by foot or bike is more than annoying, it’s downright dangerous. We addressing this issue with two design proposals.

Our most ambitious suggestion is to elevate Martin Luther King Drive (MLK) were it intersects with Woodside Drive (Figure 19). There is a natural valley that runs south to north underneath this proposed elevation, and auto traffic on MLK, with the elimination of a traffic signal, could proceed in a less impeded fashion. Underneath this busy artery, pedestrians, bikers, and water could flow without hindrance, and the greenery of the park could extend southward into campus (Figure 20). Access to campus would be moved eastward from Woodside Drive to Campus Green Drive, where a traffic signal already exists.

Our other suggestion to alleviating the imposition of crossing MLK is to redesign the cross walks as it intersects with Clifton Ave. This design incorporates a large sidewalk, safe crossings, proper signage design, and better accessibility with decorative landscape. The existing flat topography in this area of Burnet woods allows for a plaza designed with natural landscape elements with some tree guilds, the Three Sister’s Garden, and area for resting (Figure 21).

Burnet Woods Entrance from Bishop Street

This entrance is well connected with the neighborhood but is difficult to locate it. There are no leading elements for access, but the space creates a surprising journey toward the existing lake. In consideration of this nature, we proposal an attractive entrance and community space to create proper visual connectivity and physical access with organized landscape and some gathering area. The whole design will create a discernable entrance and an interactive space for the community (Figure 22).
North Entrance at Jefferson and Brookline Avenue

With less pedestrian activity and a moderate traffic pattern, this area offers a peaceful nature, a sense of solitude, and potential for a quiet reading space as well gathering spot for a small group of friends (Figure 23). Our design proposal incorporates informal sitting areas with natural landscape as one gazes or ventures along Brookline further into the park (Figure 24). This space can be used as an outside extension for the library located on the north side of Jefferson Avenue.
Figure 20. Ground View of MLK Elevation


Figure 21. Clifton-MLK Plaza

Ludlow and Clifton

The existing plaza at the intersection of Ludlow and Clifton Avenue boasts an attractive fountain and a welcoming portal. The difficulty with this as an entry into the park is that the trail quickly descends into an uninviting basin, one that we propose serve as a stormwater catchment pond.

Our design includes an elevated boardwalk around the periphery of this pond, one that will welcome the visitor, providing access and a viewing platform (Figure 25).
As the water level in this pond is likely to fluctuate through the seasons, we propose a series of stepping stones within the pond. As the water level descends, these stones will become visible and will then allow for passage to either side of the pond (Figure 26).

We consider the Trailside Nature Center to be the focal point of activity coordination for Burnet Woods. Currently, the surrounding area of the center is underutilized and restrictive. To address the lack of spatial integration and degree of isolation, we propose several additions. First is the construction of an amphitheater on the hillside across from the Center’s entrance (Figure 27). This will provide comfortable and ready seating for performances and lectures.

As mentioned earlier, we also propose the construction of a Fish Hatchery Research Center to keep the lakes stocked with fish, to monitor the quality of the water, and to offer educational lectures on the aquatic ecosystems.

Lastly, we encourage the construction of a “nut hut,” a place where people may bring their goods foraged from the nut trees mentioned earlier, hull and crack them, and then roast them.

We would also suggest that a cider press be included in this facility so that the fruits (apples and pears) could be gathered and pressed.

We see both of these options, as well as gatherings from the Three Sisters Garden, integrated with an autumn Harvest Festival, which would be coordinated from the Center.

Conclusion

The plan proposal has been offered in great consideration of community need, stakeholder viability and implementation providence. Plan elements can be viewed in the long term, such as the MLK elevation as well as within short-term immediate impact, tree guilds and green design. Altogether the plan offers an opportunity that for the sustainability of a healthy Clifton as well as broader Uptown Community. Plan proposals do not conflict with the 2007 Park Plan but enhance it with a broader vision. When stakeholders can work together towards this vision, the preservation of the Park is ensured, and a vibrant Uptown is created. Most importantly, the users of the park can take an even greater ownership of their most valuable asset: Burnet Woods.

Figure 28. Master Plan
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