GROWING WILLIAMS FARM:

A STRATEGIC VISION FOR A COMMUNITY AGRICULTURE PROJECT IN ATHENS, GEORGIA

by

JACK MATTHEWS

(Under the Direction of Dr. Rosanna Rivero)

ABSTRACT

The intentions of this practicum are to provide guidance through long-term vision and programmatic exploration of functions and development to better facilitate the management of the Williams Farm, as directed by the Athens Land Trust. This strategic vision will present a range of research, opportunities, challenges, and recommendations that can be utilized for programmatic development and holistic management, as well as for a larger exchange with the community to ultimately further the connection with local food production and open space in Athens, Georgia.

INDEX WORDS: Agriculture, Conservation, Athens, Management, Experiential Education

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BA, University of Colorado, 2006

A Practicum Submitted to the Graduate Faculty of the University of Georgia in Partial Fulfillment of the Requirements for the Degree

MASTER OF ENVIRONMENTAL PLANNING & DESIGN

ATHENS, GEORGIA

2014

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DEDICATION

To my family.

ACKNOWLEDGEMENTS

I would like to acknowledge Dr. Rosanna Rivero for her continued guidance through this process, as well as everyone on my committee their support and valuable input. I would also like to acknowledge the staff and board members of the Athens Land Trust for always allowing me to participate and learn alongside the organization.

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"The soil is the great connector of lives, the source and destination of all. It is the healer and restorer and resurrector, by which disease passes into health, age into youth, death into life. Without proper care for it we can have no community, because without proper care for it we can have no life."

-Wendell Berry

Executive Summary

Such is the current trend in many food communities across the country, the local food movement in Athens, GA has seen an emergence in popularity over the past decade. The local Athens community has been receptive and supportive, but also faces many social and economic challenges. As this plan advocates, community connections and education are two important cornerstones in continuing the trend in supporting food production and distribution. The Athens Land Trust has already worked hard to achieve many accomplishments in fostering local food systems in the area. "In November 2010, the Athens Land Trust was one of just 27 organizations throughout the country selected to receive a grant as part of the National Institute of Food and Agriculture (NIFA) Community Food Projects program, which funds projects that build community food systems and fight hunger and food insecurity."[1]

The capstone of their work in community agriculture will be the redevelopment of a 5 acre historic homestead into an active hub of food-based education and production just over a mile away from the heart of downtown Athens. (Figure 1) The Williams Farm has the potential to embody a community landmark through strategic programming, event planning, and public engagement.

[1] "Community Agriculture." *Athens Land Trust*. N.p., n.d. Web. 22 January 2014. <http://www.athenslandtrust.org/>.

On site will be a production and education farm, a historic farmhouse, a connection point to the county-owned, 5 Acre Woods, event space, and more. The renovation of Williams Farm will ultimately serve to benefit the Athens area community through a model project centered on local food-systems to connect people to agricultural production, educational opportunities, environmental stewardship, and communal involvement. This practicum will focus on a brief site analysis and interpretation, followed by the development of programmatic and management recommendations that will help guide the Athens Land Trust in the development of Williams Farm.

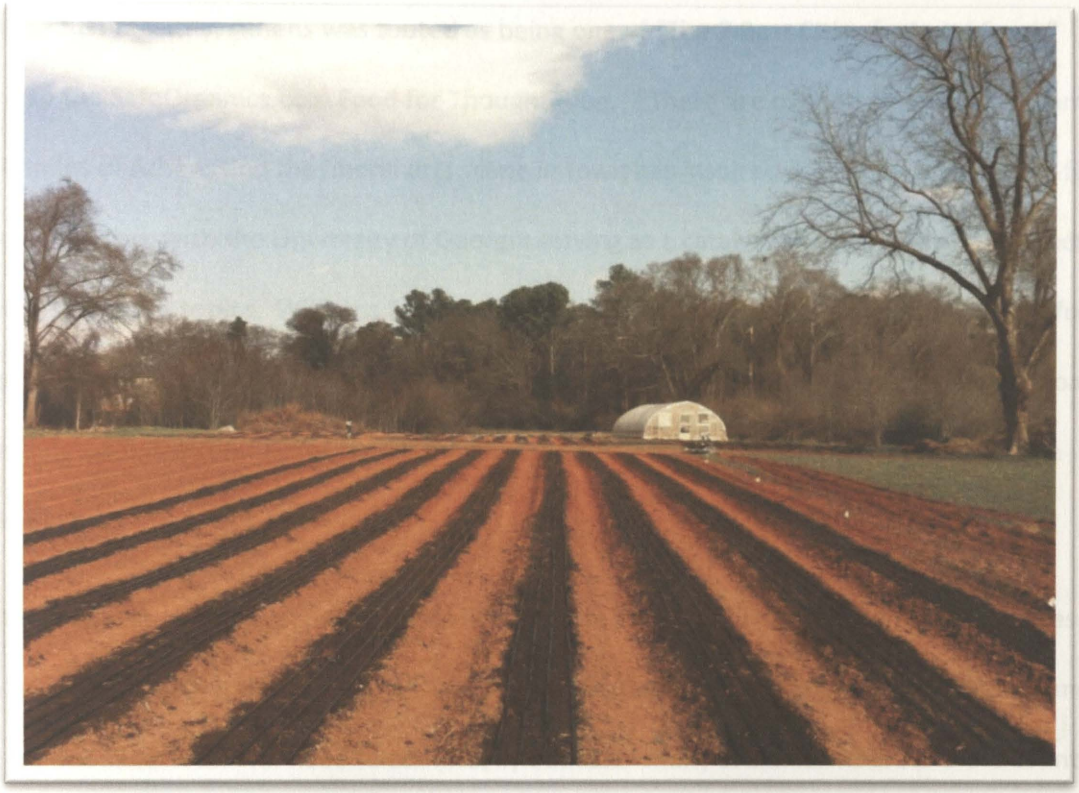

Figure 1: Williams Farm in March. Photo by Jack Matthews

Opportunities and Challenges

A connection has been lost in our current Global food system. Most people have a hard time visualizing where exactly their food was grown, harvested, or distributed. Food is simply on a shelf in store. However, there is a growing movement towards better understanding that lost connection with food and appreciating the process behind what you are eating. As the poet and writer Wendell Berry has now famously stated, "Eating is an agricultural act."[2]

Athens, Georgia is a community that has a developing reputation for embracing the local food movement. Just recently, Athens was touted as being one of "The 7 Best Cities for Local Food," according to the SafeOrganics.com Food for Thought Blog. "There are over 30 chemical-free farms within 50 miles of Athens and the liberal arts scene in town has inspired dozens of new organic-friendly restaurants."[3] Also, with the University of Georgia serving as a catalyst, food sovereignty and advocacy have also become hot topics. Williams Farm will serve to fill multiple roles as a model for local food system promotion through production, education, and sustainability. With these core tenants based as a foundation, the opportunities for successful implementation and management are great. (See Appendix B)

With opportunities abounding, the Williams Farm project will also faces many challenges. Financial viability will be one of the biggest hurdles in programmatic development and management that the Athens Land Trust will need to continually address. Many urban farms around the country have failed due to financial stress.[4] Improper planning and execution of a business plan will lead to troubling

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[2] Berry, Wendell. "The pleasures of eating." *Cooking, eating, thinking: Transformative philosophies of food* (1992): 374-379.

[3] SafeOrganics Blog. "The 7 Best Cities for Organic Food." *Safe Organics Food for Thought*. Safe Organics Online Store, 29 Nov. 2013. 12 January, 2014. < http://blog.safeorganics.com/>

[4] U.S. Environmental Protection Agency. (2011). Urban Farm Business Plan Handbook. Partnership for Sustainable Communities. 14 January, 2014. <www.epa.gov>

situations that can ultimately drown a project such as Williams Farm. Another challenge will be in the appropriate implementation of the vision for the project. It will be important to stay organized and motivated, and remember the core objectives in developing the program.

Ultimately, the recommendations suggested in this report have the potential to help make the Williams Farm project a model example of how urban agriculture can truly benefit a community such as Athens, and become an integral part of a local food movement.

Introduction

Project Overview

The Athens Land Trust has a mission "to promote the quality of life through the integration of community and the natural environment by preserving land, creating energy-efficient and affordable housing, and revitalizing neighborhoods."[5] A model project to integrate land conservation strategy and urban agriculture has been initiated to promote this mission and create an exemplary model of community investment. The Williams Farm project will also demonstrate how the conservation of open space and its stewardship have now become relevant in understanding the importance of ecological value in congruence with urban development. This report involves the layout of a longstanding vision plan to compliment this investment project set in motion by the Athens Land Trust on Ruth Street in Athens, GA. The programmatic and management decisions that are made in the future have the ability to shape both

Figure 2: Diagram of Williams Farm balance

[5] "Athens Land Trust." *Athens Land Trust*. N.p., n.d. Web. 22 January 2014. <http://www.athenslandtrust.org/>.

the community and landscape for decades to come. This vision plan will define the goals and intentions for the project; clearly describe priority functions of the property and its management; provide programming recommendations; and hopefully influence the operational strategy for the Williams St. Farm - its programs and facilities. The plan will also identify opportunities and challenges for developing maximum connections to the project, implementing educational programs, and involving the local neighborhood to support the project's long-term progress. Two case studies were also reviewed for the purpose of better understanding successful variables and implementation strategies of similar projects. (See Appendix A) Again in reiteration, the Athens Land Trust intends for this project to be a resource for the broader community, which this plan supports.

Statement of Purpose

Athens, Georgia, like many communities across the country, is in process of developing a deeper connection to its local food system. Initiatives such as the Athens Farmers Market, Slow Food Athens, and the Athens Land Trust's West Broad Community Market Garden all have contributed to this on-going process. The Athens Land Trust has made a multi-purpose investment in the Williams Farm on Ruth Street. (Figure 3) They have not only protected more than 5 acres of open space less than a mile from downtown, but they have initiated an urban agricultural project that will manage the land with further hopes in engaging and educating the community. A vision plan for Williams Farm will help the Athens Land Trust visualize a future for their community investment and promote a course of action to realize that vision. The actions taken by the

Figure 3: Athens Land Trust sign. Photo by Jack Matthews

Athens Land Trust while managing the development of this project will help largely determine its ultimate success in becoming a model for community function and revitalization. A vision plan is a formulated approach to carry out effective procedural and management measures, usable by the multiple divisions of the organization.

Specifically, this vision plan will identify decisions that are most important to project goals as defined by the Athens Land Trust mission. Upon doing so, it will guide the decision-making process helping to increase efficiency in property management, program implementation, and connectivity. The plan would also simplify understanding of short-term and long-term improvements to the property including the landscape and buildings. The Athens Land Trust is a diverse organization and a model project such as this can be burdensome to develop and manage, or present other unforeseen issues. A well-drafted plan will articulate the Athens Land Trust's goals by creating a positive vision for the future of the project and establishing a framework for how each progression makes this vision a reality. It then provides a way to measure meaningful progress toward that vision.

Also, another significant aspect of a programmatic vision plan for such a model project is its ability to increase fundraising potential. A plan provides the Land Trust with a compelling description of future progress to tell donors, foundations, and partners about what the organization is striving to realize. It takes much of the speculation out of fundraising because implementation goals are based on a tangible direction of where the project is headed. Support is more convincing because specifics are recommended and detailed.

Overall, a programmatic vision plan for the Williams Farm project will increase the efficiency and progress of development, implementation, and management strategy for the Athens Land Trust. It will help further long-term stability and coordination within the organization.

Goals & Objectives

The Williams Farm site is a vital resource to the surrounding community in its ability to foster agricultural, ecological, and educational opportunities. While these elements serve as a strong foundation for management and growth, compatibility there are also many other important considerations to think through and develop in a future vision plan. Through access and circulation, informative site development and programming, and practical community engagement opportunities, the Williams Farm will serve to operate on many different levels of function. (Figure 4)

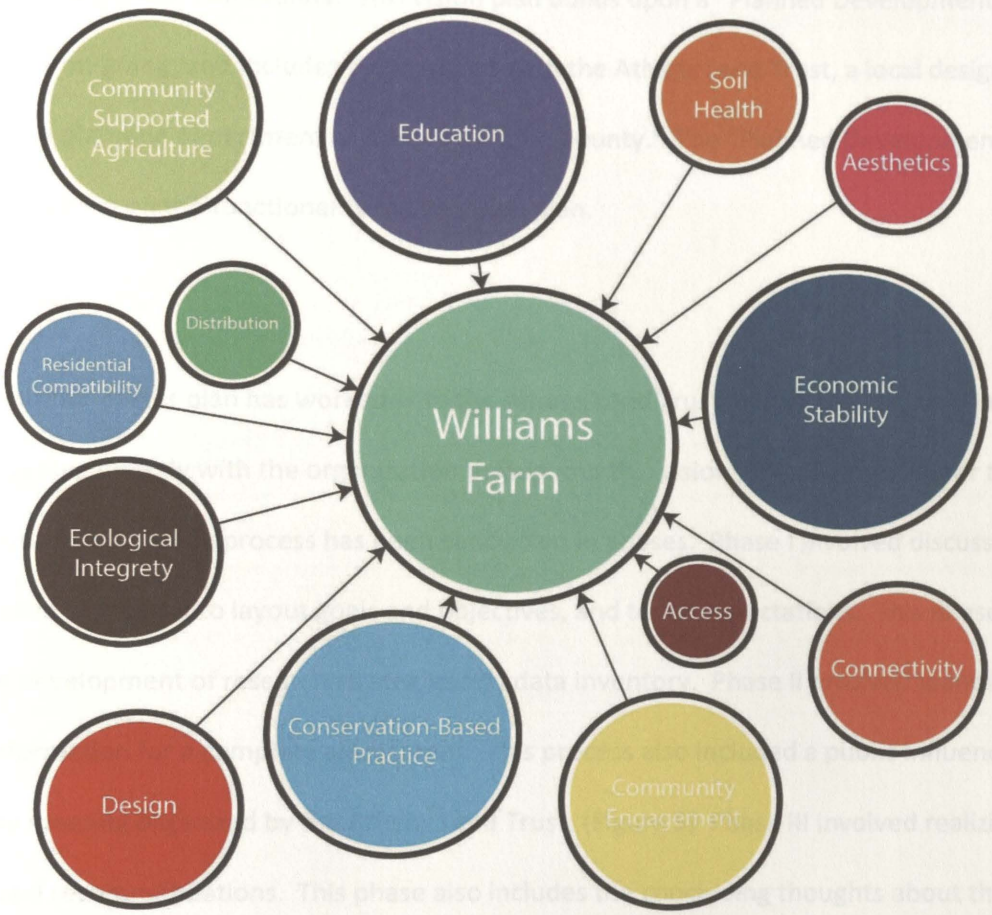

Figure 4: The vision for Williams Family Farm includes many considerations that will help to formulate proper development and guidance.

The intentions of this plan are to provide guidance through long-term vision and programmatic exploration of functions and development to better facilitate the fruition of the Williams Farm, as directed by the Athens Land Trust. This strategic vision will present a range of research, opportunities, challenges, and recommendations that can be utilized for programmatic development and holistic management, as well as for a larger exchange with the community to ultimately further the connection with local food production and open space in Athens, Georgia.

Planning for Williams Farm has already proven to be an involved development for the Athens Land Trust and the greater community. This vision plan builds upon a "Planned Development" process that is currently on-going, and includes partnerships with the Athens Land Trust, a local design firm in Athens, and the planning department of Athens – Clarke County.[6] The "Planned Development" will serve as an influence on the functionality of this vision plan.

Planning Process

The author of this plan has worked with the Athens Land Trust for over a year, and has continued working directly with the organization throughout this vision planning process for the Williams Farm. The planning process has been conducted in phases. Phase I involved discussions with the Athens Land Trust staff to layout goals and objectives, and to set expectations. This phase also included the development of research strategies and data inventory. Phase II involved identifying and collecting information for a complete assessment. This process also included a public influence through a community meeting organized by the Athens Land Trust. (Figure 5) Phase III involved realizing goals, objectives, and recommendations. This phase also includes the concluding thoughts about the project.

[6] Mathes, Lara, Personal Interview, 10 February 2014

This systematic effort generates a plan that utilizes all resources available to visualize the successful development of Williams Farm.

Phase I

- Review of Athens Land Trust development of Community Agriculture programs
- Meetings with Athens Land Trust staff
- Context
- Inventory and Existing Conditions Assessment
- Base map preparation

Phase II

- Research of case studies and trends to help guide the planning process, and enlighten planner on prospective goals and objectives.
- Community involvement effort

Phase III

- Develop and compose working Vision Plan

Timeline for Completing the Williams Farm Vision Plan

Initiate Intentions	August 2013
Consultation with Athens Land Trust, Inventory and Assessment	September – December 2013
Community Meeting	January 2014
Refine Goals & Objectives	January – February 2014
Develop Recommendations & Management Strategies	February 2014
Draft Vision Plan	February – March 2014
Review and Revise	March 2014
Final Plan, Presentation, and Deliverables	April 2014

Figure 5: In a public session hosted by the Athens Land Trust, the intentions for Williams Farm are discussed with members of the neighborhood. This session also served as a forum for discussing program development opportunities and concerns.

Context

Project Setting

Williams Farm consists of just over five acres sitting on a ridge east of the North Oconee River in the college town of Athens, Georgia. Athens is the county seat of Clarke County in Northeast Georgia, and according to the United States Census Bureau, is the fifth largest municipality in the state.[7] (Figure 6) The areas ecology and environment is characterized by that of the Piedmont region, stereotypically characterized by rolling hills, heavy clay soils, and primarily oak, hickory, and pine forests. The region was historically settled and intensively farmed for the last two hundred years or more. In the last century or so, Athens has developed so to push most agricultural operations into the outlying rural areas of the community. Also of note, the University of Georgia is located in Athens, and has influence on the most of the physical, social, and economic developments in the city and surrounding area.

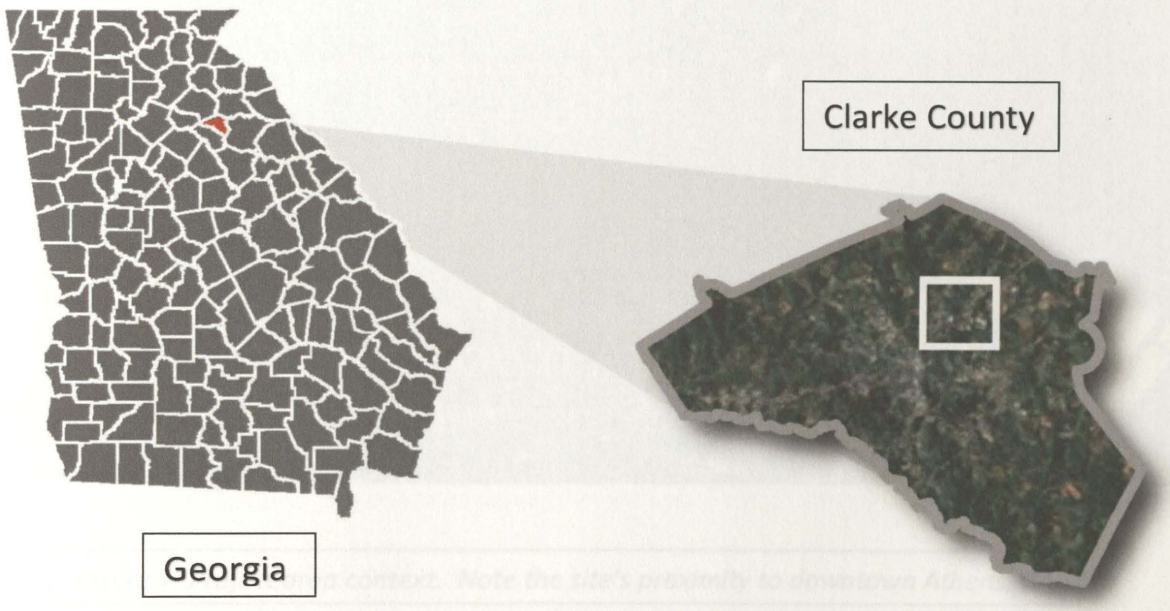

Figure 6: Located in the Piedmont region of Northeast Georgia, Athens – Clarke County is the state's fifth largest metropolis by population.

[7] "American FactFinder". Retrieved 21 February 2014. <Factfinder.census.gov>

Project Area Map

Figure 7: Project area context. Note the site's proximity to downtown Athens, GA

The Williams Farm property is located less than one mile from the downtown district, which serves as the one of the main hubs for community activity in the Athens area. (Figure 7) The site itself represents one of the last in-town open spaces that carries with it a tangible agricultural heritage. The

5+ acre property lies in between Ruth Street and Northside Drive with frontage on both roads. The property currently contains about 2 acres of forested vegetation, a little more than an acre of tillable land, and about 2 acres of infrastructure and miscellaneous open pasture. (Figure 8 & 9)

The neighborhood that surrounds the farm has seen an influx of new residents within the past couple decades due to newly constructed developments. Between 2000 and 2010, population density in the area increased by more than 30% in Census Tract 301.[8] Like many local neighborhoods close to downtown Athens, a mix of both students and local citizens occupy the vicinity. The location in parallel with the intentions of the Athens Land Trust make for a unique opportunity for the community to easily engage with such a focused project as Williams Farm.

There is one variable condition that needs to be addressed with the site. The most northern acre of the Williams Farm property with frontage on Northside Drive has potential in the future to change. There currently exists a one acre parcel that separates the Williams Farm road frontage on Northside Drive from the 5 Acre Woods parcel that the Athens Land Trust currently holds in a conservation easement. This acre was originally a part of the Williams farm but was sold by in 2007 by Marshall Williams to a Northside Drive neighbor planning infill. The Athens Land Trust has made it clear that they potentially wish to acquire this one acre parcel through either fee simple acquisition or a land swap in order to achieve continuity and better access for both sites.[9] The thinking behind acquiring this one acre parcel is that it would provide more continuity in the projects connectivity to 5 Acre Woods. It is also currently less vegetated, which could provide more space for a farming opportunities. Presently, this deal has not occurred.[10] (Figure 10)

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[8] "U.S. Census Bureau, 2000-2010 American Community Survey." Retrieved 21 February 2014. <Factfinder.census.gov>

[9] Mathes, Lara, Personal Interview, 10 February 2014

[10] Ibid, 10 February 2014

Site Base Map

Figure 8: Base Map of Williams Farm

Site Aerial Maps

Figure 9: Aerial Map of Williams Farm

Potential Land Swap Aerial Map

Figure 10: Aerial Map of Williams Farm showing one potential of a land swap between the Athens Land Trust and a neighbor to acquire the desired 1 acre parcel connecting Williams Farm to 5 Acre Woods.

Land Use History

In 2013, the property was purchased by the Athens Land Trust from Yolanda Tuttle-Williams to maintain the purpose of conservation and agriculture. In its most recent years, the property had been minimally managed as a passive agricultural site. Looking at historical aerials from the past 80 years, it is easy to see that both conservation and agriculture have played a significant role on this property. Its heritage was maintained despite obvious signs of development pressure. (Figure 11) In 1938, the site is observed in a completely agricultural setting, surrounded by terraced fields most likely planted with cotton. Although it is a relatively short distance to downtown, housing density is low, in congruence with the agricultural character. In 1951, the site remains in an agricultural setting, although more development is occurring along North Ave. arterial to the southeast. In 1967, it is clear that the site is feeling the development pressure. Residential neighborhoods have begun to surround the area, and the agricultural character of the landscape has completely shifted towards a suburban appeal. However, the site itself maintains its pastoral presence. By 1980, the area surrounding the site has evolved into a relatively dense residential refuge, with mature forests and cul-de-sac neighborhoods. The site stands out as being the last agricultural tract left in the area.

This evolution, as explained by historical aerial photography, really articulates the value of Williams Farm as a unique asset within the community. Despite decades of development pressure, its agricultural integrity and valuable open space have stood the test of time to make it an ideal candidate for the current urban agricultural project that the Athens Land Trust is undertaking. (Figure 12)

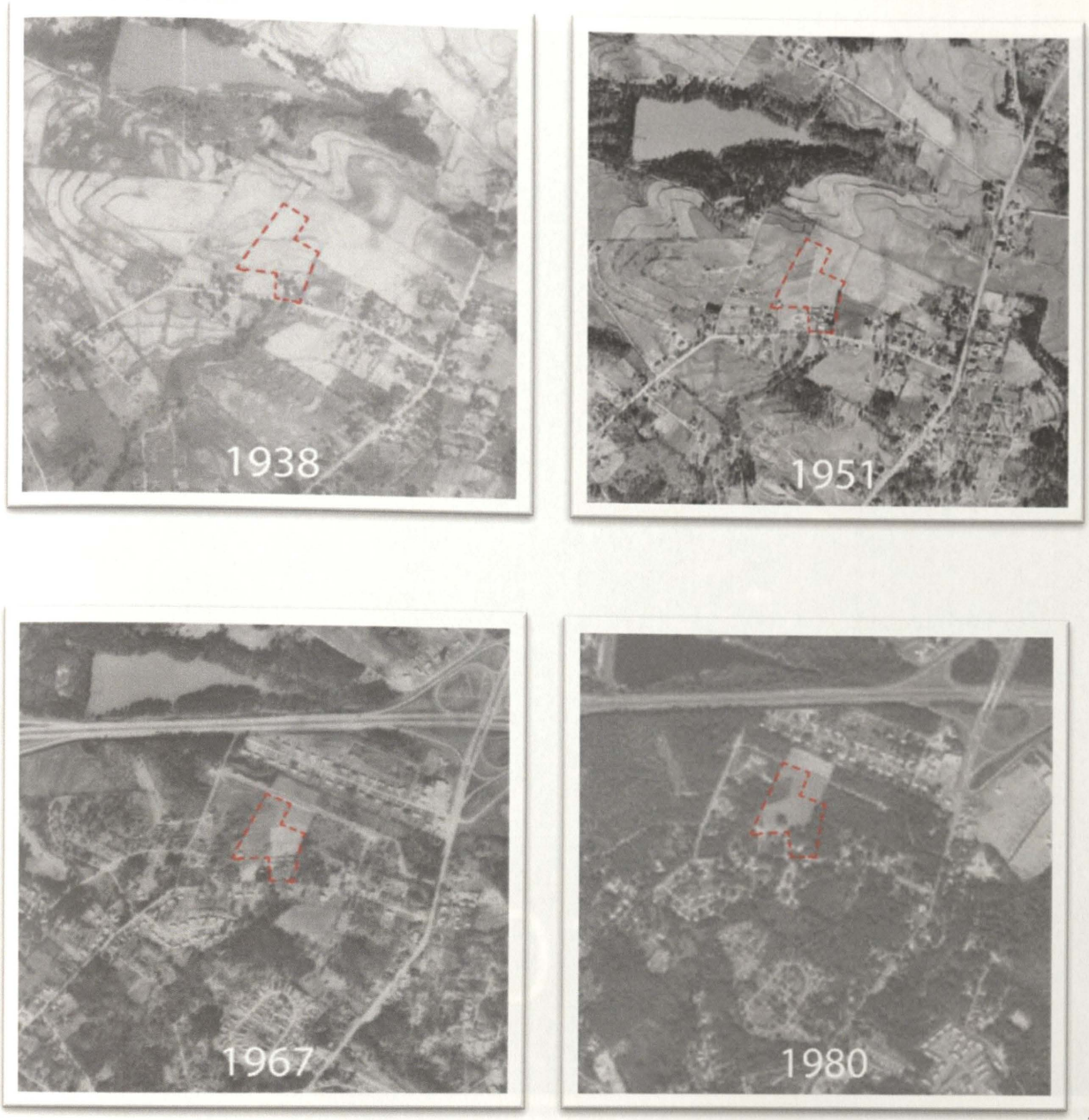

Figure 11: A historic photo series shows how both conservation and agriculture have continued to be a part of the heritage at Williams Farm.

[11] United States. Agricultural Stabilization and Conservation Service. Aerial Photography Division. Clarke County, 1938, 1951, 1967, 1980. University of Georgia Libraries Map Collection, Athens, Ga. < http://dbs.galib.uga.edu/gaph/html/clarke.html>

Figure 12: The final present day photo in a series that shows how both conservation and agriculture has and will continue to be a part of the heritage at Williams Farm.

Land Use and Regulations

In Athens – Clarke County, the Williams Farm parcel is currently zoned RS-8 Single Family Residential, allowing for 3.8 dwelling units per acre.[12] The current zoning that surrounds the property suggests that the neighborhood will remain under residential concentration. However, it is relevant to recognize the heavy traffic corridors to the east and the west that are zoned for commercial use, and funnel traffic into and out of downtown. (Figure 13) "A history of agriculture allows the land to slip through modern zoning ordinances. Because of a documented history of uninterrupted agricultural use, [Williams Farm] will be grandfathered in as legal, but technically non-conforming to current code."[13] Due to limitations in development of this grandfathered land use, the Athens Land Trust has chosen to pursue other options to allow for a rezone that would potentially better fit the needs of the project. Currently, the Athens Land Trust is applying to the Athens – Clarke County planning department for a "Planned Development" that would allow for a rezoning of the parcel to fit the needs of the project. A Planned Development is a zoning tool that is utilized in land development, and applied for by a developer applicant and the property owner. "It is the intent of the Planned Development to encourage compatible, creative development of mixed land uses through design flexibility. A Planned Development request is reviewed twice by the Planning Commission, first as a preliminary concept and then as a Master Plan. The Planned Development application is ultimately reviewed and either approved, approved with conditions or denied by the Mayor and Commission."[14] In the case of Williams Farm and the Athens Land Trust,

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[12] *PLANNING STAFF REPORT PRELIMINARY PLANNED DEVELOPMENT*. N.d. CASE NUMBER PD-2013-10-2135 481 & 482 RUTH STREET / 215 NORTHSIDE DRIVE NOVEMBER 7, 2013. Athens, GA.

[13] Gallant, Andre. " New urban farm and ag school planned for North Ave. neighborhood." Athens Banner-Herald [Athens, GA] Published: 10 August 2013. Accessed via web: 24 March 2014. <http://onlineathens.com/local-news/2013-08-10/new-urban-farm-and-ag-school-planned-north-ave-neighborhood>

[14] "Planning & Zoning 101." Athens - Clarke County. N.p., n.d. Web. 15 Apr. 2014. <http://athensclarkecounty.com/DocumentCenter/Home/View/325>

"The purpose of [the] request is to rezone 5.5 acres from RS-8 (Single-Family Residential) to RS-8 (PD) (Single-Family Residential Planned Development) to establish a commercial and educational farm, a dining/educational/event facility, and a single-family residence on [the parcel]... A Planned Development designation is sought because more than one principal land use is proposed for development; separate land uses, which would not otherwise be permitted to locate within the same zoning district, are proposed; and exceptions or variations to the size, dimensional changes in standards required, and other requirements of the zoning ordinance or community tree management ordinance are being sought to provide design flexibility. The request for a Planned Development includes a binding application report and site plan in an effort to guarantee the community that what is proposed will be constructed."[15]

Although the potential rezone would allow the Athens Land Trust to accommodate the multiple land uses suggested by the Williams Farm project, it is limiting in a sense that the project will be regulated by the legal terms connected with the planned development. These regulations will be fixed and will run with the land. Developing and managing an urban farm is a dynamic and demanding process that will offer potential challenges with being bound by regulated limitations. This vision plan must take consideration to the fact of the rezone and the land use regulations that will be established. This will require a more creative approach to less intensive management and impact in development of the site.

[15] *PLANNING STAFF REPORT PRELIMINARY PLANNED DEVELOPMENT*. N.d. CASE NUMBER PD-2013-10-2135 481 & 482 RUTH STREET / 215 NORTHSIDE DRIVE NOVEMBER 7, 2013. Athens, GA.

Current Zoning Map

Figure 13: Current zoning of the area surrounding Williams Farm

Social Context

The purchase and management of Williams Farm by the Athens Land Trust make it a valuable asset to the local neighborhood, but its intentions for operation and the people the project serves are what really define its role in the community. The Williams Farm property is located North and East of downtown Athens and the North Oconee River, and is in Census Tract 301 of Athens – Clarke County as defined by the U.S. Census Bureau. (Figure 14) In 2010, Census Tract 301 had a total population of 4778 residents. The median household income at that time was $17,480. The education level is described as both lower than the state average and lower than the national average.[16] Just comprehending these few statistics alone, it is clear that the Williams Farm, in its mission, will be valuable in establishing a presence in the neighborhood under the core tenants of production, education, and sustainability. By protecting this open space, the Athens Land Trust is protecting a keystone property to a neighborhood that will benefit from community engagement programs and potentially access to locally grown food.

Community Needs

Public meetings and sessions have taken place over the time period of September 2013 – March 2014, where community feedback has been voiced about the Williams Farm Project. Also, many personal conversations and e-mails have occurred between the Athens Land Trust and community residents about the project. There have been a few volunteer days, open houses, and a ribbon cutting ceremony, all hosted by the Athens Land Trust, in which the neighborhood residents and greater community were encouraged to attend. These meetings, session, conversations, and other exchanges have helped to capture the community feeling towards the development of Williams Farm.

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[16] "U.S. Census Bureau, 2006-2010 American Community Survey." Retrieved 21 February 2014. <Factfinder.census.gov>

On February 4, 2014, the Athens Land Trust hosted a neighborhood meeting on-site at Williams Farm in which community members gathered to share their thoughts on the development of the site, as well as express their wants and needs for the site in the future. Including both Athens Land Trust staff and board members, and neighborhood attendees, there were approximately fifteen people present. Community needs expressed in reference to William Farm include:

- Educational and Recreational Resources
- High Standard of Ecological Management
- Access and Connectivity
- Aesthetic Integrity
- Volunteer Opportunities
- Local food resource
- Low impact development and management

Census Tract Aerial Map

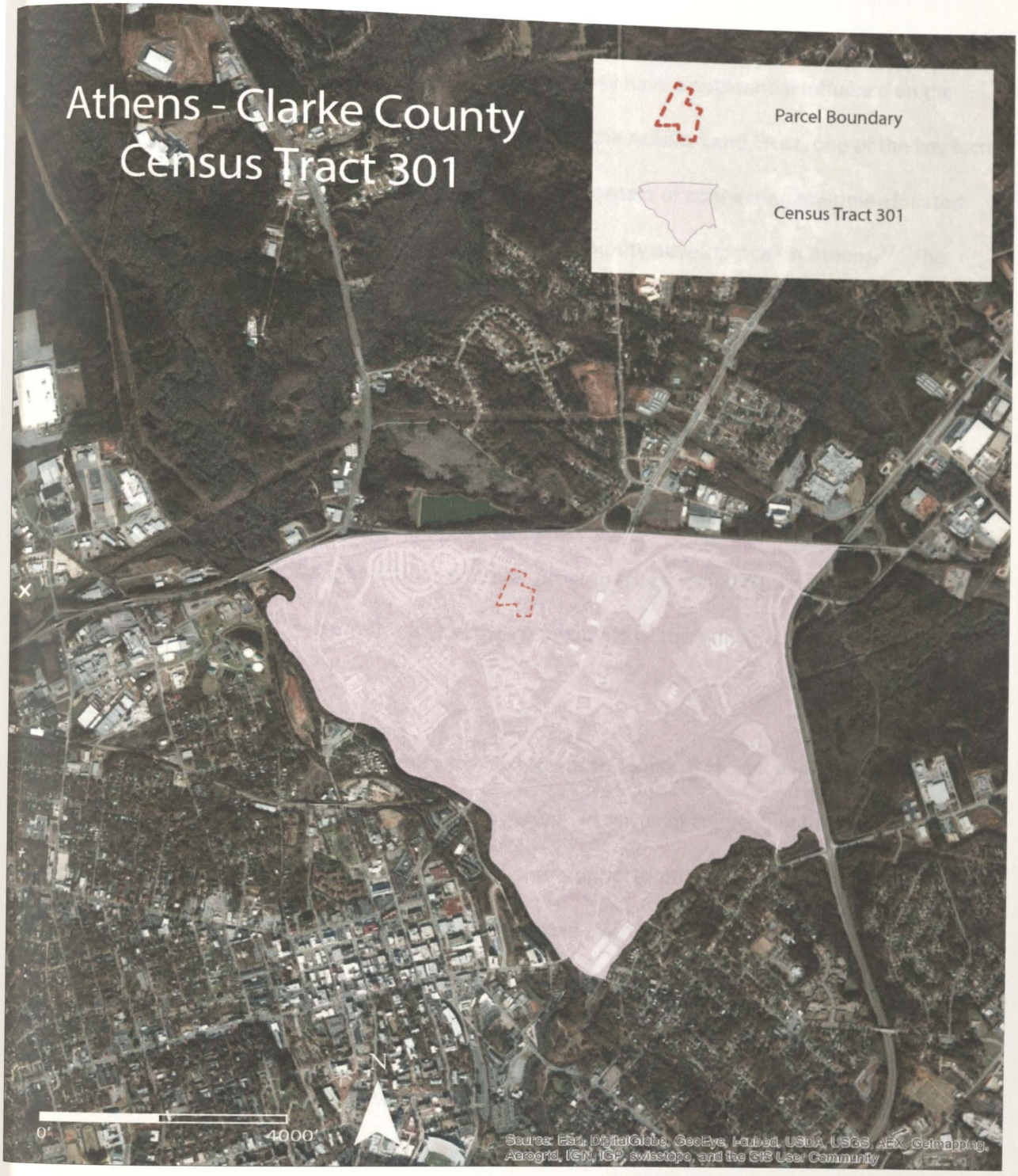

Figure 14: Census Tract 301 in Athens – Clarke County

Access and Connectivity

Access and connectivity to the Williams Farm property have a substantial influence on the future development and management of the property. For the Athens Land Trust, one of the key factors that weighed into the purchase of Williams Farm was the prospect of connecting multiple affiliated properties together to create an exemplary model for community development in Athens.[17] The potential for these very direct connections between multiple projects offers the ability for community open space to serve as an asset with multiple benefits and services. Not only will Williams Farm serve as a production farm, an educational landscape, and a model for sustainable management, but it will also connect with 5 Acre Woods that has an established network of trails for community enjoyment. Also, organizationally the Athens Land Trust has a developed Community Agriculture program that Williams Farm will tie into, and with close connections to other program sites, including the West Broad Community Farm that is less than 3 miles away, the connectivity of the Williams Farm project will add value.

With Williams Farm's close proximity to downtown, this unique project allows for a managed ease of access for people to enjoy in many different ways. In terms of connecting the public with Williams Farm and adjacent properties and projects, there opportunities for vehicle, bicycle, and pedestrian connections. Major vehicular access is available from the heavy traffic streets including North Ave., Martin Luther King Jr. Pkwy, and Highway 10/441. (Figure 15) The Oconee Greenway is about a quarter of a mile away from the property, so connection with a cycling and pedestrian network is possible. In correlation with the Planned Development applied for by the Athens Land Trust, there will opportunities for parking on site, although they will be restricted to designated users of the Williams

[17] Benham, Heather, Personal Interview, 22 January 2014

Farm property and not open to the public. There is also a plan to connect the neighborhoods directly west of the site to Williams Farm by way of a pedestrian trail. (Figure 16)

Access and Connectivity Context Map

Figure 15: Access and Connectivity Context in relation to Williams Farm

Access and Connectivity Map

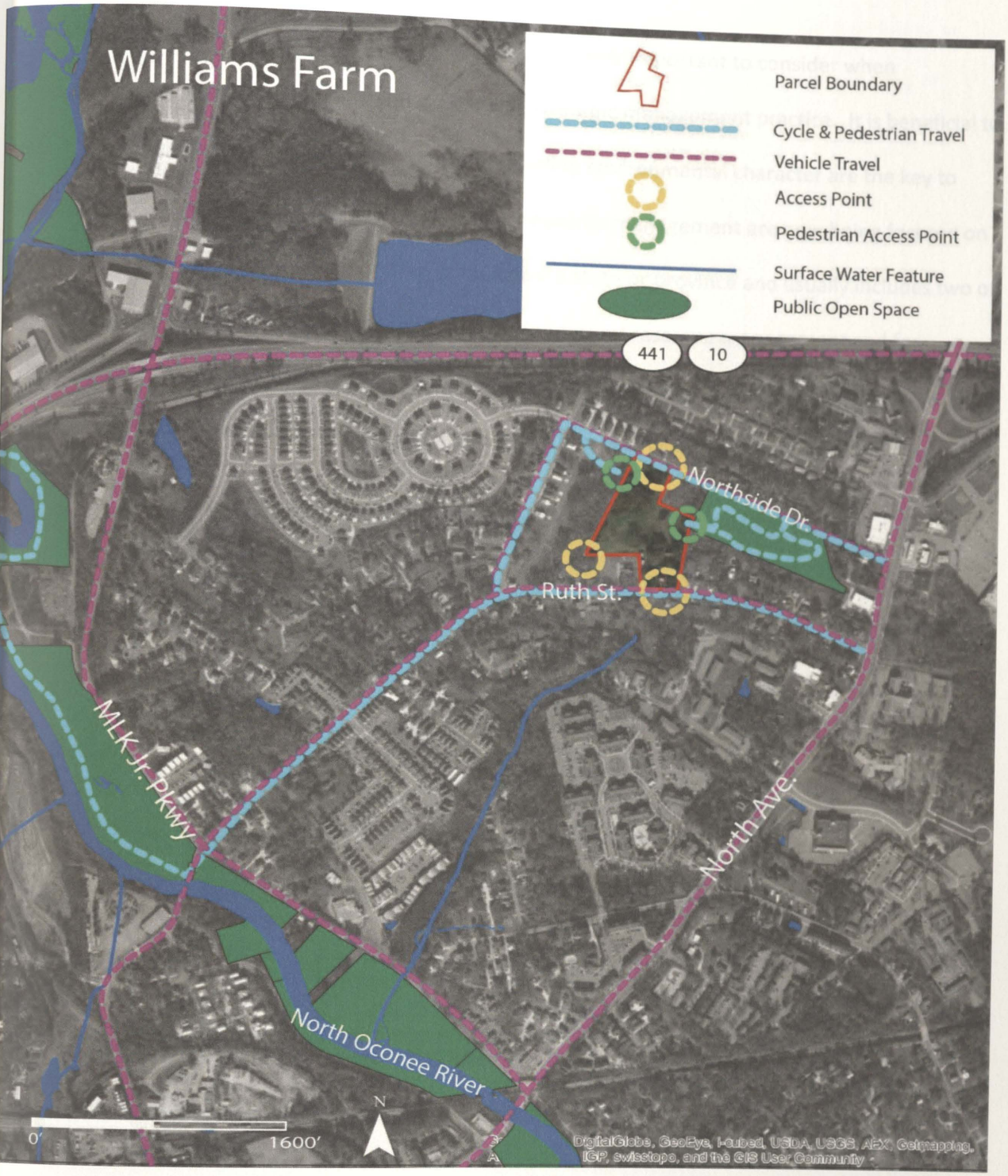

Figure 16: Access and Connectivity Map for Williams Farm

Landscape Characteristics

The environmental character of a landscape is obviously important to consider when implementing programmatic decisions and developing strategic management practice. It is beneficial to stress that both regional and local scopes for understanding environmental character are the key to overall sustainability. "Strategic planning and natural resource management are now being focused on the regional scale, which refers to the spatial scale below a state or province and usually includes two or more communities. This scale is the most appropriate for natural resource management and for progressing sustainability, because it is at this scale where ecological functioning and human activities most intensely interact and where a balance between the two is critical to studying and resolving

Figure 17: Farm Landscape.
Photo by Jack Matthews

natural resource and sustainability issues."[18] (Figure 17) This step in the process involves analyzing characteristics to best understand how to achieve identified goals for development and management.

[18] Graymore, M. M., Sipe, N. G., & Rickson, R. E. (2008). Regional sustainability: How useful are current tools of sustainability assessment at the regional scale? *Ecological Economics*, *67*(3), 362-372. doi:10.1016/j.ecolecon.2008.06.002

This includes directed observation and mapping of features and mannerisms of the site, and also influences from outside variables. Essentially, Williams Farm should be managed and directed by its characteristics, what it can potentially accommodate in the future, and what is not appropriate.[19]

Regional Climate

Proper development and management plans should always consider its context in relation to climate. The environment in the piedmont region of Northeast Georgia is characterized by a humid, four-season climate. Like much of the southeast, the weather is variable, with hot summers and mild winters. (Figure 18) "Precipitation varies throughout the piedmont region. Precipitation averages in excess of 40 inches per year and tends to be greatest in the north, [where Athens is located]."[20] These patterns describe the current regional climatology, but climate change in the future will bring a different set of circumstances. "Good design is design for change. Good design is structurally diverse and not dependent on any single element for its overall success. Good design harnesses the forces of evolution, leveraging both the built and the biological environment, and integrates them for maximum resilience."[21] Williams Farm will be required to make needed adjustments to best acclimatize to potential future changes in climate.

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[19] Falk, Ben. *The resilient farm and homestead: An innovative permaculture and whole systems design approach*. Chelsea Green Publishing Company, 2013: 50-51

[20] Georgia State Climate Office, Driftmier Engineering Center, University of Georgia "Climatology of the Georgia Piedmont." *Spring, 1998, 98-03a*. Web. 4 March 2014. <http://www.rivercenter.uga.edu/education/summit/general/climate/piedmont.pdf >.

[21] Falk, Ben. *The resilient farm and homestead: An innovative permaculture and whole systems design approach*. Chelsea Green Publishing Company, 2013: 69

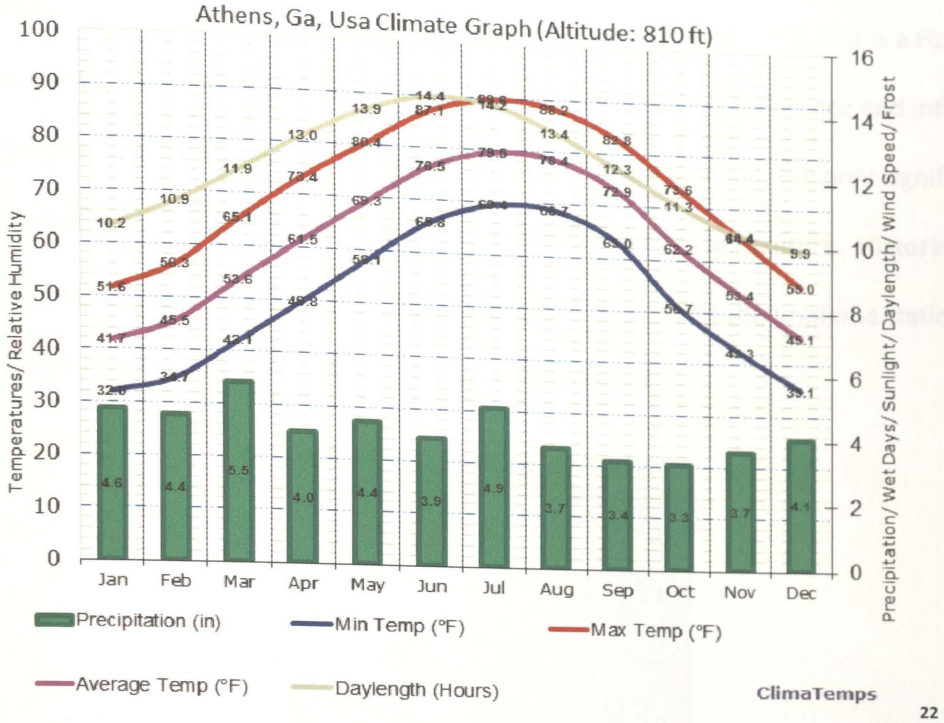


Figure 18: Athens, GA general climate graph.

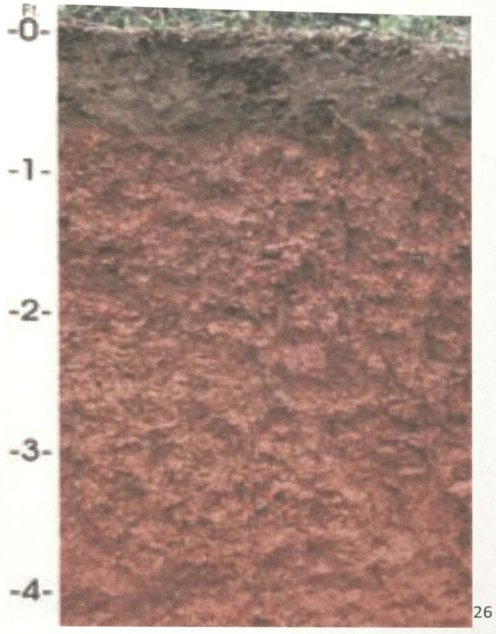
Soil

The soil structure on site at Williams Farm consists of only one soil type, and for agricultural purposes it is particularly valuable. Cecil Sandy Loam, as described by the USDA Soil Survey, is officially classified as "prime farmland." This classification implies a high soil quality that should strengthen the productivity and health of the agricultural component at Williams Farm.[23] "The Cecil series consists of very deep, well-drained, moderately permeable soils on upland ridges and side slopes. These soils formed in material weathered from felsic, igneous, and high-grade metamorphic rocks. Slopes range

[22] "Athens, GA, USA Climate Graphs." *Climate Graph for Athens, GA, USA.* N.p., n.d. Web. 13 February 2014. <http://www.athens-ga.climatemps.com/graph.php>

[23] Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. 25 February 2014. <http://websoilsurvey.nrcs.usda.gov/>

from 0 to 25 percent. The Cecil series is on the National List of Benchmark Soils, and is a Hall of Fame Soil. A monolith of the series profile is on display at the International Soil Reference and Information Centre in Wageningen, The Netherlands."[24] (Figure 19 & 20) In terms of soil, the only significant limiting factor would potentially be a lack of topsoil from its previous history in agriculture. Historically, "close to 100 years of row cropping for cotton eroded the topsoil."[25] However, the implementation of a proper management system has the ability to regenerate soil health over time.



[26]

Figure 19: An example of the soil profile of the Cecil Series

[24] "Cecil Series." *Cecil Series*. N.p., n.d. Web. 10 Mar. 2014. <http://urbanext.illinois.edu/soil/st_soils/nc_soil.htm>
[25] Brender, E. V. "Impact of past land use on the lower Piedmont forest." Journal of Forestry 72.1 (1974): 34-36
[26] Ibid. 10 March 2014. <http://urbanext.illinois.edu/soil/st_soils/nc_soil.htm>

Soil Map

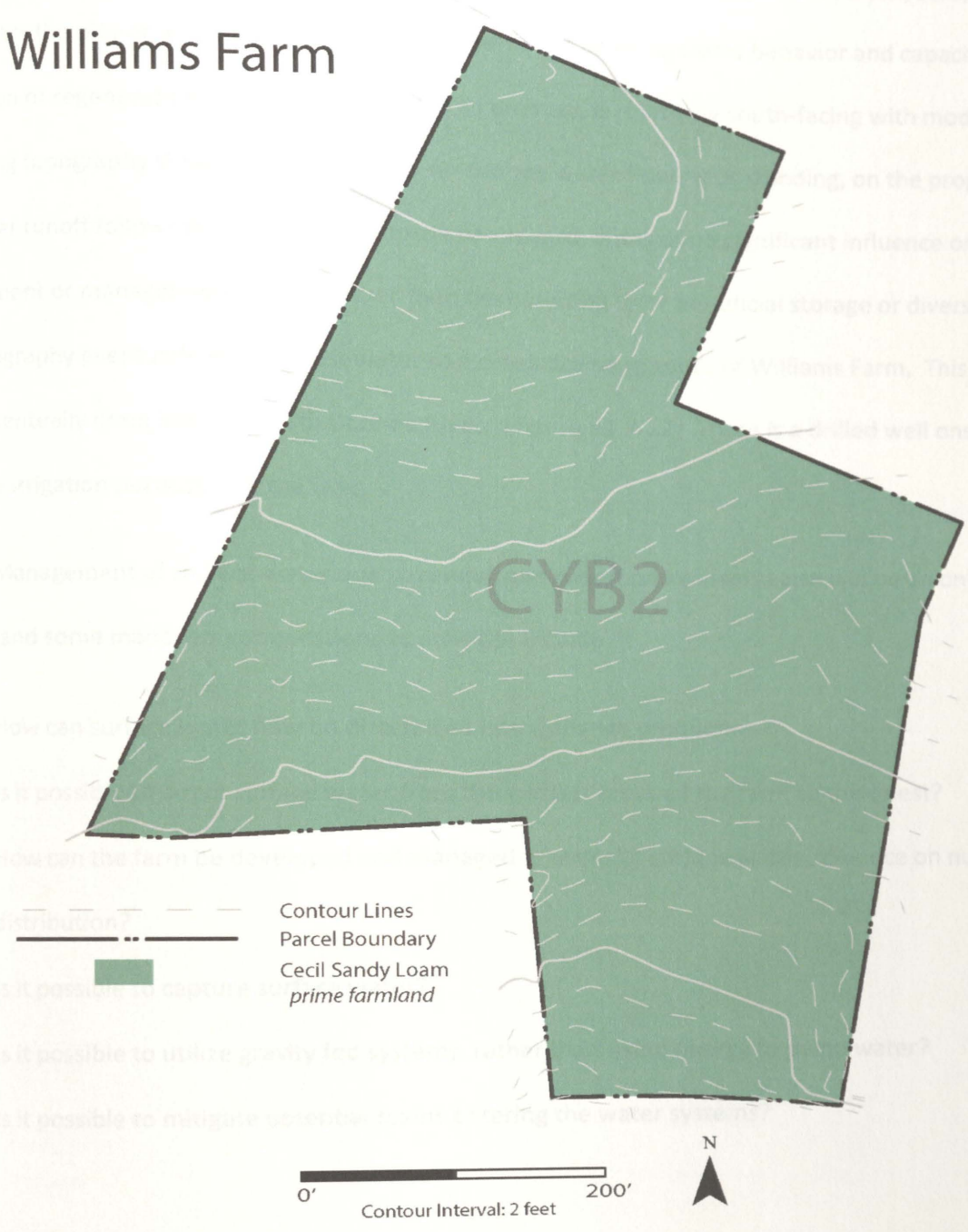


Figure 20: Soil Map of Williams Farm

Hydrology

"Though there are many physical aspects of a place, including the type of bedrock, soils, and climate, it is the play of water that most directly determines an ecosystems behavior and capacity for production or regeneration."[27] Williams Farm, in its entirety, is relatively south-facing with moderately undulating topography sloping south. There is no surface water flowing or standing, on the property. Rain water runoff follows the undulations mostly southward, but is of no significant influence on development or management practice other than best utilizing it for beneficial storage or diversion. This topography eventually moves most water to a creek drainage south of Williams Farm. This creek would eventually drain into the North Oconee River. (Figure 21 & 22) There is a drilled well onsite that will serve irrigation purposes for the farm.

Management of surface water due to rainfall and runoff on Williams Farm will be an on-going process, and some management questions to consider include:[28]

- How can surface water flow be directed to best enhance production?
- Is it possible to direct surface water from the wettest areas of the farm to the driest?
- How can the farm be developed and managed in terms of surface water influence on nutrient distribution?
- Is it possible to capture surface water?
- Is it possible to utilize gravity fed systems, rather than using energy to pump water?
- Is it possible to mitigate potential toxins entering the water systems?

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[27] Falk, Ben. *The resilient farm and homestead: An innovative permaculture and whole systems design approach*. Chelsea Green Publishing Company, 2013: 79.
[28] Ibid: 79-83.

Hydrology Map

Figure 21: Hydrology Map of Williams Farm

Hydrology Map Context

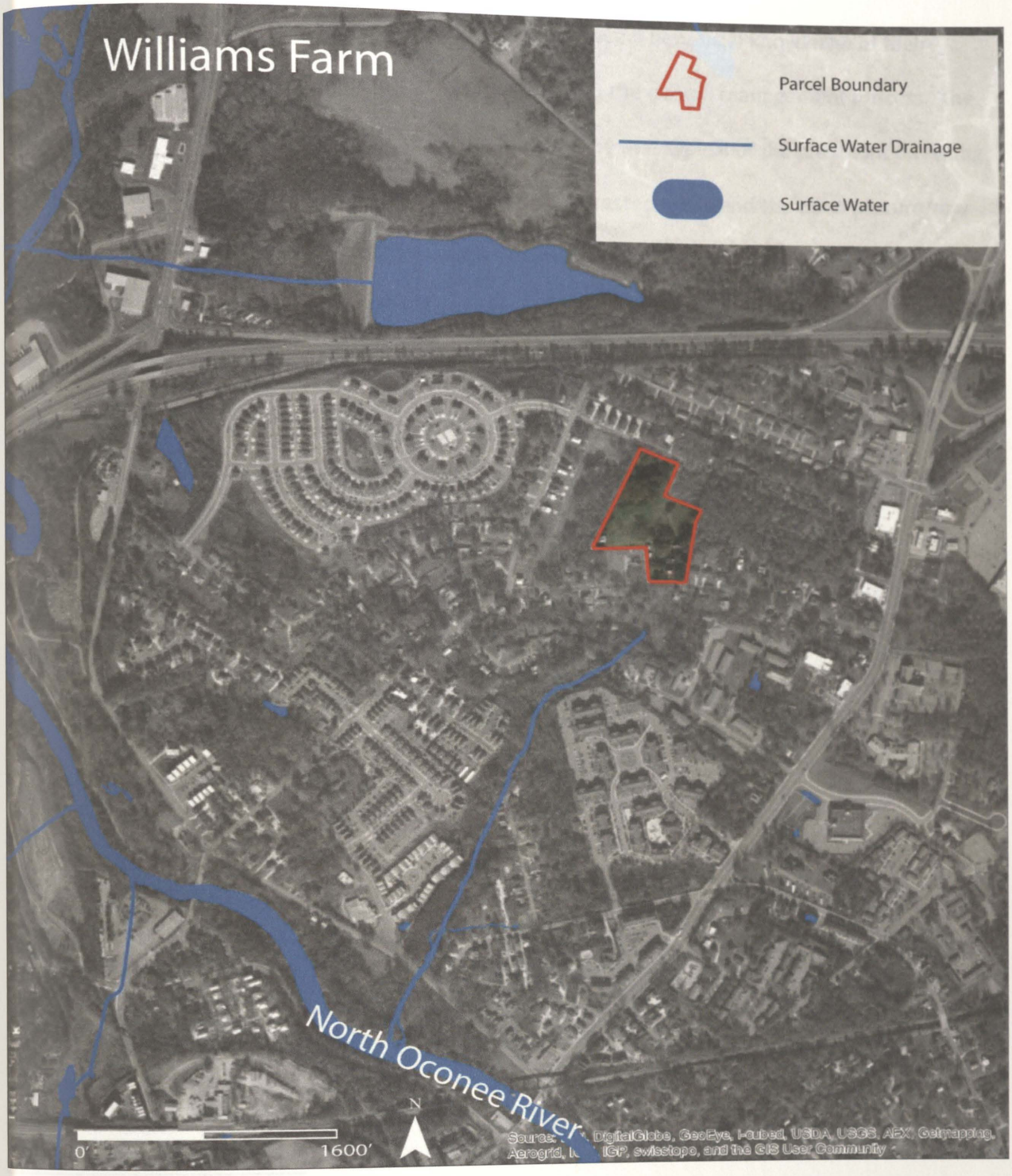

Figure 22: Hydrology context

Vegetation

Understanding existing vegetation patterns helps to reveal beneficial knowledge of their location, size, and pattern of distribution, which contributes to the overall management process. The natural vegetation on the Williams Farm site is characterized by that typical of the piedmont on rolling terrain. The vegetation groups are broken up between the forested areas and the open pasture/row crops. There also exists managed landscape vegetation near the buildings. In the upland hardwood forests of this region and on Williams Farm, dominant canopy species differ, but may include white oak, black oak, southern red oak, pignut hickory, shagbark hickory, mockernut hickory, red maple, blackgum, shortleaf pine, and loblolly pine. There also exist invasive, exotic species in the forest such as Chinese privet and others. In the open pasture, the field vegetation consists of a mixture of warm season grasses, legumes, and other miscellaneous small plants.[29] (Figure 23) Management criteria of existing and future vegetation include being self-maintainable, being diverse and beneficial in terms of food value, habitat, fertility, etc., and potentially acting as a security measure.[30] It will also be important to eradicate invasive species through hand selection if possible.

[29] "Piedmont Ecoregion." *Georgia Department of Natural Resources*. N.p., n.d. Web. 24 February 2014. <http://www1.gadnr.org/cwcs/PDF/11_Piedmont.pdf>

[30] Falk, Ben. *The resilient farm and homestead: An innovative permaculture and whole systems design approach*. Chelsea Green Publishing Company, 2013: 61.

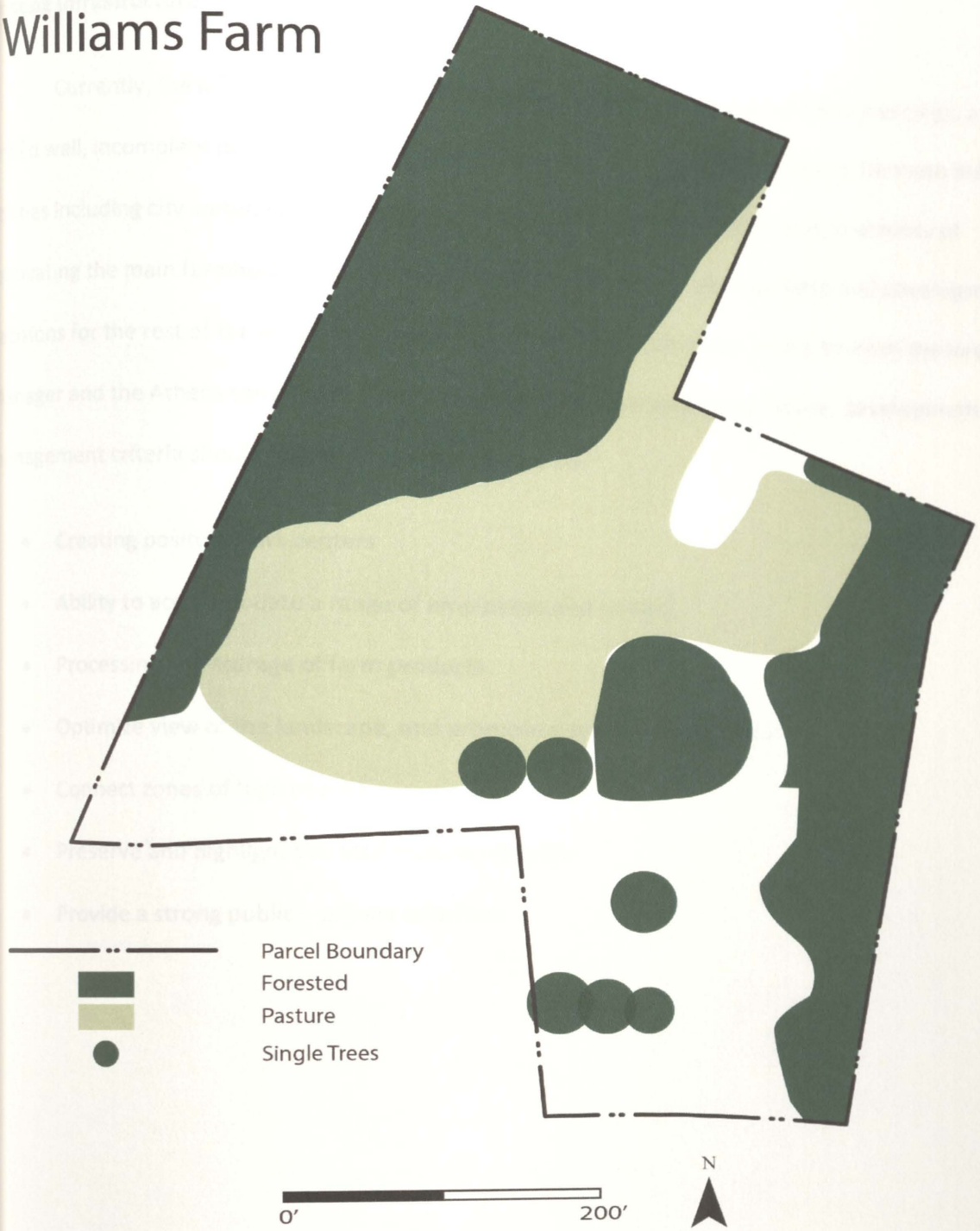

Figure 23: Vegetation Map of Williams Farm

Existing Infrastructure

Currently, the infrastructure on site at Williams Farm consists of six notable buildings, a newly-drilled well, incomplete perimeter fencing, and a Greenhouse. It also has access to common public utilities including city water, sewer, electric, and more. The Athens Land Trust is in process of renovating the main farmhouse to be utilized as residential space. Management and development decisions for the rest of the outbuildings and infrastructure will be made jointly by both the hired Farm Manager and the Athens Land Trust. (Figure 24) Both currently and in the future, development and management criteria should include, but is not limited to:[31]

- Creating positive work centers
- Ability to accommodate a range of employees and visitors
- Processing and storage of farm products
- Optimize view of the landscape, and promote a sensory experience
- Connect zones of high impact
- Preserve and highlight the sites historic integrity
- Provide a strong public – private interface

[31] Falk, Ben. *The resilient farm and homestead: An innovative permaculture and whole systems design approach*. Chelsea Green Publishing Company, 2013: 61.

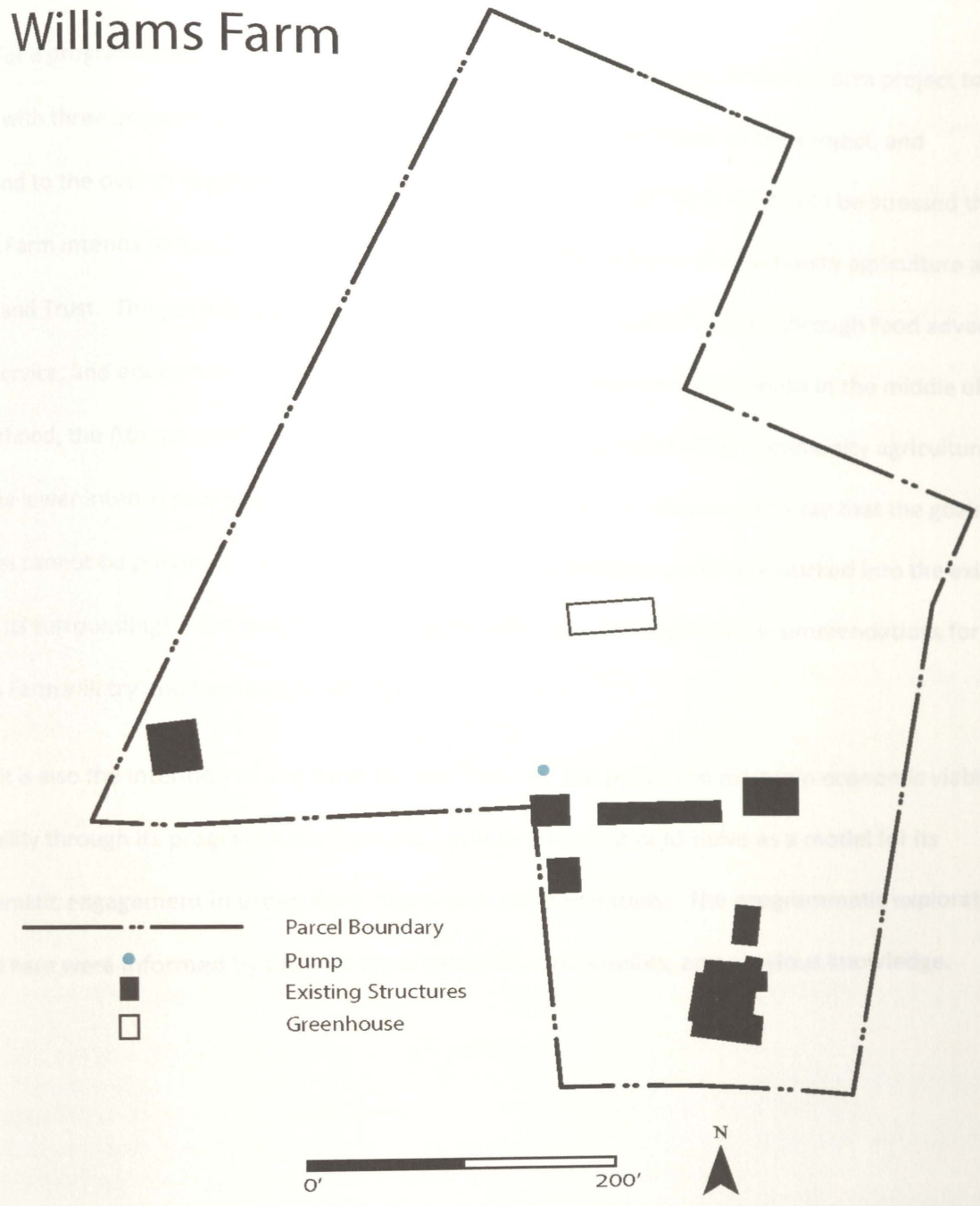

Figure 24: Infrastructure Map of Williams Farm

Programmatic Exploration and Development Recommendations

For a programming format, the Athens Land Trust intends for the Williams Farm project to function with three primary goals. These goals will serve as the backbone of the project, and correspond to the overall organizational mission of the Athens Land Trust. It should be stressed that Williams Farm intends to function as only a part of the greater mission of community agriculture at the Athens Land Trust. The project will help to address some of the public's needs through food advocacy, access, service, and education. Because of its more subtle landscape and location in the middle of a neighborhood, the Athens Land Trust sees this project to compliment other community agriculture project by lower intense program development and management. This is not to say that the goals and objectives cannot be pushed at Williams Farm, but that it should be creatively worked into the existing fabric of its surroundings. The programmatic exploration and development recommendations for Williams Farm will try and best suit these purposes.

It is also the intention of the Athens Land Trust for the project to maintain economic viability and stability through its program development. Williams Farm should serve as a model for its programmatic engagement in urban agriculture with the community. The programmatic explorations included here were informed by findings from research, case studies, and previous knowledge.

Production

Production and viability is at the heart of the Williams Farm project. Without a production capacity that maintains economically viability, the project will ultimately be unable to sustain itself. The Athens Land Trust is dedicated to promoting sustainable, community-based food systems, and has the goal for William Farm to achieve organic certification. Also, maintaining livestock on the farm will be regulated by stipulations set by the planned development and site design. With these conditions in mind, there exist many production and marketing options for a small-scale, urban farming operation such as Williams Farm. These are some recommendations that would ultimately benefit production.

Figure 25: Potential CSA vegetable share. Photo by Jack Matthews

Maintain a diversified vegetable and fruit operation as primary enterprise (Figure 25)

- Only utilize organic methods to manage farm production.
- Develop a farm business plan and marketing strategy that can be continuously evaluated and updated, so to provide financial guidance and motivation for the farm manager.
- Grow multiple species and a varieties on a crop rotation to ensure proper soil health, and to provide insurance if any one crop fails during the growing season.
- Maximize marketable crops that can be produced consistently to meet the objectives of the marketing strategy, in terms of the type, amount, and quality of crops that are grown.[32]
- Plan for Human Resource needs, such as interns and consistent volunteers, to maximize production efficiency and to accomplish educational goals.
- Utilize spatial needs efficiently.

[32] U.S. Environmental Protection Agency. (2011). Urban Farm Business Plan Handbook. Partnership for Sustainable Communities. 3 March 2014. <www.epa.gov>.

- Incorporate existing infrastructure through creative renovation to maximize production benefit

Incorporate a small livestock operation[33]

- Utilize livestock as more of an educational tool at Williams Farm, rather than for production. (excluding egg production)
- Develop a detailed management plan for all livestock on the farm. Safety for both the animals and for humans requires serious concern.
- Raise pasture-based laying hens for egg production. These hens can be moved around the farm to maximize efficiency, control weeds, and provide natural fertilization.
- Investigate honey bee program for benefits of pollination, as well as honey production. Beekeeping can serve as a great educational tools for children, as well as workshop themes for adults, and is not as impactful on the property. (Potentially look to outsource management of bees)
- Goats or sheep should be considered for educational purposes only. Have a detailed management plan if considering goats or sheep, as they require more resources.
- Investigate a vermiculture operation for educational purposes as well as for composting. Red Wigglers are the preferred breed for vermicompost.
- Other poultry such as ducks or turkeys should be considered for educational purposes.

Investigate direct marketing opportunities

- Collaborate with West Broad Community Garden to establish marketing strategy.
- Establish a good reputation at the West Broad Farmers Market through reliability, consistency, and quality product display. Plan to always attend every market.
- Network with local Athens area chefs to provide a market outlet through restaurant sales.
- Develop a crop plan that parallels a marketing strategy. The keys to direct marketability are quality and consistency.
- On-farm sale of product is prohibited.

Build on West Broad Community Garden farm share (CSA) program

- A farm share program, or CSA (community supported agriculture), is a great way to market product efficiently as well as engage the local community. As clients purchase shares in the beginning of the growing season, this provides upfront capital to the farm that could benefit its financial structure.
- Collaborate with West Broad Community Garden crop plan to market produce from both sites.
- Develop a crop plan that is marketable to a farm share program. This will require enough diversity in crop variety as well as skill in quantity and timing for needed harvest availability.

Continue to create access to affordable produce

- Offer periodic sliding-scale discounts.

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[33] Zenger Farm. *Growing Zenger Farm.* 2010. Prepared by Friends of Zenger Farm, the City of Portland Bureau of Environmental Services, Ecotone, Portland State University, and PLACE. 24 February 2014. <www.growingzengerfarm.com>

- Provide market opportunities for populations with limited mobility and transportation access through a mobile marketing.[34]

Education

Education is another primary goal in programmatic development at Williams Farm. The Athens Land Trust has already established a good history of educational programming in urban agriculture with West Broad Community Garden. The objective for Williams Farm is to continue this legacy by adding a greater variety of low intensity educational opportunities, while also engaging more with the local neighborhood. The education programs at Williams Farm will allow community members to be a part of an urban farming experience, and get their hands dirty while they learn about food, farming, and environmental stewardship.

Initiate "farm school" program for interest in long-term agricultural education[35]

- Develop seasonal internship program that is committed to teaching holistic farm management utilizing organic methods
- Create internship manual to guide a seasonal internship program and provide resources
- Network with other local farmers in the area to broaden internship education
- Investigate opportunities for payment stipend for committed internship

Develop educational program opportunities for adults and families[36]

- Create workshop/class curriculum that is diverse in specialization, and continuously active throughout the year
- Provide takeaway materials for workshop/class participants
- Offer frequent and affordable adult and family classes on-site
- Implement neighborhood gardening mentorship program

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[34] Zenger Farm. *Growing Zenger Farm.* 2010. Prepared by Friends of Zenger Farm, the City of Portland Bureau of Environmental Services, Ecotone, Portland State University, and PLACE. 24 February 2014. <www.growingzengerfarm.com>

[35] Ibid. 24 February 2014. <www.growingzengerfarm.com>

[36] Ibid. 24 February 2014. <www.growingzengerfarm.com>

Develop youth-oriented opportunities[37]

- Host field trips from local schools, club, and community groups that engage children directly with the farm and get their hands dirty
- Offer learning opportunities in animal husbandry and care.
- With the close proximity to 5 Acre Woods, develop recreational programs for kids like hiking and wildlife viewing.

Encourage community development[38]

- Continue neighborhood group discussions about farm access, intentions, goals and connections.
- Continue developing relationships with neighborhood advocates.
- Provide neighborhood gathering space
- Facilitate neighborhood community-building events
- Hold neighborhood volunteer days at the Williams Farm property and advertise with signage on the property.
- Keep neighbors informed through all aspects of development.

Sustainability

Figure 26: Cover crops can be implemented into a management plan to manage soil health and viability

In addition to the production and educational components Williams Farm will offer, the project will also serve as an opportunity to educate visitors about sustainability and environmental stewardship. The development of an urban farm that utilizes only organic methods is a great opportunity in showcasing a beneficial stewardship model. A component that is already on-going at the

[37] Zenger Farm. *Growing Zenger Farm.* 2010. Prepared by Friends of Zenger Farm, the City of Portland Bureau of Environmental Services, Ecotone, Portland State University, and PLACE. 24 February 2014. <www.growingzengerfarm.com>

[38] Ibid. 24 February 2014. <www.growingzengerfarm.com>

site includes incorporating recycled materials, techniques, methods and practices wherever possible in the site development.

Another component to the sustainability of Williams Farm has to do with economics. Financial viability in production and education obviously plays a major role in the site development, but there are also other opportunities to help achieve economic sustainability, and a business plan will help formulate that process. "As urban farming moves towards income-earning or food-producing activities, it is important to develop a plan for the start-up and operation of the business regardless of whether it is intended to be a for-profit business or a non-profit business. A business plan provides a road map that not only serves as an internal planning tool, but can be used to provide information to external stakeholders important to the successful start-up and operation of the business such as investors and funding sources. It is used to map out the strategies for the start-up and operation of a business and to track progress of that business against its goals."[39]

The following list of recommendations for sustainability initiatives will help to establish the framework for Williams Farm in its site development.

Agricultural Systems (Figure 27)

- Maintain low impact production systems that only utilize organic methods
- Eradicate invasive species and restore natural habitat
- Design educational signage to interpret key sustainable features of the site
- Provide observation areas at key points for educational purposes

Water Management[40]

- Treat all stormwater runoff on site in a functional, educational and artistic way
- Minimize impervious surfaces for roads and parking
- Utilize an irrigation system in conjunction with low consumption strategies such as drip tape or micro-sprinklers

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[39] U.S. Environmental Protection Agency. (2011). Urban Farm Business Plan Handbook. Partnership for Sustainable Communities. 5 March 2014. <www.epa.gov>.

[40] Portland, Oregon. *Beech Park Master Plan.* 2008. Prepared by Portland Parks & Recreation. 3 March 2014. <http://www.portlandoregon.gov/parks/article/469518>

- Harvest rain water where appropriate

Energy

- Research alternate power sources as appropriate

Materials[41]

- Use low-maintenance, long-life materials
- Reuse organic debris from clearing operations on site in composting operation
- Use local building materials when available
- Use natural materials
- Incorporate a recycling program to limit construction and building waste
- Adaptively reuse existing, historic buildings as appropriate

Economics

- Formulate a business plan that correlates with other programmatic objectives
- Utilize a donation platform
- Charge fees for certain visitation privileges such as field trips or workshops/classes

Conclusion: Systems Establishment and Maintenance

For the Athens Land Trust, the vision planning process represents a step toward realizing the goals of successful programmatic development and management at Williams Farm in Athens, Georgia. After analyzing and addressing the potential operation for development and management at the site, it is clear that the recommended strategies are connected by a holistic approach. *Production, Education, and Sustainability* are the objectives by which the vision for Williams Farm is divided, but diversity in development and management should be shaped through a whole-farm experience. Also, it is important to understand that "the needs of a site during the early months and years of establishment vary greatly compared to the needs of the system over decades and centuries."[42] In essence, all of the

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[41] Clark County, Washington. *78th Street Heritage Farm Master Plan.* April 2010. Prepared by Clark County, Washington. 15 February 2014. < http://www.clark.wa.gov/farm/documents/MasterPlan2010.pdf>

[42] Falk, Ben. *The resilient farm and homestead: An innovative permaculture and whole systems design approach.* Chelsea Green Publishing Company, 2013: 31.

recommendations made in this plan help to demonstrate the nature of this projects own connectedness and communication. These principle strategies should help the Athens Land Trust to have a programmatic and management vision when developing Williams Farm into the future.

Principal Strategies:[43]

- Vary Williams Farm programmatic opportunities, but maintain holistic approach
- Be adaptive to dynamic processes that will ultimately happen at William Farm
- Utilize all resource potential
- Manage for fiscal responsibility
- Hire employees committed to overarching mission of both Williams Farm and the Athens Land Trust
- The overall resilience of Williams Farm is directly tied to diversity, connectivity, manageability, and sustainability.
- Engage with the community
- Human management in the form of time, motivation, labor, and awareness is the primary limiting factor that is a key factor to success

[43] Falk, Ben. *The resilient farm and homestead: An innovative permaculture and whole systems design approach*. Chelsea Green Publishing Company, 2013: 32-40.

References

"Athens Land Trust." *Athens Land Trust*. N.p., n.d. Web. 22 January 2014. <http://www.athenslandtrust.org/>.

"Athens, GA, USA Climate Graphs." Climate Graph for Athens, GA, USA. N.p., n.d. Web. 13 February 2014. <http://www.athens-ga.climatemps.com/graph.php>

Benham, Heather, Personal Interview, 22 January 2014

Berry, Wendell. "The pleasures of eating." *Cooking, eating, thinking: Transformative philosophies of food* (1992): 374-379.

Brender, E. V. "Impact of past land use on the lower Piedmont forest." *Journal of Forestry* 72.1 (1974): 34-36.

"Cecil Series." Cecil Series. N.p., n.d. Web. 10 March 2014. <http://urbanext.illinois.edu/soil/st_soils/nc_soil.htm>

Clark County, Washington. *78th Street Heritage Farm Master Plan*. April 2010. Prepared by Clark County, Washington. 15 February 2014. <http://www.clark.wa.gov/farm/documents/MasterPlan2010.pdf>

"Community Agriculture." *Athens Land Trust*. N.p., n.d. Web. 22 January 2014. <http://www.athenslandtrust.org/>.

Falk, Ben. *The resilient farm and homestead: An innovative permaculture and whole systems design approach*. Chelsea Green Publishing Company, 2013.

"Food Systems Planning." *American Planning Association*. N.p., n.d. Web. 26 January 2014. <https://www.planning.org/nationalcenters/health/food.htm>

Gallant, Andre. "New urban farm and ag school planned for North Ave. neighborhood." Athens Banner-Herald [Athens, GA] Published: 10 August 2013. Accessed via web: 24 March 2014. <http://onlineathens.com/local-news/2013-08-10/new-urban-farm-and-ag-school-planned-north-ave-neighborhood>

Georgia State Climate Office, Driftmier Engineering Center, University of Georgia "Climatology of the Georgia Piedmont." Spring, 1998, 98-03a. Web. 4 March 2014. <http://www.rivercenter.uga.edu/education/summit/general/climate/piedmont.pdf >.

Graymore, M. M., Sipe, N. G., & Rickson, R. E. (2008). Regional sustainability: How useful are current tools of sustainability assessment at the regional scale? Ecological Economics, 67(3), 362-372. doi:10.1016/j.ecolecon.2008.06.002

"Growing Gardens | Cultivating Community through Urban Agriculture." N.p., n.d. Web. 10 March 2014. <www.growinggardens.org>

Hylton, Christina, Personal Interview, 27 February 2014

Mathes, Lara, Personal Interview, 10 February 2014

"Piedmont Ecoregion." *Georgia Department of Natural Resources*. N.p., n.d. Web. 24 February 2014. <http://www1.gadnr.org/cwcs/PDF/11_Piedmont.pdf>

PLANNING STAFF REPORT PRELIMINARY PLANNED DEVELOPMENT. N.d. CASE NUMBER PD-2013-10-2135 481 & 482 RUTH STREET / 215 NORTHSIDE DRIVE NOVEMBER 7, 2013. Athens, GA.

"Planning & Zoning 101." *Athens - Clarke County*. N.p., n.d. Web. 15 Apr. 2014. <http://athensclarkecounty.com/DocumentCenter/Home/View/325>

Portland, Oregon. *Beech Park Master Plan*. 2008. Prepared by Portland Parks & Recreation. 3 March 2014. <http://www.portlandoregon.gov/parks/article/469518>

"Rezoning and Planned Developments." *York County, South Carolina*. N.p., n.d. Web. 15 Apr. 2014 <https://www.yorkcountygov.com/departments/PlanningAndDevelopment/planning/Rezoning>

SafeOrganics Blog. "The 7 Best Cities for Organic Food." Safe Organics Food for Thought. Safe Organics Online Store, 29 Nov. 2013. 12 January, 2014. <http://blog.safeorganics.com/>

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. 25 February 2014. <http://websoilsurvey.nrcs.usda.gov/>

United States. Agricultural Stabilization and Conservation Service. Aerial Photography Division. Clarke County, 1938, 1951, 1967, 1980. University of Georgia Libraries Map Collection, Athens, Ga. < http://dbs.galib.uga.edu/gaph/html/clarke.html>

"U.S. Census Bureau, 2000-2010 American Community Survey." Retrieved 12 April 2014. <Factfinder.census.gov>

U.S. Environmental Protection Agency. (2011). Urban Farm Business Plan Handbook. Partnership for Sustainable Communities. 14 January, 2014. <www.epa.gov>

Zenger Farm. Growing Zenger Farm. 2010. Prepared by Friends of Zenger Farm, the City of Portland Bureau of Environmental Services, Ecotone, Portland State University, and PLACE. 24 February 2014. <www.growingzengerfarm.com>

"Zenger Farm." *Zenger Farm*. N.p., n.d. Web. 10 March 2014. <www.zengerfarm.org>

Appendix A: Case Studies

Case Study: Zenger Farm, Portland, Oregon

The Zenger Farm in Portland is a successful model for developing a community farm that focuses on local agriculture, education, and sustainability based in an urban environment. (Figure 27) The farm was initially purchased by the City of Portland Bureau of Environmental Services in 1994 to preserve and promote land conservation and environmental stewardship in the area. As it was and still is, the soil was very fertile from years of healthy agriculture by the former owners, and the farm quickly evolved into an urban connection to local food production as a working landscape and public open space. From a programmatic standpoint, Zenger Farm has established a great model for Williams Farm and the Athens Land Trust to glean for its own development. The Zenger Farm is actively maintained as a diversified agricultural operation, specializing in vegetable and livestock production without the use of petroleum-based chemical. (Figure 28) The farm sells its product through local outlets, including a Community Supported Agriculture (CSA) program, to local restaurants, and through a farmers market. This direct connection to its intended target is of similar interest to the mission of Williams Farm and the Athens Land Trust. The livestock operation is small in scale, but works well in its intention to add diversity to the farm and draw interest from the community. The livestock program includes a small flock of laying hens managed for eggs, a small apiary intended for pollination and honey production, and vermiculture habitation for composting, and a seasonal turkey flock for meat. These limited animal-

Figure 27: Logo by permission from Zenger Farm

Credit: http://www.zengerfarm.org/

based operations help to minimize impact and noise in the urban setting, but also connect the community to an important component of agriculture.

Figure 28: Row cropping in an urban setting. Photo by permission from Zenger Farm. Credit: http://www.zengerfarm.org/

Another mission of Zenger Farm is to provide a place-based education that the community can interact with and become more connected with their local food system. The farm offers a variety of educational programming that the Williams Farm would be able to implement to align with the objectives of the Athens Land Trust. In association with production, Zenger Farm offers a multi-faceted internship as part of the farm operations crew. This allows an individual or two to be part of the production process and learn what it takes to run a successful agricultural operation. Other educational opportunities include farm camps and field trip openings, where children are exposed to a farm experience they might not otherwise be able to access. At Zenger Farm, these experiential programs allow kids to get their hands dirty and learn about the importance of such a landscape. And finally, workshops open to the public are held on site to engage different groups and develop certain skills.

Zenger Farm is a well-developed urban agricultural operation that has taken on a diverse array of programmatic chapters. Its mission of agriculture, education, and sustainability is exemplary for the Williams Farm project and the Athens Land Trust. There are also many programmatic components that

could be similarly implemented. Zenger Farm proves relevant in developing a vision for the future of Williams Farm.[44]

Case Study: Growing Gardens, Boulder, CO

Growing Gardens, based in Boulder, Colorado has developed into one of the most successful urban agriculture programs in the country. (Figure 29) The organizations focus "is to enrich the lives of [their] community through sustainable urban agriculture. Growing Gardens envisions people experiencing a direct and deep connection with plants, the land and each other. Through its many gardening-based programs, Growing Gardens strives to reach gardeners and would-be gardeners of all ages to work alongside the organization and build community through urban agriculture."[45]

Figure 29: Logo by permission from Growing Gardens. Credit: http://www.growinggardens.org/

The programs that Growing Gardens has developed, and the means by which they manage their operation and landscape seem to have great relevance to Williams Farm. Similarly to Williams Farm and Athens, Growing Gardens operates its programs on a property only a mile or so away from downtown Boulder. This local proximity connects the project to the community very easily, making programmatic operations run with much more success. Also, community events are held on the property with great success in capturing and connecting people to the agrarian setting.

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[44] "Zenger Farm." *Zenger Farm*. N.p., n.d. Web. 10 March 2014. <www.zengerfarms.org>
[45] "Growing Gardens Mission." *Growing Gardens*. N.p., n.d. Web. 10 March 2014. <http://www.growinggardens.org/mission>

The production aspect at Growing Gardens is managed by a staff member, but is actually driven by youth-oriented operation. Each season, "Youth invest their time and energy in organic gardening and giving back to the community while developing their leadership and job skills."[46] From and educational standpoint, Growing Gardens hosts adult classes, children's field trips, children's summer camps, after-school events, and more. The adult classes range in topic and length, and different series are structured to support both the beginner and advanced knowledgebase. Children's involvement in the Growing Gardens is "engaging, hands-on and will enhance elementary science curriculum!"[47]

Like Zenger Farm, Growing Gardens is a well-developed urban agricultural operation that thrives with the community support in Boulder. Its organization is exemplary for the Williams Farm project and the Athens Land Trust. Again like Zenger Farm, there are also many programmatic components that could be similarly implemented. Growing Gardens in Boulder, Colorado, a similar college town as Athens, proves relevant in developing a vision for the future of Williams Farm.

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[46] "Cultiva." *Growing Gardens*. N.p., n.d. Web. 10 March 2014. <http://www.growinggardens.org/the-cultiva-youth-project>

[47] "Childrens Field Trips." *Growing Gardens*. N.p., n.d. Web. 10 March 2014. <http://www.growinggardens.org/childrens-field-trips>

Appendix B: Food Systems Planning Brochure

Planning a Healthy, Sustainable Food System

The American Planning Association's **Planning and Community Health Research Center** is dedicated to strengthening the connection between urban, regional and rural planning and community health. The Center engages in collaborative, multidisciplinary research; education and outreach activities; and policy development work aimed at addressing today's pressing health issues (such social inequities, physical inactivity, poor food access) through urban, regional and rural planning.

This brochure provides an overview of APA's resources, publications, and activities related to food system planning.

What is food system planning?

Planners play an important role in the development of healthy, sustainable local and regional food systems to support and enhance the overall public, social, ecological, and economic health of communities. Community food system planning is the collaborative planning process of developing and implementing local and regional land-use, economic development, public health, and environmental goals, programs and policies to:

1) Preserve existing and support new opportunities for local and regional urban and rural agriculture;
2) Promote sustainable agriculture and food production practices;
3) Support local and regional food value chains and related infrastructure involved in the processing, packaging, and distribution of food;
4) Facilitate community food security, or equitable physical and economic access to safe, nutritious, culturally appropriate, and sustainably grown food at all times across a community, especially among vulnerable populations;
5) Support and promote good nutrition and health, and;
6) Facilitate the reduction of solid food-related waste and develop a reuse, recovery, recycling, and disposal system for food waste and related packaging.

PLANNING & COMMUNITY HEALTH RESEARCH CENTER
http://planning.org/nationalcenters/health

American Planning Association
Making Great Communities Happen

WEBPAGES

Planning & Community Health Research Center Homepage
http://www.planning.org/nationalcenters/health/

Food System Planning
http://www.planning.org/nationalcenters/health/food.htm

Access to Healthy Food
http://www.planning.org/nationalcenters/health/food.htm

PUBLICATIONS

Community and Regional Food Planning (PAS Memo, Sept 2007),
http://www.planning.org/pas/memo/2007/sep/index.htm

Farmland Preservation (APA Education CD-ROM)
http://www.planning.org/apastore/Search/Default.aspx?p=3419

Food Systems Planning (PAS Essential Info Packet 16)
http://www.planning.org/pas/infopackets/pdf/EIP-16.pdf

Old Cities Green Cities: Communities Transform Unmanaged Land (PAS Report 506/507)
http://www.planning.org/apastore/Search/Default.aspx?p=2420

A Planners Guide to Community and Regional Food Planning (PAS Report 554)
http://www.planning.org/apastore/search/Default.aspx?p=3886

Planning Magazine, The Food Issue (August/September 2009)
http://www.planning.org/planning/open/aug/

Policy Guide on Agricultural Land Preservation (APA Policy Guide)
http://www.planning.org/policy/guides/adopted/agricultural.htm

Policy Guide on Community and Regional Food Planning (APA Policy Guide)
http://www.planning.org/policy/guides/adopted/food.htm

Regulating Temporary Summer Uses (PAS Essential Info Packet 9)
http://myapa.planning.org/APAStore/Search/Default.aspx?p=3846

QuickNotes: Food Systems Planning
http://www.planning.org/pas/quicknotes/pdf/QN24.pdf

Zoning for Public Markets and Street Vendors (Zoning Practice, February 2009)
http://www.planning.org/zoningpractice/2009/pdf/feb.pdf

Zoning for Urban Agriculture (Zoning Practice, March 2010)
http://www.planning.org/zoningpractice/2010/pdf/mar.pdf

INTEREST GROUPS

Food Interest Group (FIG)
FIG is a member lead and initiated group of practicing planners, students, and professors interested and engaged in food system planning practice at the local, regional or state levels.

CURRENT PROJECTS

Community-Based Brownfields Redevelopment Strategies Workbook (2006-present)
http://www.planning.org/research/brownfields/index.htm
With funding from EPA, the Planning & Community Health Research Center is developing an education and training product that community development corporations, organizations, and residents across the country can use to support the active involvement of their communities in brownfields redevelopment.

Urban Agriculture and Resilient Cities (2009-present)
With funding from EPA and in collaboration with the Center for Resilient Cities, and MetroAg: Alliance for Urban Agriculture, the Planning & Community Health Research Center is developing a Planning Advisory Service Report on the role of planning practice and local government policies in developing and supporting urban and peri-urban agriculture.

Planning for Food Access (2009-present)
http://www.planning.org/research/foodaccess/index.htm
With funding from Healthy Eating Research, a National Program of RWJF, the Planning & Community Health Research Center will identify and evaluate food access goals in comprehensive and sustainability plans across the country and manage the development of a report for policymakers that identifies best practices in planning for food access.

Planning Healthy Communities Forum (2009-present)
http://planninghealthycommunities.ning.com
The Planning Healthy Communities Forum is an online public, social networking forum centered on planning and community health. It provides a central clearinghouse of information and an electronic meeting place for all stakeholders interested in topics related to healthy, sustainable communities, including air quality, brownfields, climate change, environmental justice, food systems, health impact assessments, housing choice & affordability, parks, open space & recreation, schools, social equity, transportation alternatives, urban design, and water quality.

For more information about the Planning and Community Health Research Center, contact Kimberley Hodgson at khodgson@planning.