Urban Agriculture in Atlanta - Saving Grace or Pipe Dream?
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Question Presented – Would urban agriculture be a viable option in Atlanta especially in light of the Tri-State Water Wars, and what would be the obstacles and benefits from implementing a large regional policy including urban agriculture as a planning element?

Urban agriculture is most popularly defined as the growing, processing, and distribution of food and other products through intensive plant cultivation and animal husbandry in and around cities. According to the United States Department of Agriculture (USDA), at least fifteen percent of the world’s food is grown in urban areas. Presently, about eighty percent of America’s population is located in urban areas, but according to the Community Food Security Coalition’s North American Urban Agriculture Committee these areas only produce about five percent of their needed food.

Urban agriculture can be a useful tool when dealing with food insecurity and lean economic times. Food insecurity is defined as “limited or

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uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.”

This paper takes an in depth look at the applicability of urban agriculture to the Atlanta metropolitan area, its legal implications, and economic and social benefits that could be drawn from a program that implements urban agriculture on a wider regional level. Additionally, there is a discussion on the effects that urban agriculture may have in regard to the Tri-State water war among Alabama, Florida, and Georgia.

I. Introduction – Atlanta as a field ripe for sowing

Atlanta is known as the poster child for sprawling and inefficient land use development. With three major interstate highways transecting the city and an interstate by-pass highway encircling it, there is no question that Atlanta is largely dependent upon personal automobile transportation. Coupling the extensive interstate system with a lack of natural boundaries, Atlanta has the capability to spread into Alabama and to the Atlantic Coast. This capability has allowed Atlanta to overpower its actual jurisdictional

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6 The Tri-State Water War includes Alabama, Florida, and Georgia and involves the flow rates and quality of the Apalachicola-Chattahoochee-Flint (ACF) and Alabama-Coosa-Tallapoosa (ACT) river basins as they flow through the three states.
boundaries and seep into the surrounding counties, creating a metropolitan
region that encompasses ten counties.\textsuperscript{7}

The seepage of Atlanta growth into a ten county area has also placed
higher burdens on the local resources. One of the most notable burdens has
been on the water systems throughout northern Georgia – the Apalachicola-
Chattahoochee-Flint (ACF) and Alabama-Coosa-Tallapoosa (ACT) river
basins. For the past twenty years Alabama, Georgia, and Florida have been
fighting in court about the proper appropriation of water usage and flows
for these rivers that originate in Georgia and flow through the other states
on their way to the Gulf of Mexico. Most recently, on July 17, 2009, District
Court Judge Magnuson ruled that the three states would be allowed a three
year stay period in which they could negotiate amongst themselves and
request congressional approval. The publicity surrounding the Tri-State
Water Wars and the latest court mandated developments over the
Apalachicola-Chattahoochee-Flint (ACF) and Alabama-Coosa-Tallapoosa
(ACT) and ACF water basins has made national news.

In theory, urban agriculture can help many cities, like Atlanta, address
some of their modern day problems. Urban agriculture can increase
greening initiatives in metropolitan areas by providing extra green space. It

\textsuperscript{7} According to the Atlanta Regional Commission, the ten core counties of the Atlanta region
include Cherokee, Clayton, Cobb, Dekalb, Douglas, Fayette, Fulton, Gwinnet, Henry, and
Rockdale.
can also provide high quality food to low income or food insecure areas.\(^8\)
The availability of local food also decreases the amount of energy needed to transport food to serve that population center. Locally grown food can also revitalize local economies and neighborhoods by cleaning up and employing empty lots and residents in agriculture related ventures.

The current economic situation has been difficult throughout the nation, but has been especially felt in Atlanta. The increase in foreclosure rates have led to a decrease in property tax revenue for local governments. In addition, the Water Wars between Georgia, Alabama, and Florida have brought the nation’s attention to a very large problem – Atlanta doesn’t seem to have a sufficient water source to sustain its current population in times of drought. How will Atlanta continue to grow and could urban agriculture be one of the many solutions to the problem?

**II. Legal Implications**

There are several existing legal implications that will come into play by starting and promoting urban agriculture. Each of the following should be thoroughly examined by individuals before embarking in urban agriculture, though the applicability of each will be largely determined on a case-by-case basis. For instance, those wishing to simply augment their own food supply

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\(^8\) Food insecure is defined as limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways. Economic Research Development/USDA, “Food Security in the United States: Measuring Food Security” http://www.ers.usda.gov/Briefing/FoodSecurity/measurement.htm#and (Last accessed November 21, 2010).
will not have to consider the for-profit tax implications, but will have to abide by all local zoning regulations allowing agricultural activities in urban areas.

A. Legislation

A broad way to implement urban farming is to do so through federal or state legislation. As mentioned below, direct land use regulation and planning is a state and often local function, so any type of federal legislation promoting urban agriculture will likely need to be incentive based or it will likely be found to infringe upon the state’s power. By making the legislation incentive based, potential urban agriculturists can affirmatively choose to participate in the program where it is consistent with local and state regulations. State legislation, on the other hand, can be more forceful depending on how much land use power the local governments have been delegated.

i. Federal Legislation

The most on-point federal legislation is the Greening Food Deserts Act\(^9\), which was introduced into the House of Representatives on March 25, 2010. The purpose of the bill is to increase the emphasis on urban agriculture by creating a new office in the USDA to encourage local agricultural production in urban areas. The bill proposes to amend The Department of Agriculture Reorganization Act of 1994\(^10\) by adding a section

\(^{9}\) Greening Food Deserts Act, H.R. 4971, 111th Cong. (2010).
\(^{10}\) 7 U.S.C. §§ 6920-8922 (2010).
that establishes the Office of Urban Agriculture.\textsuperscript{11} The Office of Urban Agriculture is empowered with the responsibility of coordinating USDA activities related to urban agriculture and nutrition.\textsuperscript{12}

The bill also amends the Food Security Act of 1985.\textsuperscript{13} This section would provide $20,000,000 each fiscal year to fund the USDA’s technical assistance for backyard conservation and community gardening. This money would directly benefit “small subsistence and personal-use agriculture.”\textsuperscript{14}

One of the most progressive portions of the bill is the creation of the Urban Agriculture Outreach Program.\textsuperscript{15} This program would be run by the USDA and would allow eligible entities to qualify for up to $25,000 in microloans or grants to be used in a specific food production program.\textsuperscript{16} This funding provides for several types of projects related to urban agriculture, including the conversion of vacant land into food production areas, creation of infrastructure for community gardens, education regarding small scale agriculture, and other activities that promote agricultural development in communities not traditionally associated with agriculture.\textsuperscript{17}

Currently, the bill is still in the first step of the legislative process at the committee level. It was referred to both the House of Agriculture and

\begin{footnotesize}
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\item Greening Food Deserts Act, H.R. 4971, 111th Cong. §3 (2010).
\item Id.
\item Greening Food Deserts Act, H.R. 4971, 111th Cong. §4 (2010).
\item Id.
\item Greening Food Deserts Act, H.R. 4971, 111th Cong. §10 (2010).
\item Id.
\item Id.
\end{enumerate}
\end{footnotesize}
the House of Education, where it was then referred to subcommittees within each house. If the bill makes it out of the subcommittees and committees, then it will be set in front of the House of Representatives for a vote. Needless to say, the bill is still a long way from becoming an enforceable law.

On the other hand, the Farm Security and Rural Investment Act of 2002 contains some provisions centered on urban agriculture that are currently in effect. The Community Food Projects Competitive Grants Program which is authorized by the act is a program aimed at putting “funds in low income communities and areas of need that struggle with access to healthy, nutritious food.” The competitive grants can be awarded to three different enterprises – community food project, healthy urban food enterprise development center, and innovative programs for addressing common community problems. Recently on November 18, 2010, the USDA announced that more than five million dollars were to be distributed from the program to sixteen different organizations and at least one of those projects was directly promoting urban agriculture; however, none of the programs were based in Georgia.

20 7 U.S.C. § 2034
21 USDA National Institute of Food and Agriculture: “USDA Awards More Than $5 Million in Grants to Support Local Foods Initiatives,”
ii. Georgia Right to Grow Bill

The 2010 legislative session in Georgia brought hope to enthusiasts for urban agriculture when House Representative Bobby Franklin introduced House Bill 842\(^2\) – the Georgia Right to Grow Act. The purpose of the bill was to “protect the right to grow food crops and raise small animals on private property so long as such crops and animals are used for human consumption by the occupants, gardeners, or raisers and their households and not for commercial purposes.”

The bill is short and comprised only of three sections. Section (a) provides definitions of the terms “crops” and “milk goat” which are used in the subsequent sections. Section (b) mandated that “[n]o county, municipality, consolidated government, or local government authority shall prohibit or require any permit for the growing or raising of food crops or chickens, rabbits, or milk goats” in specified areas. These specified areas included home gardens, private residential properties, or community or cooperative land used for these purposes. There are two caveats to these agricultural activities – the growing and raising of crops or animals cannot be used for a commercial purpose, and the total lot size used for these activities cannot be larger than 2.75 acres. Section (c) provides that this legislation

\(^2\) Georgia General Assembly, HB 842 - Agriculture; preempt certain local ordinances; protect right to grow food crops; provisions

does not override either the local governments’ or private citizens’ ability to abate public or private nuisances in accordance with appropriate provisions. This section also specifically states that any private covenants restricting the use of land, such as Home Owner’s Association Rules, are not overridden by this bill.

The Georgia Right to Grow bill was introduced on April 1, 2009 and was sent to the House Committee on Agriculture & Consumer Affairs for review. The Committee narrowly approved the bill, with a vote of seven for and six against on March 11, 2010, but the bill was never placed on the Rules Calendar to be considered for voting by the entire House.

The bill received some publicity in the local Atlanta paper. Those who were in favor of the bill felt it would provide a reliable source of sustainability for individual families, but those who opposed it were mostly concerned with the property values of the surrounding land.

On its face, it appears that if passed, the bill would not have any conflicting issues with Georgia’s home rule power. Georgia’s Constitution gave county and municipal governments the legislative authority to adopt “clearly reasonable ordinances, resolutions, or regulations relating to its

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23 See O.C.G.A. §41-2-4 on the issuance of injunction where nuisance that is about to be erected or commenced will be likely to result in irreparable damage.
24 O.C.G.A §41-2-4(c)(3)
25 Georgia General Assembly, HB 842 - Agriculture; preempt certain local ordinances; protect right to grow food crops; provisions http://www.legis.ga.gov/legis/2009_10/sum/hb842.htm (last accessed November 2, 2010).
property, affairs, and local government.” However, this power is expressly limited when a law passed by the Georgia legislature is in conflict with the proposed local legislation. The Georgia Right to Grow bill specifically limits the ability of local governments to impede with non-commercial farming operations, so long as they don’t arise to the level of a nuisance. Because the constitutional provision provided that the Georgia legislature can override local authority, the Georgia Right to Grow bill should not have any home rule implications.

Additionally, an important distinction should be made concerning the Right to Grow bill and the current Georgia Right to Farm Act. The Right to Farm Act takes away most public and private nuisance actions, except for under certain circumstances that may be brought against existing agricultural facilities when there are changed conditions around the operation.. On the other hand, the Right to Grow bill does not furnish any special protections against nuisance actions to urban agriculture operations.

B. Local Government

Absent any overriding state legislation, local governments may be the most effective mechanism at fostering an environment conducive to urban agriculture operations.

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27 Id.
28 O.C.G.A. §41-1-7 (2010).
29 O.C.G.A. §41-1-7(b)(5)(C)(2010) (detailing that nuisance actions shall be allowed when an agricultural facility or operation becomes a nuisance due to negligent, improper or illegal operation of a facility).
agriculture. First and foremost, local governments have the power to zone the areas within their jurisdiction under the police power which was given to them in the Georgia Constitution.\footnote{Ga. CONST art. IX, § II, cl. IV.} Local governments could use this power as an opportunity to make urban agriculture a universally accepted use throughout their jurisdiction, thus allowing some form urban agriculture on any parcel. The added benefit to making agriculture a permissible use on parcels is that surrounding property owners and the local government still retain their nuisance right of action if the property is maintained in an inappropriate way.

Conservation easements could be another source of providing locations for urban farming. Conservation easements are defined as “a non-possessory interest of a holder in real property imposing limitations or affirmative obligations, the purposes of which include retaining or protecting natural, scenic, or open-space values of real property; assuring its availability for agricultural, forest, recreational, or open-space use; protecting natural resources; maintaining or enhancing air or water quality; or preserving the historical, architectural, archeological, or cultural aspects of real property.”\footnote{O.C.G.A. §44-10-2(1) (2010).} Conservation easements can be created in the same manner that regular easements are created, with the exception that they cannot be created by eminent domain.\footnote{O.C.G.A. § 44-10-3(a) (2010).} By placing an urban agricultural
An easement on a piece of property, the property would not be able to be developed in the future and could provide a locale for urban agriculture plots in perpetuity. Conservation easements can be between private individuals, but more often they are between a private landowner and a nonprofit or governmental organization recognized by the state. Some areas, like the City of Chattahoochee Hills in southwestern Fulton County, have incorporated a complex scheme revolving around conservation easements as a main tool in their comprehensive plan. While these easements do not specifically create urban farming plots, the idea could be used in more metropolitan areas.

Additionally, local governments can utilize the federal Neighborhood Stabilization Program (NSP), which is a program associated with the Housing and Economic Recovery Act enacted in 2008 primarily to address the subprime mortgage crisis. The Act allocated almost four billion dollars to the NSP, which allows state and local governments with extreme rates of foreclosures to apply for grants in order to purchase and redevelop abandoned or foreclosed property. Each government entity that receives

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funding from the NSP can choose what projects to pursue with the money.\textsuperscript{36} The City of Atlanta was awarded slightly over twelve million dollars to employ the NSP within its jurisdiction.\textsuperscript{37} Twenty-five percent of the money must be used in conjunction with the United States Department of Housing and Urban Development (HUD) to provide low income housing, but a portion of the funds can be used for demolishing blighted structures and redeveloping them for community benefit.\textsuperscript{38} Some of these redevelopments could be for community urban agriculture plots, which would be less expensive than rebuilding residential homes in central areas and would provide common greenspace for the residents of the area.

\textbf{C. Federal Taxes}

\textit{i. Income Taxes}

One of the most enticing legal implications for doing urban agriculture may be the associated tax breaks with running a farm. The Internal Revenue Service (IRS) clearly states that in order to qualify for any of the farming tax benefits, one must be in the business of farming, which means one must “cultivate, operate, or manage a farm for profit, either as owner or tenant.”\textsuperscript{39} Given this mandate, a person interested in growing food for their

\textsuperscript{36} US Department of Housing and Urban Development “Neighborhood Stabilization Program Grants” \url{http://hud.gov/offices/cpd/communitydevelopment/programs/neighborhoodspg/} (last accessed November 2, 2010).

\textsuperscript{37} Id.

\textsuperscript{38} City of Atlanta Online “Neighborhood Stabilization Program (NSP)” \url{http://www.atlantaga.gov/government/planning/foreclosure_040709.aspx} (last accessed November 2, 2010).

\textsuperscript{39} I.R.S. Pub 225, pg 1 (2010).
own personal consumption would not be eligible for any tax incentives associated with this provision.

   Assuming an individual would want to farm for profit, any income the person receives related to the operation of the farm (for example, selling of crops, livestock, or custom hire proceeds) would have to be reported to the IRS as taxable income.\textsuperscript{40} Luckily, because the IRS wants to encourage people to be farmers, there are several deductions that someone engaging in for-profit urban agriculture could qualify for.\textsuperscript{41} Schedule F is the appropriate form to fill out if engaged in for-profit farming and details the line-by-line income inclusions and deductions applicable to any farm, including urban farms.

   First, the person would be able to deduct the start-up costs associated with the agricultural business.\textsuperscript{42} Starting in 2010, the IRS allows farmers to deduct up to $10,000 of business start-up costs.\textsuperscript{43} Additionally, the ordinary and necessary costs of operating the farm can be deducted as business expenses.\textsuperscript{44} There are several farm specific deductions that can be applied to the urban agricultural business, but will be largely dependent on the specific farm situation, such as the capital investment in machines which may have to be amortized over a period of years.\textsuperscript{45} In most circumstances,

\textsuperscript{40} I.R.S. Form Schedule F
\textsuperscript{41} I.R.S. Pub. 225.
\textsuperscript{42} I.R.S. Pub. 225, pg. 19.
\textsuperscript{43} I.R.S. Pub. 225, pg 2.
\textsuperscript{44} I.R.S. Pub. 225, pg. 19.
\textsuperscript{45} I.R.S. Pub. 225
urban farmers should be able to qualify for soil and water conservation deductions up to the twenty-five percent ceiling.\textsuperscript{46} These conservation deductions can only be applied when they are consistent with a plan approved by the Natural Resources Conservation Service.\textsuperscript{47}

For those who wish to engage in urban agriculture as a not-for-profit activity, any income realized must be reported as income on Form 1040 and any expenditures associated with it cannot be deducted.\textsuperscript{48} However, there are still some tax advantages even for hobby agricultural enterprises. According to IRS § 183(b), hobby associated expenditures can be deducted from the taxpayers income, but only up to the amount of the total hobby income. The rationale behind this type of deduction is that the IRS does not want to allow for personal use deductions, but has found a way to make an exception when it is associated with some profit producing activities.

\textit{ii. Brownfield Redevelopment Incentives}

Urban areas are often filled with sites that are no longer useable due to concerns about their environmental contamination. These sites are often referred to as brownfields. The Environmental Protection Agency has seen development in brownfields as an opportunity to protect the environment, reduce blighted areas, alleviate development pressure on green spaces.

\textsuperscript{46} I.R.S. Pub. 225, pg 27-30.
\textsuperscript{47} I.R.S. Pub. 225, pg 28. For appropriate conservation programs see www.nrcs.usda.gov/programs. Individual site plans can be obtained by consulting with the NRCS and specific grants for obtaining and implementing these plans are available from the federal government and the 2008 Farm Bill, discussed below.
\textsuperscript{48} I.R.S. Pub. 225, pg 26.
(undeveloped land), and often can result in a two to three percent increase in property values. In order to promote the cleanup and reuse of these areas, in 1997 the Brownfields Tax Incentive was enacted. This incentive allowed tax payers to immediately recuperate the costs incurred for the environmental remediation of qualifying properties in the year they were incurred as opposed to having to amortize them.

The incentive was available for taxpayers that met both the land use and the contamination requirements stated in the bill. The land use requirement states that "the property must either be held by the taxpayer incurring the eligible expenses for use in a trade or business or for the production of income, or the property must be properly included in the taxpayer's inventory." The contamination requirement states that there must be a release or a threat of a release of a hazardous substance at the property. The Act further defines hazardous substances as any substance included in the definition of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. In 2006, the Act was improved to include petroleum as a qualifying contaminant. Unfortunately, this tax incentive was only extended through December 31, 2009 and has

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50 Tax Payer Relief Act of 1997 (PL 105-34). Codified in IRC § 198
expired. It is expected that Congress will re-enact the Brownfield Tax Incentive and will have it apply retroactively to the 2010 tax year.\textsuperscript{56}

Even if the Brownfield Tax Incentive is re-enacted, it may depend on a particular site’s level of contamination and the owner’s financial commitment as to whether the site can or will possibly be remediated to the standards applicable for urban agriculture. Depending on the specific levels of contamination and the types of contaminates on a property, it may not be financially feasible or technologically possible to remediate to a safe level for agriculture. In these situations, properties would likely be better suited for commercial or industrial uses instead.

Unfortunately, not-for-profit farms will not be able to qualify for this tax incentive, even if it is reinstated. In those situations, a landowner may be faced with two choices – either to enter into a for-profit urban farming venture or use containers to avoid contact with the contamination on the property. This second choice may be much more appealing at first, but it may still require some sort of remediation of the property, including the placement of an impermeable clay cap to prevent soil or water contamination from reaching the crops. This may be a more expensive option than most people are willing to incur just to augment their own food supply in urban areas and as a result may discourage people from engaging in it.

Individual tax incentives may not be the most efficient way to encourage the redevelopment of brownfields. On April 22, 2010, the EPA awarded Atlanta two brownfields assessment grants – one grant for petroleum contaminated sites and the other for hazardous substances contaminated sites, totaling $400,000. This grant will be used to conduct up to twenty Phase I and up to seven Phase II investigations as well as community outreach and planning activities. The City of Atlanta estimates that over 950 brownfields exist within its jurisdiction, but this grant money will be targeted in the area of the Atlanta Beltline, which has about 136 brownfields and forty redevelopment areas.

**D. Landowner Property Rights**

Individual property rights will also play an enormous part in the success of urban agriculture. For property owners that want to use their property for farming, so long as the local ordinances allow for it, they will be allowed to utilize their land in that way. In other instances, landowners may not have the knowledge or time to devote to developing their own land into

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57 [http://cfpub.epa.gov/bf_factsheets/index.cfm](http://cfpub.epa.gov/bf_factsheets/index.cfm) (then link Atlanta, City of) (Last accessed November 19, 2010).

58 Phase I is an initial environmental site assessment used as a preliminary tool to develop the possible scope and type of contamination on the site based on physical inspection of the site, historical records, and personal interviews.

59 Phase II is a secondary environmental assessment that requires appropriate samples (usually soil, water, and air) that are used to concretely determine contaminate levels and delineate contamination areas on site.

60 [http://cfpub.epa.gov/bf_factsheets/index.cfm](http://cfpub.epa.gov/bf_factsheets/index.cfm) (then link Atlanta, City of) (Last accessed November 19, 2010).

61 The BeltLine is a 22-mile transit greenway that circles downtown and midtown Atlanta.

agricultural plots. In this situation, an agricultural plot leasing program could be an appropriate solution to making the land productive for growing fruits and vegetables. Prospective urban farmers could rent plots of land from the landowner for agricultural activities for a specified time period – either the growing season of a particular crop or a calendar year. In exchange for the land plots, the urban farmer could either pay the rent in the form of money or as a reasonable share of the produce from the plot of land, much like in a Community Supported Agriculture (CSA) system. Having alternative options for the payment of the lease may be more suitable to meeting the needs of both the farmer and the landowner – they may both choose a payment to consist of a CSA-type share of the crop harvested.

One important aspect in allowing others to farm the land is to draft a contract that specifically details the conditions of the lease. In addition to the period of the lease and the type of payment involved, landowners may be concerned about being held liable for injuries sustained while others are farming the property. In order to assuage those fears, a “hold harmless” clause can be drafted into the lease document that would state that the lessee forfeits any right to sue the landowner with regards to the use of the agricultural plot. The lease should also be certain to contain provisions on what will occur if the farmer or landowner is no longer able to hold up their portion of the agreement.
One of the most uncertain areas with farming other landowners’ properties will be when the landowner is absent and unavailable. In these instances, the property owner may be unreachable to enter into a land lease or agricultural easement on the property. Neighbors or eager urban farmers may attempt to claim the abandoned plot for their own purposes and if the landowner waits past the statutory time period, the current possessors may obtain legal title to the property via adverse possession. However, if the landowner does assert his or her property rights before the statutory time limit, the occupying urban farmer will be left with nothing and could possibly be charged with trespassing.

There may also be some resistance from the general community in regards to urban agriculture because of property values. As mentioned above in the discussion of the Georgia Right to Grow bill, opponents of the bill were mostly concerned with the effect of agricultural plots on the property values of the surrounding areas. Research, however, tends to show that properties within 1000 feet of community gardens experience a positive effect on property values, with increases over time.

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63 In Georgia, the statutory time period for claiming title to real property by adverse possession is twenty years. (O.C.G.A. § 44-5-163 (2010)).
III. Geographic Implications

While any type of agriculture is usually very labor intensive, some geographic areas are inherently more suited for raising crops. Climate, underlying soil and geology composition, water supply, and daily hours of sunlight are all natural factors that can prove to be more important than the actual legal motivations or restrictions.

Approximately twenty percent of soil in Fulton County is described as Urban Land, with the majority of this located within the more developed downtown area of Atlanta. The soil type is considered to be comprised of arent entisols, which is defined as a soil type that does not have a diagnostic horizon (differentiating levels of soil) because they have been deeply mixed by plowing, spading or other methods of moving by humans. In most situations, arents are used for cropland, urban land, or pasture.

One of the main concerns in an urban area is the contamination of the soils and their suitability for growing crops. As mentioned above, if a site needs to undergo environmental remediation, it may be impossible to bring the location into compliance with the various contaminate level maximums mandated by state and federal agencies for agricultural activity. A better alternative is to employ some type of container gardening that would keep...

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66 United States Department of Agriculture, Natural Resources and Conservation Service, Web Soil Survey for Fulton County, Georgia.
68 Id.
the crops alienated from the contaminated soil and water, but would still allow the land’s surface area to be used for agricultural purposes. Container gardens may also be a good alternative in urban areas where the underlying soil is historically not nutrient rich or very arable.

Another important factor is the water supply for the agricultural plot. In instances where residential lots are large and water needs can be met by merely attaching a hose to the residence once a week, it is not a complicated matter. Problems occur when the property is inaccessible to a conventional water spigot or when droughts impose water usage restrictions on areas. When a property is located far away from a spigot, access to the water main may be necessary to supplement the crop with sufficient water during the growing season. This can be a prohibitively expensive cost if the plot to be farmed is small or of poor quality.

Additionally, when droughts happen, no matter if a spigot is near or far, land application of water is usually one of the first uses that is restricted. Installing drip irrigation systems help reduce the amount of water lost to runoff or evaporation and rain catchment systems attached to nearby residences can often supply a year’s worth of supplemental watering if planned appropriately. In many cases, the grey water – water that has been used for purposes such as laundry, bathing, and dishwashing – that is discharged from homes is perfectly suitable for farming purposes. Drip irrigation and rain catchment systems are by far the more economical choice
among the three – drip irrigation kits can be purchased for less than the price of a nice supper for two, and rain catchment systems can be made from a barrel placed under a downspout gutter of a home; both can be installed with little expertise. The grey water system, however, requires a bit more investment as it must divert water flows from different appliances and locations in a home so that they do not comingle with any black water (toilet) systems. Use of these alternative water sources would not only cut down on the amount of money spent on making the urban agriculture site thrive, but would also aid in making people more conscious about their water consumption in general.

Another issue with implementing urban agriculture in the Atlanta area is the actual location of these sites – regardless of the zoning issues discussed above. One of the most obvious sites to locate these urban plots on would be currently empty and undeveloped lots. Additionally, with the increased number of homes entering into foreclosure, many property owners, including the mortgage holders, are refusing to maintain their properties in accordance with local building code ordinances. The result is a blighted home or property that decreases the value of the surrounding neighborhood. These plots could be taken over by the local community, and the structure on the property demolished and used as a community agricultural site.
Additionally, the location of these plots needs to take into account the people who will be farming them, the actual farming process, and the end result of the farming. Locating the plots closer to the residents that will be tending to them will allow easier access and likely more attention and better upkeep of the crops – as would be the case in reusing blighted properties or vacant lots within existing neighborhoods. While implementing a container garden strategy may alleviate the issue of soil quality, other natural considerations need to be taken into account – like amount of sunlight the plot receives and the ability to irrigate the crops. It may make more sense to choose lots that are located in areas where they will receive maximum light in order to grow a variety of crops; plots that receive shorter amounts of daylight may be more constrained in the type of agriculture that will produce a successful crop.

Keeping these urban agriculture plots in areas surrounded by neighborhoods also would keep the supply and fresh produce closer to the consumer. This would decrease the amount of crops that spoil before reaching the ultimate consumers.\textsuperscript{69} The closer proximity would also provide more access to fresh produce and decrease the fuels used in association with bringing traditional produce to large chain grocery stores, thus lessening the community’s carbon footprint as a whole.

\textsuperscript{69} The USDA has compiled information regarding the amount of food that spoils every year since 1970. Every year the unadjusted estimate is more than one hundred pounds of fruit and more than one hundred and fifty pounds of vegetables per person. http://www.ers.usda.gov/Data/FoodConsumption/app/reports/displayCommodities.aspx?reportName=Individual+fruit&id=4#startForm
Another creative option is to use edible plants as non-conventional landscaping in order to increase the agricultural productivity of existing plots of land that would not be farmable in the ways mentioned above. This method is already implemented in Serenbe’s Grange hamlet development. Each home in the development is landscaped with edible berry bushes and herbs that are suited for the area’s soils and climate so there is no requirement for inorganic fertilizers or extra watering.

IV. Social Implications

The social implications of urban farming extend much farther than just creating a local source of food and can be incredibly beneficial to several sectors depending on the creativity of the community. Urban agriculture could aid in the fight against food insecurity, as well as produce a more healthy urban population due to the increased access to fresh fruits and vegetables. A study conducted by the Atlanta Development Authority shows that the City of Atlanta is expected to add over 100,000 people in the next 20 years. Having an intact urban agriculture policy could help in providing local fresh produce for the growing population.

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70 Serenbe is a 1,000 acre development in southwestern Fulton County which has focused on preserving at least seventy percent of the land in a sustainable manner. Serenbe, http://www.serenbecommunity.com/serenbeoverview.html (last visited November 12, 2010).
71 Food Insecurity is defined as a limited or uncertain availability of nationally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways. USDA “Food Security in the United States: Measuring Household Food Security” http://www.ers.usda.gov/Briefing/FoodSecurity/measurement.htm#and (last visited November 12, 2010).
72 Atlanta Development Authority, Pulse of Progress, Volume 6 Issue 10.
Urban agriculture could also create more jobs in the urban centers by allowing people to farm and sell their produce to local establishments. Where appropriate, these urban farmers could organize farmers markets in neighborhoods, which would not only help increase their incomes but would help foster a sense of community in those areas. A greater sense of community could also be achieved through community garden urban agriculture projects, allowing neighbors opportunities to interact while tending to their plots.

Furthermore, urban agriculture would help increase the amount of greenspace in Atlanta, which currently has one of the lowest greenspace percentages of all large cities in the country. Recently Mayor Kasim Reed made a goal for Atlanta to be declared one of the top ten greenest cities in the nation. Part of successfully reaching this goal includes increasing the amount of locally produced food and adding greenspace. Urban agriculture can serve both of those needs as well as provide for a decrease in surface water runoff due to increased vegetation in urban areas.

Additionally, by converting vacant or condemned lots into productive plots, neighborhoods can be revitalized and saved from blight and plummeting property values. In some instances, drug and crime rates are lowered once some sort of urban agriculture is implemented because more

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74 Leon Stafford, Plan seeks to make Atlanta a top ‘green’ city. The Atlanta Journal-Constitution, October 26, 2010.
people are outside in the neighborhood, tending to the crops being grown on the plot.

Urban agriculture can even go beyond serving personal food needs or entrepreneurial pursuits. If urban agriculture is successful in the area and there is an overabundance of produce that cannot be sold or consumed, a gleaning program could be implemented. Currently, Marin County in California boasts one of the most famous gleaning programs, which allows for the aesthetically unsellable produce to be used for other purposes, such as feeding the homeless. The gleaning program from Marin County, California could be imported to other areas in order to provide excess produce to homeless shelters and thus help serve a greater community purpose and cut down on the amount of edible nutritious produce that is wasted.

V. Conclusion – The Water Wars and Urban Agriculture in Georgia

While negotiations continue concerning the Water Wars with Alabama and Florida, Georgia could capitalize on the opportunity to make state-wide changes that would allow urban agriculture to be more easily implemented. Georgia is on a tight time frame to reach an agreement with Alabama and Florida concerning the water flow issues, and if the attempts fail, they will be

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left with Judge Magnuson’s decision to no longer allow the Atlanta metropolitan area to withdraw water from Lake Lanier.

One of the biggest things that Georgia needs to evaluate in the negotiations is the growth plan for the Atlanta area in the future. Judge Magnuson states in his opinion that the “[l]ocal governments allow unchecked growth because it increases tax revenue, but these same governments do not sufficiently plan for the resources such unchecked growth will require.”76 Urban agriculture may be one of the ways that the Atlanta area could decrease the pressure on the ACF river basin.

One possibility to integrate urban agriculture into the solution for the Water Wars is to temporarily decrease the amount of land that is allowed to be farmed in the southwestern Georgia agriculture area located on the Flint River. The farmers would likely need to be paid a subsidy or some type of just compensation for the temporary taking of their land. The time frame of the farming moratorium should be long enough for farmers affected by the mandate to install more water conservation friendly technology for their land. This technology is expensive, but has been shown to drastically improve the efficiency of water used in large scale farming operations.77 During the decrease of productivity and while the new technology is being installed, urban agriculture in the Atlanta area could make up for any shortage in crops that are incurred. Clearly urban agriculture will not be

76 In re Tri-State Water Rights Litig., 639 F. Supp. 2d 1308, 1355 (M.D. Fla. 2009)
77 CHATTahoochee – FROM WATER WAR TO WATER VISION (Red Sky Productions, 2010).
able to completely replace the crops grown in that area, but it may be able to alleviate enough of the tension between the three states in order for an interstate agreement to be reached and could be seen as a very big step towards good faith negotiation on Georgia’s behalf.

Local government and home rule may have set a steep hill to climb in regards to Georgia’s ability to institute state-wide mandates for more sustainable development, but in light of the impending shut off of water from Lake Lanier, it may be the perfect time to do something more creative to meet the needs of the growing metropolis and of Alabama and Florida. Additionally, those who are against urban agriculture because of the fear of their property values declining may find that urban agriculture is the lesser of two evils when left with the court mandated water flow option.

Georgia’s unique position in the Water Wars may be the perfect catalyst for an overhaul to the legal framework for urban agriculture, but other states and cities may be able to implement some of these ideas if Georgia is successful. There is already sufficient federal legislation to begin small scale urban agricultural programs throughout the nation, and perhaps if Georgia adopts a scheme that involves urban agriculture to deal with the Water Wars it will have enough publicity around it to catch on in other areas.

In Georgia, it seems the conditions are favorable for urban agriculture to take root. The mayor of Atlanta has launched a new greening initiative and the impending changes with the Water Wars may be the perfect setting
for a proposal for urban agriculture to thrive. One thing is for certain, a creative and nonconventional solution will be necessary to avoid a draconian ruling in the Water Wars saga and urban agriculture may be a component of it.