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Governmental Fragmentation and Rural Sprawl
Case Studies Examining Governmental Structure and
Limited Public Choice

A Dissertation
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DEDICATION

This dissertation is dedicated to my father, for his support throughout my educational and professional career and his understanding as I researched a case-study in which he was an integral part of the story; to my wife and children for their patience and sacrifice; to those in my community who choose to do what is right by insuring that Marion County grows intelligently by protecting its natural assets.

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ABSTRACT

Marion County, Tennessee was formed in 1817 and currently all seven cities within its boundaries combined account for 34,202 (thousand) acres. Within a short period time, Marion County will experience over 40,000 (thousand) acres of traditional forestland being converted to private, rural residential development. These former forested tracts are all located in remote areas of the county with very few existing public services. The intent of this dissertation is to demonstrate how government structure and funding mechanisms result in a type of rural sprawl that is rapidly fragmenting thousands of acres throughout Tennessee and the United States as timber companies sell their forest lands to private developers. This dissertation contends that local governments in Tennessee are not designed by state statute to address the public need of open space and recreation; nor does their fragmented institutional structure result in well-planned decisions related to growth. As a result, private development interests appear to determine how land is divided and utilized in the rural counties of Tennessee and specifically the South Cumberland Plateau in Tennessee.

This dissertation will explore how devolution has created a climate whereby local officials support and encourage rural growth for the rational purpose of revenue production, without considering the potential negative consequences of unplanned growth. The first case study of this dissertation outlines a series of actions taken by various governmental actors in response to a recent drought situation where towns were running out of drinking water, while rural water lines were being extended to new development. The second case study chronologically outlines specific actions

taken by governmental units to consider whether to sell recreation land for private development. The third case study chronologically outlines a series of actions taken to limit sprawl through conservation with the support of local officials. Each case study occurred simultaneously in one county with interrelated governmental actors and events.

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Chapter I

Theories of Collective Action and Rural Sprawl on the South Cumberland Plateau of Tennessee

This dissertation will examine whether specific case studies of rural sprawl are effectively explained by theories of collective action, suggesting that governmental agencies are systematically designed to encourage decisions favoring revenue production over other important public needs. This dissertation contends that rural sprawl is both encouraged and financed through public funds by way of rural water line extensions, limited resources and functional capacity to protect open space, federal and state grants for infrastructure upgrades and a myriad of public economic development agencies working to promote growth without considering its potential negative consequences.

Media outlets throughout the United States and around the world cover stories of growth and sprawl each day, attempting to provide citizens with greater knowledge of what is occurring in their surroundings; however little is known about how our fragmented system of government complicates our understanding of who is responsible for growth decisions. For the purposes of this study, rural sprawl is defined as a collective problem resulting from both public and private decisions to allow rural residential growth to occur anywhere the private market has demands.

Defining Rural Sprawl

Rural residential growth is one of the most provocative issues facing many rural and urban-fringe counties throughout the United States; yet little is understood about what choices are available to citizens to influence its impact on natural

surroundings. Land fragmentation by way of rural residential development provokes several competing views among local, state and federal leaders regarding its' merits as a positive form of growth. While many argue that rural residential development has long-term negative consequences, others suggest this type of growth serves as a legitimate economic stimulus to rural areas creating property tax revenue to fund much needed local services.

As the policy debate on the merits of rural residential development continues, much of the academic literature has conceptualized the subject under the negative heading of "rural sprawl". According to Tom Daniels with the Department of Planning and Geography at the State University of New York at Albany, "Rural sprawl takes two forms. The first is low-density residential development that is scattered outside of villages, suburbs, and smaller cities. The second type of rural sprawl is commercial strip development along arterial highways leading into and out of villages, suburbs, and smaller cities (Daniels 1999, pg. 1)". Researchers from the U.S. Department of Agriculture define rural sprawl counties as those with high rates of housing and population growth, a high percentage of houses not served by public wastewater systems, a high mean travel time to work and a high percentage of commuters who drove to work alone (Reeder, Brown, McReynolds, 2001). To distinguish this research, the author has avoided analyzing rural sprawl defined by population indicators. The rural sprawl currently occurring on the South Cumberland Plateau of Tennessee is more aptly described as speculative land fragmentation where private individuals are buying mountain land in the region but not building homes. There is significant research on the type of growth and development driven by rapid

migrations of individuals to a given region; however less is understood about the type of rural sprawl that fragments thousands of acres of rural forests as timber companies sell their large land holdings to developers in the business of selling land, not homes.

For the purposes of this study, the term rural sprawl will be defined as follows: “sub-divisions of traditional recreation and forestland that are not adjacent to existing municipalities and services.” The sub-division of land is the process by which plat maps are filed in the local court house, creating multiple smaller parcels of land out of an original contiguous larger parcel. Traditional recreation and forestland include those large tracts of land where most economic uses included timber production, hunting leases, or individually-owned recreation land not intended for residential use. Therefore, the topic of this dissertation is not about commercial strip malls or residential development contiguous to existing municipal limits and services. The intent of this dissertation is to more clearly describe the beginnings of a type of rural residential development that is rapidly fragmenting thousands of acres throughout the United States as timber companies sell forest land to private developers. It is important to outline specifically how government plays a significant role in allowing for this process to occur and this thesis contends that local governments in Tennessee have not institutionally evolved to address the public needs of open space and wise planning of water resources.

Each level of government plays a separate and often un-coordinated role in allowing large timber tracts to “be developed” as they do. The case studies for this dissertation are taken from Marion County, Tennessee, geographically located on the South Cumberland Plateau, approximately thirty miles West of Chattanooga, TN.

The reason for choosing this county is due to its recent conversion of 40,000 acres of timber land to new rural residential development. Many of the local decisions influencing this growth have created much debate about its public benefits; for example government officials responsible for funding local services suggest that retirement communities are cost effective, since most of the new residents will not have children in the local school system, a significant lost component for local governments. The case studies outlined in this dissertation illustrate how federal, state and local agencies engage in rural development projects and do so without a planning process that first defines whether or not it is in the public interest.

The first case study highlights how poor water planning and un-coordinated county planning processes resulted in a situation where entire communities faced serious water shortages due to an unprecedented drought in 2007, while new water lines were being extended to new developments with no current residents. The second case-study involves the historical events leading to the disbursement of publicly-owned TVA recreation land for private residential development without adequate consideration of water, sewer or open space needs. The third case study demonstrates how large tracts of forest in remote regions of the county, traditionally used for outdoor recreation, were purchased for development and sub-divided, apparently without consideration for open space protection or adequate water supply to service developments.

By focusing on a few specific instances of rural sprawl, insights may be gained that have wider implications for future research and hence future policy changes. Rural large tract developments occurring on the South Cumberland Plateau

are often hidden from the public eye, located in remote areas and not contiguous to existing towns with infrastructure. These developments often have gated private roads stretching more than 5 miles at a time over thousands of acres, with average lot sizes ranging from 2-7 acres and marketed as “mini-farms”, on land that was once a large contiguous forest tract (See Table A-5, A-6, and A-7 in Appendix). These developments are not typical of the traditional type of rural sprawl on the fringes of existing municipalities; the phenomenon occurring on the South Cumberland Plateau of Tennessee covers thousands of acres with miles of roads, in some cases 15-20 miles from existing small municipalities (See Map A-1 in appendix).

Theories of Governmental Decision-Making and Growth

Historically the literature has included several competing models of federalism - dual federalism, cooperative federalism, pragmatic federalism, non-centralized federalism and national-centered federalism. However, a more recent conceptual model of federalism, public choice, offers the most useful insight for the following study. Public choice blends understanding of rationality with concern for the rules in which systems are organized and views individuals as self-interested decision-makers operating within a complex system of agencies, institutions, and governments designed to influence their decisions with rules and structural constraints (Rosenthal and Hoefler, 1989). This dissertation explores how fragmented governmental decision-making leads to poorly planned policy outcomes.

Another important conceptual understanding of the impact of federalism on decision-making is the increasing devolution of funding for government services.

According to a recent study on the fiscal relationship among federal, state, and local governments (excluding Social Security, Medicare, net interest on the federal debt, and defense), 80 percent of our domestic spending is administered at the state and local level (Sawicky, 1999). A second tier of devolution is illustrated by state-aid to local governments as a proportion of total state spending, which decreased from 33 percent in the late 1970's to approximately 24.3 percent in 2000 (Census of Government Finances 2002). However, studies of contemporary intergovernmental relations have failed to consider the impacts of devolution on the decision-making process at the local level.

One of the classic models of understanding the allocation of funding among governments is Charles Tiebout's 1956 model of inter-local competition, based on the assumption that municipal officials compete for citizens and taxes. He argues that citizens shop among cities for services, which is made possible by spatial mobility and numerous local governments (Tiebout, 1956). Subsequently, Paul Peterson, the author of *City Limits* (1981) utilized Tiebout's theory to argue that local officials make decisions with a strategic eye towards revenue generation in order to protect the economic well-being of their community. This theoretical line of reasoning would suggest that high-end rural sub-divisions mostly consisting of retirees with no children could be perceived as cost effective for rural local officials. The intent of this dissertation is to demonstrate how government policies and fragmented local government structures influence the conversion of thousands of acres of timberland to rural residential development in the name of economic progress. An important oversight throughout much of the academic and policy literature on local

governments is the propensity to define local government as a single entity; the proverbial “they” when referring to local governments creates a misnomer about the extent of fragmentation in the local decision-making process. This dissertation will describe how the institutional decision-making structure in a single rural Tennessee county influences decisions resulting in rural sprawl.

While analytical studies of government have long understood that federalism is an important variable when examining policy outcomes, the policy literature has failed to construct adequate conceptual models of understanding how organizational structure influences decision-making. Dale Krane points out the need to “link components of federal organization to the formulation, adoption, or implementation of policy (Krane, 1993 pg. 186)”. This dissertation will explore how federal, state and local institutions influence rural development through grants and loans to expand water utility capacity and sometimes fund water line extensions. In addition, state statutes determine the level of involvement local governments have in the development process through enabling legislation related to the regulation of the sub-division of land.

Marion County, TN, the subject of this dissertation, has a planning commission, as do 71 of 95 counties in Tennessee that must approve sub-division plats that meet a minimal set of standards related to the construction and installation of basic infrastructure such as roads (Tennessee Department of Economic and Community Development, 2007). Under Marion County’s current planning regulations, development is permissible in any areas so long as the sub-division requirements are adhered to. Unlike other states that have policies regulating and

discouraging development in environmentally sensitive or unique geological areas such as the Cumberland Plateau, Tennessee currently has no special consideration for unique landscapes.

In Marion County, as with nearly half of all counties in Tennessee, zoning ordinances are not in place that specify where growth should occur in areas outside municipal planning regions. In addition, there are 24 counties in Tennessee that have no planning commission, plat approval process, or sub-division regulations at all (Tennessee Department of Economic and Community Development, 2007). The type of growth defined in this case study is located in the rural areas of the county and not subject to municipal zoning ordinances. Although current efforts are underway to update county sub-division regulations, recent developments encompassing approximately 12,000 acres have occurred without a public water system in place.

Why is this important? Because, in one county alone, as this dissertation will illustrate, over 40,000 acres of former commercially-owned timberland are being sold for private residential development in a 3-5 year time period. As timber companies continue to divest their land assets throughout the United States, these case studies will most likely repeat themselves many times over. While many rural counties have limited institutional capacity or political will to regulate and plan for growth, state and federal grants and loans continue to fund crisis driven projects that could have been prevented with competent planning. The first case study of this dissertation will illustrate how fragmented local institutions interacted separately with state and federal agencies to fund water projects without a comprehensive regional plan.

The Sprawl Debate

Although the term “sprawl” indicates rural growth is not desirable, the literature and policy dialogue on the subject indicates there is not consensus on this fact. An alternative view of sprawl suggests that unregulated growth allows a desirable freedom of mobility and residential development alters nature no more than traditional agricultural practices; therefore government is not bound to constrain or guide it. Scholars have reinforced this view of growth by pointing out that house lot sizes have stayed the same or even declined over the past few decades and that no more than 5 percent of the land in the United States is currently developed (Bruegmann, 2005). Along similar lines, some have made a case that sprawl embodies the freedom for individuals to choose how they want to live; therefore the market should determine how communities grow (Gordon and Richardson, 2001; Gordon and Richardson, 2000). Without government intervention, free market growth in scenic rural counties will potentially face negative externalities including the loss of open space. The Tennessee legislature recognized this and passed a statute in 1998 that attempted to encourage local governments to address some of the negative consequences of sprawl. However, despite good intentions, this dissertation will demonstrate that Tennessee’s state and local agencies exert little influence on the rural growth process.

Overview of Tennessee’s Growth Policy Act

The spectrum of state intervention into local land use decisions ranges considerably among states (Burby and May, 1997a). According to summaries of the

legal intent of Tennessee Growth Policy Act, also known as Public Chapter 1101, “The law seeks to meet the public service demands of commercial and residential growth, while maintaining the character of Tennessee’s rural areas” (University of Tennessee Institute for Public Service, 1998 pg. 1). One of the key components of the law was to direct attention to the preservation of undeveloped areas but it gave each individual county the flexibility to choose how rural areas would be defined; hence this permissive language ultimately resulted in very limited protection of agricultural lands, forests or open space.

In addition, Public Chapter 1101 mandated that each municipality and county legislative body had to agree on a county-wide plan that consisted of planned growth areas that are reasonably compact yet sufficient enough to accommodate 20 years of growth, urban growth boundaries surrounding municipalities, and rural areas that are not within planned growth areas or urban growth boundaries. The purpose of the rural areas was to “reflect the county’s duty to manage growth and natural resources in a way that reasonably minimizes detrimental impact to agriculture, forest, recreation and wildlife management areas” (University of Tennessee Institute for Public Service, 1998 pg.1).

In Marion County, the subject of this dissertation, the coordinating committee responsible for drafting the plan disregarded the intent of Public Chapter 1101 to protect open space, forests and agricultural lands. Instead, it chose to designate only existing state-owned land as rural areas and the remainder of the county was either designated as a planned growth area or urban growth area (including steep mountain sides, coves, and all commercial timber tracts on the plateau) paving the way for the

development rush that ensued five years later. In total, Marion County has 320,000 acres within its county boundaries and the locally designated coordinating committee identified 264,447 acres for growth and development (McCleod, 2003).

Despite the contradictory outcome of Marion County's growth plan, the state Local Government Planning Advisory Committee (LGPAC, the entity in charge of ensuring local governments met the requirements of the state statute) approved the final plan. It is important to note that any county failing to pass a plan by July 1, 2001 would not have received state grants, so placing significant pressure on LGPAC and technical assistance agencies to implement some type of plan, whether it met the intent of the law or not (University of Tennessee Institute for Public Service, 1998).

Another basic central requirement of Tennessee's Growth Policy Act directed municipalities to estimate the amount of land area they would require to sustain 20 years of growth by identifying urban growth boundaries for the purposes of directing future service needs. However, 10 years later, data illustrates that municipal water districts provide services far beyond their urban growth boundaries, and into other counties in many cases. In practicality, rural growth, in terms of sub-division development, is far outpacing the rate of land sub-division contiguous to the municipalities. Concurrently, growth patterns in Marion County simply do not reflect the traditional expansion of existing cities as intended through the 1998 Tennessee Growth Policy Act; in fact, most of the new developments are over 3,000 acres and dwarf the existing cities in size in terms of miles of water lines, power lines, and roads.

Historical Context of Growth Policy in Tennessee

The origins of Tennessee's Growth Policy Act began as an annexation and incorporation issue between counties and cities in Tennessee. For years, state legislators were faced with the politically daunting tasks of addressing city-county issues that often split their home constituencies against one another, creating a losing proposition for the legislators. One controversial local issue involved the competition between cities and counties over situs-based revenue (situs-based taxes primarily refer to sales tax and beer tax revenue that gets re-distributed back to the local government where the site of the business is located.) The disputes normally occurred when municipalities annexed along highway corridors in order to take-in commercial areas for revenue purposes only without taking in the contiguous parcels of land along the way. As a result, counties were faced with a shrinking tax base while cities argued that it was their legal right to annex these areas since they provided the services. The policy problem in this case is a local revenue issue resulting from a flawed system of local government funding in Tennessee, creating inevitable competition for limited revenues.

Another controversial annexation issue involved rural county residents who resisted being annexed by neighboring municipalities, as these residents did not feel that they would receive a fair return in municipal services from the increased tax dollars they would pay if annexed. One way to prevent annexation from a neighboring city was to incorporate themselves; however this required having a reasonably compact area of at least 1,500 residents. In 1996 Lt. Governor John Wilder amended a non-controversial incorporation statute to make it easier for a small

community in his home district to incorporate, by lowering the required number of residents to 225. The amendment was very narrowly drawn and passed unanimously with little deliberation; however it was soon challenged in court by a neighboring city and the statute was written more broadly the following year. In 1997, opportunistic citizens who wanted to prevent themselves from being annexed by neighboring municipalities began incorporating all across Tennessee creating what became known as “Tiny-Towns.” The issue ultimately reached crisis-levels when the rumor emerged that apartment buildings were attempting to incorporate. The Tennessee Supreme Court declared the law unconstitutional by December of that year and nullified all incorporation elections under the new statute.

In 1998 Lt. Governor John S. Wilder and House Speaker Jimmy Naifeh created an ad-hoc committee led by Senator Robert Rochelle and Representative Matt Kisber to study the issue. The chairpersons appointed a sixteen-member body (consisting of eight senators and eight representatives) to serve on the committee, which was also staffed by various officials with knowledge and expertise in local government issues. The resulting legislation was Tennessee’s Growth Policy Act of 1998. As the title indicates, the solutions went beyond the controversial issue of annexation and attempted to address the issue of growth, suggesting that somewhere in the deliberative process the problem was re-defined.

Tennessee’s Growth Policy Act was an attempt to address the complex issue of local government revenue, where local governments compete for the same revenues to fund local services. For example, the local option sales tax is distributed based upon the site of the business where goods are sold; the first half of all local

options sales tax is required to fund education, the second half is redistributed back to either the city or county depending upon the location of the store. Beer taxes are redistributed on the same premise except there is no requirement that a portion of the revenue go to fund education, creating a situation where cities have a financial interest in annexing businesses that generate sales and beer taxes. The problem arises when counties start losing revenue and have no means of cutting back on their largest expenditure – Education. Tennessee’s growth policy act sought to rectify this issue by holding county revenue harmless for 15 years after an annexation so municipalities would only receive the growth in revenue from the time of annexation, but the counties were burdened with the responsibility of contacting the Tennessee Department of Revenue to remind them to continue sending the revenue to the county. Unfortunately, county officials are not always made aware of this requirement and the solution to the problem is not utilized.

There are many solutions to the problem of local government revenue which would not be an issue at all if public education were not reliant on local funding. There are approximately 136 school systems in Tennessee and most are funded in part by county revenues. Most counties utilize the second half of their sales tax revenue to fund this service and many argue that one solution is for the state to collect and re-distribute all local option sales taxes based on the same formula already established to redistribute state funds to the school systems. This solution would also help solve the related revenue issue involving the problem of rural versus urban inequities in school funding. Since the major urban regional centers collect a large

portion of the sales tax of residents from surrounding rural areas, those counties in which they are located have an advantage in school funding.

One of the only ways outside of property tax increases for municipalities to grow their revenue is to annex situs-tax producing areas in the county. Annexation in Tennessee has been a source of contention between municipalities and counties for years and lobbying organizations on both sides have attempted to define the problem. For example, County Government lobbyists have identified extreme cases of strip annexation where municipalities have clearly abused their annexation privileges - visual images of the non-contiguous municipal limits offered clear illustrations of the abuses. Municipalities argued, on the other hand, that they provided most services such as water, sewer and gas to these commercial areas and therefore had a right to reap the revenue which they helped to create.

Tennessee's Growth Policy Act addressed the issue of annexation by requiring all counties, with the exception of metropolitan governments, to create a coordinating committee representing both city and county officials with the task of drawing acceptable boundaries in which municipalities should have the right to annex. Chapter VII will discuss the events leading to Tennessee's growth law, in order to illustrate how the issue of growth control was secondary to the original problem of annexation that state legislators sought to address.

How Does Tennessee Compare to Other States in Growth Planning?

In a recent dissertation entitled “State ‘Smart Growth’ Policies: a Cure for Dumb Urban Growth?”(Mitchell, 2004) research indicates that the “more coercive a state’s smart growth legislative program is, the more likely it will be effective at the local level” (pg. 212). According to Mitchell, her research confirms, along with other academic studies, that local governments are more likely to develop and implement meaningful and effective smart growth plans when they are mandated to do so by the state (Burby and May, 1997a; Bollens, 1992; Durant et.al., 1993; Gale, 1992; Degrove, 1990).

Tennessee’s growth policy is not dissimilar from other state initiatives that allow local governments to retain control of growth decisions; however many states including Florida, Georgia, Vermont, Maine, Maryland, Rhode Island, and Washington transferred some responsibility back to the state, in particular where environmentally sensitive areas existed. An extensive case study of Oregon’s Growth Policy statute indicated an inconsistent pattern of development throughout the state was frequently explained by the level of growth control administered at the local level (Nelson and Moore, 1996).

The core debate concerning state growth laws is whether coercive or cooperative policies are most effective (May and Burby, 1996). Tennessee’s Growth Policy Act reflects a cooperative law disguised as coercive. Each county was able to define the meaning of what constituted rural areas and the many of the rural counties interpreted the law from an urban perspective allowing for residential development in

rural areas; there was apparently no effort to protect agricultural and forest lands from rural residential development. Tennessee's Growth Policy Act of 1998 is an example of a state-mandated smart growth law that did very little to enforce its intent. During the implementation of this law, the author served as a technical assistance provider responsible for insuring that 10 rural counties in southwest Tennessee filed a growth management plan, and it was made very clear that the Local Government Planning and Advisory Committee was only concerned with making sure that counties and cities had some type of plan by the deadline date, irrespective of its content. With very little guidance, data, or indication that the intent of the law would be enforced, most counties made minimal efforts to protect open space, forests or agricultural lands. Summary data of all the growth plans indicate that even in the more progressive counties with professional planning assistance, there was little effort to address the growth planning components of the Act (McLeod, 2003).

Another example of how Tennessee law allows local governments and developers to avoid regulation is a statutory exemption for septic system approval by the Tennessee Department of Environment and Conservation on lots over 5 acres. This has tremendous consequences on how large forested tracts are sub-divided and it is no coincidence that rural parcels are often five acres and above so that developers can avoid regulation. As a result, thousands of acres of new lots will all rely on septic systems should land-owners decide to build houses. Since these lots are not pre-approved due to the 5-acre statutory exemption for septic systems by the State of Tennessee, many may find they cannot build a house as they will be unable to install a septic system. Conversations with the officials of the Tennessee Water Pollution

Control Division of the Tennessee Department of Environment and Conservation reveal that many buyers of parcels over five acres will, in fact, not have suitable soil for a septic system and will therefore be unable to build a home on their property on the site desired, or even at all. According to one report presented to the American Planning Association in 1999, Tennessee and Ohio are the only two states with such an exemption (Daniels, 1999); hence, rural developments occurring on former large timber tracts on the South Cumberland Plateau are not contiguous to municipal sewer systems and consist of tracts larger than 5 acres for this very reason.

While some Tennessee policies and statutes are very explicit in wanting to allow local governments the freedom not to regulate growth, another less transparent public action is the distribution of public water. Tennessee has approximately 437 water utility districts created and regulated by state government. In most instances, water utility districts are either owned by municipalities or rural utility boards created through county government and appointed by the county mayor. However, over the years, counties have asked their local state legislators to pass special legislation to separate rural water districts from traditional county government creating boards elected from the residents of the districts. Since water distribution is not a primary functional component of counties, there is little incentive to maintain oversight of the service.

Rural water utility boards exert tremendous power in controlling where new water lines are placed in the South Cumberland Plateau of Tennessee. With little coordination between county planning commissions and rural water utilities, rural water line extensions are rarely made based on comprehensive plans involving public

input on where residential development should occur. Water utilities make decisions related to growth based on the institutional guidelines placed upon them by state statutes and regulations and there is little incentive for comprehensive planning or cooperation among utility districts.

As Chapter IV of this dissertation will demonstrate, water utility districts act independently from county planning commissions, yet have great influence on rural residential growth in areas far outside their jurisdictions. Inter-governmental fragmentation has created a situation where some ‘water-rich’ water utility districts will allow developers the ability to purchase and install miles of water lines to developments with no houses, while adjacent utility districts are dangerously close to not having enough capacity for existing residents. Some water utility districts often cover miles of rural land providing water to multiple small municipalities without water systems, and in many cases, multiple counties with varying levels of planning. Water utility district boards have the sole power to influence where water is run; State government only regulates the production aspects of water utilities, not how it is distributed. Rural water line extensions represent a very important variable in determining where rural growth will occur.

Conclusions

This dissertation will determine if specific case studies of growth decisions are effectively explained by theories of collective action. In addition, the goal is to gain insight and knowledge of how structural and funding limitations of government can lead to rural sprawl. It is important to more clearly understand how and why

poorly planned and un-coordinated growth occurs so that state and local policy makers are able to make wise and reasonable policy changes resulting in greater transparency and public choice. Accurate assumptions regarding the development process are important, as local and state leaders seek out land-use policies and strategies that result in optimal balance between development and conservation. As outlined thus far, Tennessee's state and local agencies exert very little influence on the rural growth process, through mostly permissive legislation allowing local government to choose not to regulate development. Chapter II will discuss relevant literature related to policy and sprawl, including a discussion of how federal policies can also contribute to poorly planned growth, while Chapter III outlines how the case study method of research can help frame the collective problem of rural sprawl in a factual context. Chapter IV is a case study of how fragmented water distribution decisions result in a type of rural sprawl not contiguous to existing municipalities or services. Chapter V adds an interesting perspective to the general topic of rural sprawl by highlighting how easily local economic forces in conjunction with a federal agency can disperse of quality public recreational land at a time when adding new public lands proves virtually impossible in the same county. Chapter VI will clarify how the free-market approach to growth allows developers and water utilities to determine the future of thousands of acres of Tennessee's rural landscape, while conservation needs go un-met. Finally, Chapter VII outlines policy solutions to address the collective problem of rural sprawl and how recent policy windows offer opportunity for new conceptualizations of the issue.

Chapter II

Theoretical Approaches to Understanding Rural Sprawl

Institutionalism and Rural Sprawl

Fragmentation of local governments is a result of an evolution of legislative statutes, created over time by state and federal legislative bodies, and analytical understanding of how government works from an organizational perspective has primarily focused on the federal and state levels of government. This dissertation will help describe how institutional funding structures promote rural sprawl. While institutionalism has been the primary means of applying organization theory to public administration, according to Herman Boschken, there is a recent interest in the subject due to “uncertainties associated with American federalism’s shift toward tighter coupling of intergovernmental processes. Spurred by diminishing resources, the “reinvention” of government, and a desire for better policy integration, agencies are propelled toward more collaboration among policy makers of widely different persuasions” (Boschken, 1998 pg. 1). This dissertation will demonstrate how economic models of federalism have resulted in a pro-growth economic machine, driving local officials to expand property tax revenue through rural development with very little consideration for planning.

The Sprawl Debate Continued

Scholars lack consensus regarding the extent to which sprawl is a problem. While urban growth is the topic of the majority of academic literature, the general

principles of the sprawl debate can also be applied to a rural context. For instance, much of the urban sprawl literature focuses on the negative externalities associated with growth such as pollution, traffic congestion and loss of open space (Porter, 2004; Squires, 2002). While pollution and traffic congestion may not occur immediately in a rural context, the loss of open space has been instantaneous - once large timber tracts were sold in Marion County to private developers gates were immediately erected and hunting leases were terminated.

Another important debate among scholars is to what extent growth benefits local communities economically and socially. Many have suggested that local governments traditionally perceive growth as a positive economic stimulus, while underestimating the costs of infrastructure and services, therefore encouraging development at higher levels than socially desirable (Oates, 2001). As this dissertation will demonstrate, developers in Marion County, Tennessee, converted much of the prime, accessible recreation lands to private residential development without any account being taken of long-term infrastructure and service costs to the community. In addition, there was not a public institution responsible for considering the loss of open space, so the economic outcomes of Marion County's land rush are too early to determine. However, citizens and elected officials are beginning to question its social benefits as local residents have lost access to the land. Urban sprawl studies have examined what factors may lead to measures limiting the long-term negative consequences of sprawl (Squires, 2002) but, as this dissertation will illustrate, one of the distinguishing factors between urban and rural responses to

growth is the lack of a planning infrastructure for rural local governments to guide growth in a timely manner.

Elite Theories of Growth

Rural, like urban, communities reflect a social structure whereby business owners and wealthy individuals carry a significant amount of influence in the local decision-making process. Scholarly studies have examined the influence of wealth on growth decisions by analyzing which characteristics of communities are likely to result in support for growth control to combat sprawl (Gainsborough, 2002). Some studies suggest that many anti-growth proponents are elitist in nature, as they strive to restrict growth in order to maintain livable communities, with the result being the inflation of housing prices to such an extent that the poor are excluded (Harrigan and Vogel, 2003). This approach to understanding growth suggests that a small group of powerful economic elites have the ability to both encourage or control growth depending on which outcome favors their financial interest (Protash and Baldassare, 1983; Gottdiener and Neiman, 1981). Therefore, it would appear that growth and development undemocratically favor the values of the pro-growth elite, resulting in a dichotomy of “the machine versus the residents” (Troutman, 2004 pg. 611). This has led researchers to seek a greater understanding of the role of citizen participation (Oakley, 2002; Swindell, 2000; Burby and May, 1997b), and citizen familiarity (Chapin, 2004), in the land-use decision-making process in order to more accurately understand which groups attempt to influence growth. This dissertation will examine whether such theories help explain growth outcomes in a rural setting.

One of the challenges of applying such theoretical approaches to growth in a rural context is the limited involvement of government in the growth process. As this dissertation will demonstrate, many rural governments in Tennessee have not established land-use plans or zoning ordinances that would create a decision point to either approve or disapprove a development. While the subject of this dissertation, Marion County, TN, has a set of sub-division regulations, it is only able to control how developments are designed, not where and when they occur. It is suggested here that rural attitudes and perceptions of private property rights and limited government involvement provide some explanation as to why land use controls are not becoming established in rural communities.

Growth Machine Theory

An evolution of elite theories of growth manifests itself in what is known as growth machine theory, which suggests that both local officials and economic elites join forces to promote growth. The theory originated from the classic 1987 work by John Logan and Harvey Molotch, which argued that growth patterns in both rural and urban America are intimately tied to the close relationships among development interests and local officials (Logan and Molotch, 1987). According to growth machine theory, local government officials partner with the local economic elites to influence growth patterns in their communities. A more precise definition by Mark Schneider and Paul Teske describes a “growth machine” as “a powerful coalition of business interests supporting local economic development. Underlying the growth machine is an asymmetric relationship between mobile capital and geographically

fixed governments dependent on local private wealth to supply most of the resources local governments must access to provide needed services” (Schneider and Teske, 1993 pg. 720).

Logan and Molotch’s (1987) work asserts that the dynamics involving the urbanization of rural/agricultural areas are “identical to that underlying the urban growth machine, but in a rural context” (pg.226). The literature on urban politics and growth has extensively confirmed the existence of growth machines in major urban centers; however it is much less clear on the dynamics of development and growth in rural and urban-fringe areas. Land development in rural and urban-fringe America is where many in the real-estate industry make their fortunes; land that was once had little market value now becomes priceless, as retirees and individuals seeking to escape an urban life-style move into rural areas. Due to close proximity to urban centers, many urban-fringe counties are experiencing intense development, resulting in the rapid loss of farmland and open space. The case studies in this dissertation at first appear to demonstrate validity to Logan and Molotch’s assumption that growth machines do exist in a rural context. Chapter V clearly outlines a growth machine where pro-growth local officials partnered with mobile capital to assist in the development of land that was once public. However, it is important to note that outside wealth, not local wealth, is the primary driver and benefactor of the development project in this case.

This dissertation argues that growth machines exist because there is no other alternative for local officials. Growth controls are often politically impossible and there are rarely enough funds for rural local governments to acquire land for public

purposes. With little ability to halt, or even mildly influence, development projects in rural areas without major policy changes, local officials have limited options other than to support growth. In response to this, states have passed legislation creating voluntary farmland preservation and growth committees for the purpose of making recommendations to local officials to protect open space and farmland. One study confirmed that when local officials are given a choice, farmland preservation efforts do challenge some aspects of urban growth as a means of growth control (Pfeffer and Lapping, 1994). Another recent study found that local officials become less ambivalent to farmland preservation as counties became more urbanized (Koontz, 2005). In other words, when given a choice, local officials will support controlling growth when couched under the idea that they are protecting farmland.

A paradox is that while many local officials support growth and progress, signed documents indicate support for land protection (Appendix III, Letter A-2). As this dissertation will outline in Chapter VI, supporting land conservation efforts and public land protection is a momentous task for rural communities with limited public capital. Chapter V of this dissertation outlines a separate, but related, case in the same county, where the Tennessee Valley Authority (TVA) sold public land for private development with the support of local officials. The fundamental difference for a local official when deciding whether to support land conservation or private development is that one requires public capital, and the other does not. However, the TVA land deal outlined in Chapter V offers a unique perspective of public attitudes about growth and land protection just prior to a major land rush in the same county. One of the more interesting components to this particular case-study is its illustration

of how TVA used extensive public participation for the purposes of grass-roots decision-making, yet abandoned all processes and feed back once the land deal was completed.

The Tennessee Valley Authority and Organizational Theory

Philip Selznick wrote a classic study of the Tennessee Valley Authority (TVA) in 1949, related to the study of sociology in formal organizations. He demonstrated how TVA, an independent federal corporation, used local participation to achieve its ends and placed into question their democratic accountability (Selznick, 1949). Other classic democratic studies of the TVA include David E. Lilienthal's (1945) *TVA: Democracy on the March* and Herman Pritchett's *The Tennessee Valley Authority: A Study of Public Administration* (1943).

The TVA is one of the most unique governmental entities in the country, with wide administrative discretion as a government corporation established outside of the traditional federal agency structure, and until recently led by a three person board. The independent federal agency has a long history of political controversy including fierce congressional battles over direct federal appropriations versus revenue bonds to pay for electric power (Wildavsky, 1961); utilizing cooptation to gain local support for its own agenda under the guise of "grassroots democracy" (Selznick, 1949); conflicting missions as evidenced by the environmental and recreational impacts of TVA river draw-downs for hydro-electric power production (Schaffer, 1990); air and water pollution issues as a result of coal and nuclear power plants (Durant, 1985) and

failed attempts to transform the Tennessee Valley into a prospering region (Chandler, 1984).

Scholars have argued that TVA is not accountable to Congress or the public and has insulated itself from the political process (Chandler 1984), while others have suggested TVA is very sensitive to the political climate and public opinion (Hargrove and Conkin, 1983). TVA was the centerpiece of an academic symposium in 1981 at Vanderbilt University where 12 essays were presented, discussed, and organized into a book entitled *TVA: Fifty Years of Grass-roots Bureaucracy* (Hargrove and Conkin 1983).

The TVA's original mission was to:

Establish a unified program for resource development for the advancement of economic growth in the seven-state region comprising the Tennessee Valley. Its programs include flood control, navigation development, electric power and fertilizer production and distribution, and recreation, forestry, and wildlife development (Selznick in Hargrove and Conkin, 1983).

With such a broad mission, Phillip Selznick is skeptical that TVA actually acts upon the public will through democratic partnerships; instead he argues that TVA utilizes the term “grass-roots democracy” to substantiate and validate its own internal political motivations and desires (According to Selznick, TVA defines their so-called democratic partnerships with people and the region as “grass-roots democracy”). He goes on to point out that TVA is virtually self-supporting and free of controls from democratically elected bodies, yet partly due to the skillful publicizing of its programs and impressive dams and other public works, TVA is held up as a model bureaucracy fostering regional development.

One of the more salient issues that TVA must address relates to the 1.2 million acres of land it has acquired since 1933. In recent years, TVA has sold approximately 500,000 acres for industrial and recreational uses with 342,000 acres being transferred to other governmental entities. It currently controls approximately 293,000 acres around its reservoir that are not power generation or transmission facilities (Flessner, 2005), and these large land holdings are often considered prime water-front real estate to the development industry in those communities where TVA dams created reservoirs.

The TVA and Land-Use Policy- Revisiting Selznick

Although the intent of Selznick's study of the TVA was to examine organizational behavior, his case-study on its role as land manager around reservoirs in the early 1940's is impressively insightful for the purposes of this dissertation. According to Selznick, organizations often seek a "unified pattern of response" (1949, pg. 181). Bureaucratic organizations have mission statements, symbols and heroes to help define their character and systematize behavior as seen in this statement cited by Selznick in 1949:

The purchase of a minimum amount of land around TVA reservoirs would provide opportunity for private enterprise to exercise its initiative in the development of the waterfront free from the stifling effect of public ownership and in accord with public demand. *The TVA Agriculturalists* (1941) (Selznick, 1949 pg. 181).

Selznick carefully illustrates how statements such as these have helped shape land policies set out by TVA. However, there are others who believe TVA should acquire more land for conservation purposes. Based on the writings of Selznick, there has

been a long standing identity crisis within TVA concerning land policy, and board members have had a long-standing impact on whether to sell or purchase land.

Chapter V of this dissertation will chronologically outline the influences behind TVA's decision to sell public land for private residential development. The motivating factors behind this decision will never be known without interviewing the board members who made the final decision; however evidence from this case study suggests that public input was merely a formality to the decision. This case study is a reminder that powerful individuals and private capital can influence federal decisions to disperse public land for private development.

A secondary component of this case study is whether TVA made the decision to disperse of public land against the will of the people – or that TVA was appropriately acting on the wishes of local elected officials who wanted to see the land developed. It can be seen that this case study is an excellent illustration of the complexity of democracy and how local citizens may have differing views from local elected officials on the benefits of growth.

The relevance of the TVA land deal described in Chapter V to the subject of rural sprawl is its illustration of how quality public open space can disappear far more quickly and easily than it can be acquired. As outlined in Chapter VI, local efforts were made to protect a private tract of land from development by the same group that acquired the TVA property. Once again, private capital prevailed in acquiring yet another quality recreation tract illustrating a staggeringly out of balance approach to growth in Tennessee, heavily favoring the profit needs of private developers over the open space needs of local citizens

Policy Changes Needed to Balance Rural Growth in Tennessee

Subsequent to the case study outlined in Chapter V, TVA changed its policy to no longer disperse of public land for private residential development. In addition, changes are also being considered at the state level as a result of the policy issues outlined in Chapter's IV and VI. Chapter VII of this dissertation will place these changes in the context of the various theories in the field of policy studies, organizations, and intergovernmental relations. As a practitioner of local government, models of understanding the policy process have been very useful in bringing attention to the issues addressed in this dissertation including agenda-setting (Cobb and Elder in Palumbo, 1987) and the stages of problem-definition (Houston and Richardson, 2000; Dery, 1984).

Chapter III

Research Methodology

Case Studies

The case studies for this dissertation chronologically describe the contextual factors influencing growth in one rural Tennessee County. Particular attention is focused on the role federal, state and local governments play in the growth process through planning and infrastructure investment. The information gained from the case studies will help determine whether theoretical assertions regarding federalism, institutions, organizations and growth are useful in explaining the collective problem of rural sprawl. The author chose the case study method because the academic literature appears lacking in basic descriptive understandings of the impact of institutional structure on decisions and actions that result in rural sprawl. The case studies chosen integrate rural water distribution as an important variable influencing rural sprawl.

Case studies are descriptive narratives of series' of events leading to a given outcome. The first case study of this dissertation, for instance, outlines a series of actions taken by various governmental actors in response to a recent drought situation where towns were running out of drinking water. The second case study chronologically outlines specific actions taken by governmental units to consider whether to sell recreation land for private development. The third case study chronologically outlines a series of actions taken to limit sprawl through conservation with the support of local officials. Each case study occurred simultaneously in one county with interrelated government actors and events.

The case study method of research was chosen in order to capture the series of events and actions leading to the collective problem of rural sprawl. This thesis seeks to illustrate the early stages of growth as large rural forested tracts are fragmented prior to individuals actually building homes and moving to the region. This stage of the growth process will not be captured by much of the growth literature since population growth indicators are key variables in most of these studies. Sprawl studies often describe growth on the fringes of existing cities, including commercial and industrial development; however less is understood about the type of rural sprawl that fragments thousands of acres of forests by rural residential development. Since population data is not relevant in the early stages of land fragmentation, other variables such as parcel sales data served as the key means of defining rural sprawl in this dissertation. General local knowledge of where major tracts of land were being sold directed the gathering of relevant parcel data from the local property assessor's office. In addition, [having] access to documents, individuals and settings as a local resident, or as in one case study being the primary participant of the event described, has served as the greatest asset to this research allowing the story to be told "from the inside."

This research utilized multiple sources of material to describe rural sprawl including newspaper articles, government documents and letters, web-sites, and maps. The chronological ordering of events allowed description of how one county reached a point of rapid fragmentation in only a few short years. Since two of the case studies involve very public events, including a TVA land sale and a subsequent

drought impacting the local water supply, data were readily available through numerous newspaper articles.

The case study method of research can be an effective tool in the gathering of knowledge about subjects like rural sprawl that have limited academic literature to build upon. While some scholars have viewed the case study as an academically ambitious endeavor lacking in rigor, comparability, and replicability (McCurdy and Cleary, 1984; White, 1986), several scholars have made sound arguments in defense of the research method (Barzelay, 1993; Bailey, 1992; Jenson and Rodgers, 2001). This dissertation describes three separate development-driven projects occurring simultaneously in Marion County, Tennessee. As a local citizen of the community being studied, and a former practitioner of local government, the case study method was chosen in order to integrate experiential knowledge of the subject of rural sprawl with empirical research.

One of the greatest strengths of the case study method when researched appropriately is its ability to explain why things happen, versus what happened. Traditional quantitative research, while appropriate in many instances, could not offer the breadth of context necessary to fully understand the collective problem of rural sprawl. This dissertation describes a series of events related to rural development in one county, highlights relevant variables influencing rural growth and discusses each action in the context of current theories related to growth, organizations, federalism, intergovernmental relations and institutions.

Although analytical research has produced growth models that seek to predict outcomes and end-products of growth, very little is known about the relationships and

processes influencing rural sprawl. The complex interconnected and interrelated particulars of growth involve multiple players including local, state and federal officials, developers, water utility districts, county planning commissions, county legislative bodies, municipal legislative bodies, and in some cases, local residents and special interests.

Action Research and Ethnography

Action theory may be described as an approach to studying phenomena that seeks to incorporate moral and social considerations of the public good in the public decision-making process. Action research fundamentally aligns with the post-modern belief that normative values are central to the decision-making process and should therefore be a central theme in public administration research. This dissertation will cover two case studies in Chapter V and Chapter VI chronologically outlining specific actions contributing to rural sprawl. Action research confirms that valid knowledge can be attained through stories and case studies and serves as a useful means of sharing knowledge with government practitioners (Herzog and Claunch, 1997; Hummel, 1991; Harmon, 1989; Catron and Harmon, 1981).

In addition to describing actions leading to a particular result, there is a need to identify the importance of the decision frame-work - extensive research was required to describe the complexity of Tennessee's local government framework and how it contributes to the rural sprawl. This information was gleaned from several sources including governmental web-sites offering statistical data, informal

conversations and meetings with various role players, government documents and newspaper articles.

It is important to note that prior to the research for this dissertation, extensive knowledge on the subject matter was gained by the author as a county government consultant for the University of Tennessee's County Technical Assistance Service. After nine years as a local government consultant and many years of serving on local government boards and committees, intimate knowledge is gained regarding the population and culture impacting local decisions just as an ethnographer would gain insight from living with a foreign tribe. According to Martyn Denscombe, "The term ethnography literally means a description of peoples or cultures"(Denscombe, 2003 pg. 84). One of the primary purposes of ethnographic research is to produce detailed pictures of events or cultures, as this provides descriptions of the motivations behind actions taken which contribute to rural sprawl. As will be discussed in the concluding chapter of this dissertation, further ethnographic research regarding the culture of local government is necessary as state and federal policy makers continue to pass legislation with the intent of encouraging or discouraging growth outcomes at the local level.

By understanding the intricacies of local decision-making, written documents were available that sufficiently established policies of local, state and federal agencies and the chain of events leading to the present status of each case study in this dissertation. By having local knowledge and contacts as well as serving on local boards related to economic and community development, it was made it possible as a researcher to obtain files, letters and reports relevant to the case studies. In essence,

the author is a participant observer to the phenomena described as rural sprawl in Marion County, Tennessee.

Participant Observation

Participant observation has long been an established means of social inquiry (Peshkin, 1988; Spradley, 1980), as evidenced by the field of ethnographic research. Academic fieldwork has defined participant observation to be an accepted means of gaining knowledge and understanding of a social culture. Participant observers chronologically organize records in the form of logs, diaries, journals and what has been described as “head notes.” Head notes are materials that never get written down, but are considered “tacit understandings and impressions that are difficult to record” (Dewalt and Dewalt, 2002 pg. 154; Ottenburg, 1990; Sanjeck, 1990).

This research is not pure ethnographic research in the sense that the author was engaged in research while embedded with a tribe or culture full time, nor was the goal to describe some of the more complex aspects of the culture of local government and development. However, this research does highlight why this is an important variable to understand when predicting how, when and where rural growth occurs and the factors and policies that enable it to happen. The case study described in Chapter VI related to the land rush in Marion County and a subsequent conservation effort to balance the rapid growth with open space, water-shed and wildlife protection is, primarily, a chronological history of the author’s efforts. All data are carefully logged and saved with the intent of allowing for a chronological narrative of the process which has proven invaluable when assessing the accuracy of theoretical assertions

regarding the growth process as well as informing those in the public policy field interested in the subject of rural sprawl.

As a former practitioner of local government, action research appears to be the obvious choice to assess the social issue of rural sprawl. As outlined in Chapter VII, the goal of this research is not only to offer an understanding of problems associated with rural sprawl, but to actually influence the way decisions are made related to rural sprawl. According to Denscombe, there are four defining characteristics of action research: 1. *practical*- dealing with real world problems. 2. *change*- offering solutions and describing the problem 3. *cyclical process*- research involving a feedback loop where findings generate change which are implemented then re-evaluated. 4. *participation*- practitioners are an active part of the process (Denscombe, 2003 pg. 73-74).

The research for this thesis claims the first two defining characteristics outlined above. Rural sprawl is clearly a real world problem that is important to academic research, citizens and practitioners of government. However, the most important component of this research is its effort to describe a policy problem, while offering practical solutions that are informed from many years of active participation in policy decisions related to growth and development in rural counties of Tennessee. As for a formal feedback loop, this is much more loosely defined for the purposes of this dissertation; however the author is in a position to engage state and local leaders and is currently funded by a foundation and state agency to create a Rural Lands Institute in Tennessee that will serve as a policy think-tank on rural growth-related issues in the upcoming year. The ultimate goal is to move to the fourth defining

characteristic of action research, by developing a process where practitioners and researchers come together to discuss policy changes and actions needed to promote a more sustainable type of growth in Tennessee.

Chapter IV

A Case Study of Governmental Fragmentation, Water Distribution, and Rural Sprawl in Tennessee

While water is the most important shared natural resource among governments and citizens, the decision to determine where and when water is distributed is left to independent water utility districts, without regard for its regional importance. Despite federal and state funding of water distribution through loans and grants, there are limited requirements for planning and prioritization in a given region. Separate governmental units within the same water-shed and region work independently to acquire grants for separate water projects. This case-study will illustrate how revenue generation impacts why water utilities make decisions that promote rural sprawl.

The following chapter will describe a series of recent events and actions by local, state and federal agents and agencies, responding to an unprecedented drought-situation in Marion County where local residents and an entire municipality ran completely out of drinking water. Information for this case study was gathered through numerous newspaper articles covering the drought, highlighting how emergency state and federal grants funded rural water line extensions to residents without water. There was little coverage of the broader issue, that being how water supply is planned and distributed in the region, and another omission of the media coverage throughout the summer of 2007 was the fact that “water-rich” municipal utilities were extending new water lines to developments with no residents. The complexity of intergovernmental fragmentation is a difficult subject to understand

without placing it in the context of a specific situation. The following case study will describe how governmental fragmentation and a water distribution network reliant on the decisions of individual utilities fail to address regional water needs.

Governmental Fragmentation and Institutional Design

The State of Tennessee has 95 counties with county commissions ranging in size from 9 to 25 members with an additional 126 school boards and countless other boards, commissions and committees charged with overseeing various public services. According to the University of Tennessee's Municipal Technical Advisory Service web-site (www.mtas.utk.edu) there are 347 municipalities in Tennessee ranging in populations from 100 to 700,000 people, each with a board of aldermen or city council charged with overseeing services such as water, sewer, gas, law enforcement, fire protection, and parks and recreation. Tennessee has approximately 437 water utility districts, many of which are municipally owned and controlled; while a large number of rural districts were created under Tennessee state statute and appointed by the county mayor. However, their operational budgets are not approved by the county legislative body, nor are they considered a primary function of county government. Each local government responds and interacts with state and federal agencies through state-shared funding, grants, regulations and general statutory enabling legislation since local governments are legally creatures of the state.

The subject of this dissertation - Marion County, TN - has 8 incorporated municipalities with populations ranging from 124 in Orme, TN to 3,295 in South Pittsburg, TN. Current developments in rural parts of Marion County not contiguous

to local municipalities encompass approximately 40,000 acres, while the existing municipalities encompass 34,202 acres. Many developments in rural parts of the county will create populations larger than most of the existing municipalities in Marion County, resulting in many long term demands for additional services. For example, assuming a rural mountain development consists of 500 homes in the next 10 years, at 2.5 residents per home, the population will reach 1500 residents, which is greater than five of the seven municipalities in Marion County.

Water Distribution

One of the greatest enablers of this type of rural development are municipal water systems allowing rural water line extensions far beyond current municipal limits to developers willing to pay for the service. The value of raw land is greatly enhanced when public water utility districts decide to make water available through rural water line extensions, often indirectly funded by state and federal grants that build plant capacity and infrastructure.

Despite the fact that many uninformed buyers continue to purchase parcels without a public water source, most developers recognize water is necessary in areas with limited ground-water availability, which is the case on the Cumberland Plateau. Some developments on the Cumberland Plateau have installed water lines throughout their development in preparation for future water line extensions in the knowledge that local, state and federal officials will likely supply water if the developers bear a portion of the cost.

At the time of writing this thesis in 2008, there were approximately 40,000 acres of remote timber tracts purchased by development groups in Marion County. All developments are seeking water line extensions from local utilities and in each case the developers are agreeing to pay the expense of the lines and installation. Developments on the plateau have average lot sizes of 2-7 acres with field line and septic tank as the only option for sewer disposal. One of the most critical issues facing this rapid rate of growth is the lack of water available on the plateau which is exacerbated by the recent drought conditions. Despite over 500 existing residents in the county being without a municipal water supply (Tennessee Department of Environment and Conservation, 2005), local utilities are expected to extend water lines to four new developments with no existing residents.

The water distribution network of the South Cumberland Plateau does not follow traditional municipal and county jurisdictional lines, with many municipal and rural water utilities extending far into adjacent counties. For example, neighboring Grundy County, located entirely on the Cumberland Plateau, has three water utility districts, two of which draw water from mountain top lakes, that reached a stage where grass was being mown in front of boat-docks during the drought months. According to a *Chattanooga Times Free Press* article on October 13th, 2007, the city of Monteagle was buying all of its drinking water from other districts (Benton, 2007). The mayor of Monteagle stated there would be no new meters issued to developments until the water supply issue is addressed, but an adjacent development to Monteagle with a projected 500 new homes recently won a case in court essentially directing local utilities to supply water as was originally promised prior to the summer drought.

State officials note that when a municipal water system proposes to extend water to a new development, there are requirements to show that the sources of water and infrastructure are adequate to maintain a reliable drinking water supply. Marion County records reveal that recent development plats in close proximity to Monteagle have been approved by the Marion County planning commission without a public water supply. The reason for this was that the county planning commission had no requirement that developers have water line extension agreements with a utility; therefore state government had nothing to approve. The buyers of the lots in these developments will rely on well-water until water lines are extended. Governmental fragmentation clearly results in a poorly planned growth process, where state government only engages in the process when a utility decides to extend water, but not when a county approves plats that fail to demonstrate a reliable drinking supply.

One of Monteagle's solutions to its water supply crisis is to seek emergency grants to fund a connection from the City of South Pittsburg's water system which draws from the Tennessee River. The same water utility is negotiating water line extensions to a minimum of four major real estate developments totaling over 25,000 acres, while existing residents in Monteagle face severe water shortages. It should be noted that Grundy County has neither a planning commission nor zoning ordinance therefore developers have the freedom to file plats and sell parcels for residential development outside municipal planning areas. However, informed consumers will demand a public water supply, so developers have an incentive to provide water whether Tennessee Department of Environment and Conservation or local governments regulate the process or not. Local officials in Marion County are

requesting that Governor Bredesen, the U.S. Department of Agriculture's Rural Development Agency and the Southeast Tennessee Development District find emergency funds to solve the water crisis in Monteagle. The challenge for state and federal officials is that there is no assurance that emergency grants will be spent for existing residents only. There is nothing to prevent local utilities extending rural water lines to new developments once capacity and infrastructure are increased by state and federal funds.

Rural water line extensions have a tremendous influence on rural residential growth and are one of the core means of achieving rural development. Although rural county mayors are often pressured by local residents and developers to extend water to a region of the county, the authority to do so rests with entities completely independent from county government. The point to note is that although state statute may allow for it, county governments are not in the water business and there is no decision making connection between the county planning commission and where water utilities decide to allow for rural water line extensions. Only as a result of the recent drought of 2007 have maps been produced indicating where the rural water lines exist in connection to one another. The final decision to extend water to rural areas lies with the utility and not the county mayor or county planning commission. The municipality with the most abundant water source, in this case South Pittsburg, TN, will determine the amount of water able to be distributed to other utilities versus new developments.

Rural water utility districts exert tremendous influence on growth in this region due to the limited supply of water available for wells on the Plateau.

According to the Tennessee Department of Environment and Conservation's Rural Water Needs Report in 2005:

The availability of public water service is one of the critical pieces of the infrastructure that must be in place for growth and development to occur in undeveloped areas. When public water service is extended into rural areas, the potential for residential (sub-divisions) and commercial growth is greatly increased. This growth can change the nature and characteristics of a rural area. There would likely be local residents that support development and the economic opportunities that come along with it. There would likely be other residents that oppose development (Tennessee Department of Environment and Conservation, 2005 pg.8).

Therefore, developers must work closely with public utilities and the local communities to service their developments on the front-end. Marion County has seven water utility districts serving approximately 24,500 individuals with an estimated 500 existing residents without public water service (TDEC, 2005). There are over 437 water utility districts in Tennessee serving the drinking water needs of approximately 5.3 million Tennessee residents. In some cases, these public utilities operate under boards that are organized separately from municipal and county legislative bodies. Tennessee statutes related to utility organizations reflect numerous narrow population class exemptions supported by county legislative bodies allowing rural water utility districts to elect their own boards without the need for county-wide approval.

Federal and State Role in Rural Sprawl

At first glance, it might appear that federal and state agencies are not involved in local development matters, despite the fact that local governments and utilities are

legally sub-divisions of state government. Many water line extensions and plant upgrades however, are funded through federal and state loan or grant programs including USDA's Rural Development, The United States Housing and Urban Development Block Grants, Drinking Water State Revolving Loan Fund, private lending agencies and developers (TDEC, 2005).

Marion County, Tennessee, currently has seven utilities currently considering linking together to solve a water capacity problem associated with the unprecedented drought. The municipalities include Orme, South Pittsburg, New Hope, Kimball, Jasper, Whitwell, Monteagle and two rural utilities, Foster Falls and Griffiths Creek. In addition, neighboring Franklin and Grundy Counties have the Sewanee and Tracy City utility districts which, in turn, connect to Big Creek and on to Cagle Mountain in Sequatchie County. Below is a sample breakdown of who might benefit from connecting all the water utilities and increasing water capacity to the region through state and federal loans and grants.

The City of Jasper (in Marion County, TN) receives its water from 'Blue Hole' which is the mouth of Town Creek (the home of a federally listed endangered snail) and the drought-ridden Sequatchie River. Although the Jasper water treatment plant capacity is sufficient for growth, its water sources are questionable and as in many rural water utilities, the infrastructure has not been updated in many years. However, Jasper will soon run a water line extension to approximately 32 residents in Coppinger Cove just outside the community of Sequatchie, TN as well as the new Rarity Development resulting from the TVA land sale outlined in Chapter V. While the City of Jasper did not pay to run a water line to the residents of Coppinger Cove

whose wells and springs ran dry as a result of the drought, the county mayor applied for an emergency grant from the Appalachian Regional Commission (ARC- a federal agency) to supply water to these residents. As outlined earlier, county government does not own, control or fund water utilities; therefore the county legislative body would not provide the matching funding for the federal ARC grant.

As it turns out, there were more than 32 residents in need of water in the Coppinger Cove region but due to poor coordination and planning between state agencies, municipal water utilities and county government, only a portion of residents received emergency water assistance. This was confirmed when a nightly TV news report Tuesday November 13th on Channel 9 out of Chattanooga interviewed a resident of Coppinger Cove, and she indicated it was Ferndale Road, on the other side of the creek, that has been fighting to receive water. A recent newspaper article shows a photograph of a resident on Ferndale road pumping water from a spring into the back of his truck as they have done for years prior to the recent drought, yet federal and state grants to extend water to this region failed to pick up those residents with the greatest need.

The case of Coppinger Cove is a clear example of federal and state funded water line extensions with no comprehensive plans or maps outlining and prioritizing regional water needs. There is clearly an issue of equity since poor residents do not have the ability to either pay for the entire water line extension or the match to a state or federal grant, while developers will always be willing to pay more for water line extensions due the profits it would create. The Coppinger Cove water line extension further illustrates competing interests of wildlife protection and growth within state

and federal agencies. If, in fact, the new rural water line extension leads to future residential growth in Coppinger Cove, there has been little consideration for its long term impact on threatened species and water-shed protection.

Coppinger Cove is part of the Sequatchie Cove water shed which is the largest water shed in the region, ultimately supplying the sources of water for the Jasper Water Utility and the South Pittsburg Water Utility (after the Sequatchie River runs into the Tennessee River in the case for South Pittsburg). The Sequatchie Cove is also home to several large timber tracts that are both targeted for development and for conservation efforts. Despite applications for state and federal funds to protect this watershed through public land acquisition, most of this area is under intense development pressure due to its scenic attributes.

For the purpose of illustrating the fragmented local decision making process, it is important to note that the Coppinger Cove region is not adjacent to the municipalities that provide its water and hence future growth prospects. These municipal water districts have little financial incentive to run water lines to this area due to insufficient revenue from the limited number of consumers versus the costs of providing the water lines. Federal grants and private matching donations were the only hope for receiving water to this region, but the Federal Emergency Grant Funds went to the side of the creek where a potential private developer had something to gain. Simply put, for those rural residents in counties supplied by a myriad of small municipal water districts, the only chance in many cases to receive a public water supply is if they happen to live on the way to a new development. The Marion County water crisis does not stop with the Coppinger Cove situation.

To further illustrate how water is distributed in the region, the Town of Kimball water system is owned by the City of South Pittsburg; therefore the municipal officials of Kimball do not control the future growth of their community without the City of South Pittsburg approving it through water line extensions. When the towns of Orme and Monteagle, Tennessee almost ran completely out of water for their existing residents, the former of the two cities, Orme, received a \$600,000 + grant through a combination of state and federal grants to connect to the City of Bridgeport, Alabama, while the plateau city of Monteagle is currently obtaining water from the City of Sewanee in Franklin County and Tracy City in Grundy County, whose own residents were in a concurrent water crisis situation. Comments by the Governor of Tennessee on the crisis seem to indicate awareness of the poor water planning in the region; nonetheless, state and federal officials responded quickly to the Orme water crisis by providing grants once it was highlighted on Good Morning America, CNN, and USA today. As for Monteagle (despite the fact that there are many more residents in imminent peril of losing water) one could argue that due to less national publicity, state actors have responded with much less enthusiasm and grant money and local residents on the Cumberland Plateau express concern over development outpacing water availability (Benton, 2007).

Water Crisis Response

One solution being considered in response to the Monteagle and Tracy City water shortage is for South Pittsburg to connect to Sewanee through an approximately 8 mile stretch along Hwy 156 where developers platted approximately 15,000 acres

for residential development with no water - this will equate to a political life-saver for the Marion County Planning Commission that approved these plats without water. In the meantime, Monteagle is making arrangements to pull water out of a privately-owned sand pit lake adjacent to its city limits to service their short term needs.

Regional Water Planning Efforts and Unplanned Growth

Should South Pittsburg connect to Sewanee, they would in turn send water to Monteagle. Monteagle would in turn have the capacity to provide water to Tracy City, that could then service all of its unplanned growth. Tracy City, in Grundy County can then supply water back into Marion County to the rural Foster Falls Water Utility that will then potentially have the capacity to supply water to Jasper Mountain, the potential 5,000 acre development above the cities of Jasper and Kimball and the topic of the third case study in this dissertation. To demonstrate how developers have choices among utility districts, see map A-5 in the Appendix II. As illustrated, Jasper Mountain could be serviced by either South Pittsburg via Kimball, Foster Falls, or Jasper, depending on which utility district is willing to negotiate a rural water line extension with the private developer.

The current Marion County mayor is working with developers, local utilities, a private water company and a regional development district to tie all the water utilities together with South Pittsburg, which has the greatest capacity as it draws water from the Tennessee River, the largest water source in the region. Should South Pittsburg choose not to participate, the remaining water utility districts could create a separate rural water authority to oversee a new water plant on the Tennessee River. It

is not clear at this point as to the role that, Tennessee American, a private water company based in Chattanooga, Tennessee will play in this case. There are several political challenges to this effort since it could be perceived as an effort for a private company to gain a foot-hold in the region, although Tennessee American Water Company did receive positive press for its role in trucking water to the residents of Orme during a time of need.

One concern, should a regional water effort succeed, is that there appear to be no changes in the process of how water will be distributed, consideration for watershed and land protection, or comprehensive planning that would identify existing residents in need. The balancing act could easily be addressed by requiring a regional water plan that incorporates land conservation for water-sheds, while providing a clear picture to both the public and developers of where water supplies may extend to in the future. More importantly, the general citizenry needs a voice in the process either through local referendum or county legislative body approval that sets out where water should go to encourage development in areas that are natural extensions of existing cities. There should also be more transparency, as water utilities cut deals with developers to run long rural water line extensions to remote land that was purchased at forest and recreation prices.

The legal and political question is whether private developers can be constrained in the ability to sub-divide the forests. Currently, developers are purchasing remote tracts in areas with no water for prices far cheaper per acre than fair market value due to the significant capital investment required to purchase large tracts (this is clarified in further detail in Chapter VI). From a political stand-point,

local officials cannot oppose any means of getting water to those long-time existing residents without water, especially since private developers are willing to pay for the water line extensions. Utility boards and city council members are generally not concerned so long as developers are willing to either cover the costs of rural water line extensions themselves or provide the matching payments for federal and state grants or loans. This is one of the options on the table for getting a public water source to the former public land owned by TVA, and now private development known as Nickajack Shores, which is discussed in further detail in the next chapter.

While the Marion County Mayor is hosting meetings to develop a regional water supply that will connect all the municipal and rural water utilities, it is still unclear where these funds will come from and how this will help the remaining residents in the county with no, or poor, water supply. As mentioned earlier, despite tacitly approving the creation of a few rural utilities in the county as allowed by state statute, the county government is not in the water business and does not want to initiate the precedent of paying for water line extensions to rural areas, as evidenced by the ARC grant situation in Coppinger Cove. This is the most important illustration of how decisions are made related to rural growth. Counties, county planning commissions, state and federal agencies and local residents do not have the authority to exert control or influence on where utility districts choose to run rural water line extensions despite potential long-term costs to the county as demands for other services are created from these actions.

Water utilities operate under enterprise funds that are designed to reflect profits, just as any business. Therefore, profit will ultimately be the factor to

determine water line extensions; limiting development does not add to their bottom line, especially when developers are required to purchase a certain number of taps and pay for the water line extensions. Simply put, water utilities perceive water line extensions and a guaranteed number of taps purchased in bulk by the developers as a revenue source, not an expense. Although more public-minded elected councils and mayors have the authority to prevent water line extensions in the case of municipally-owned districts, these decisions are generally approved so long as the utility is operating in the black.

How Government Creates Wealth for Private Developers

When Thunder Enterprises, a Chattanooga development group (who brokered the TVA Public Land Sale of Little Cedar Mountain discussed in the next chapter), purchased 4200 acres adjacent to Franklin State Forest known as Timberlakes at Sewanee, there was no public water system. Despite having a local planning commission in Marion County, multiple plats have been filed and approved and lots have been sold with no public water system. Local officials have indicated that buyers of these remote parcels have a clear understanding that well water is their water source at this time; informed buyers of property will not be willing to purchase, or pay premium prices for, development lots without a public water system. The Timberlakes at Sewanee development, in anticipation of future water line extensions, has water lines run throughout the development and local officials have indicated that agreements were made with the City of South Pittsburg water utility to extend water to this development as well as several others in the region.

J.J. Detweiler, an Ohio based developer purchased approximately 3,000 acres overlooking Nickajack Lake and has a contract ready to be signed by the Mayor of South Pittsburg to run approximately 24 miles of rural water lines up the side of a remote mountain, to a development with no houses. This developer is willing pay for the extension that will also provide water to long time existing residents at the base of Ladds Mountain, so local residents with limited water sources will benefit without having to pay for the 24 mile extension.

If the water utilities connect and gain greater water capacity to service more rural residential growth, developers will likely profit from increased land prices, due to rural water line extensions to the 40,000 acres of large forested tracts purchased in rural parts of Marion County. Ironically, the drought may result in further unplanned growth from a water stand-point leading to increased rural sprawl and greater profits to private out-of-town developers. Water infrastructure investments will likely be made based on future growth and development and not for the benevolent purposes of providing water for existing residents who were sold land without a good supply.

A major factor in the Marion County growth process is the Little Cedar Mountain Development, the case study outlined in the next Chapter of this dissertation. Prior to TVA dispersing public land for private development along Nickajack Lake, city officials from Jasper verbally agreed to provide sewer and water to the high-end golf course development, only to find there is not the capacity to do so. Numerous newspaper articles illustrate efforts by the County Mayor to connect South Pittsburg water utility to Jasper that would in turn extend services to the new

high-end development; these negotiations are still underway at the time of writing this dissertation.

The profit motivations of the private developers are quite impressive (see lot sales outlined in Table A-5 through A-7 in Appendix I). As illustrated in Table A-1 of the appendix, the former TVA tract now known as the Rarity Development, pre-sold 14 million dollars in lots without any public water or sewer available and with the Marion County Planning Commission approving the plat. The rural mountain top developments also stand to profit considerably, based on current sales recorded in the Marion County courthouse. South Pittsburg will determine the future wealth of private developers, with Tennessee American Water waiting in the background to meet their needs if approved by local governments.

State Responses to the South Cumberland Plateau Drought

Water distribution in Tennessee is primarily a local issue; the most obvious weakness of the current system being the freedom of water utility districts to determine residential growth far beyond the district area without consideration of the financial burdens placed on the county as a result of demand it will create for future services. State action is the only way to solve this problem. Although water supply in Tennessee is controlled by a myriad of urban and rural water utility districts, all are regulated to certain extent by the State Department of Environment and Conservation and audited by the State Comptroller's Office. Water utility districts are the result of state-enabling statutes passed by the Tennessee General Assembly, although in response to the recent drought state leader's note that local governments are

responsible for their own water situations. The Governor of Tennessee has indicated that water utility districts have created their own problems through inadequate planning, insinuating there is no state role in water supply unless in emergency situations (Schelzig, 2007). Such statements simply fail to recognize that state legislation created the fragmented decision structure of these governmental entities - state statutes passed by state policy makers determine when and by what authority, water utility districts can make rural water-line extensions.

Water utility districts in Tennessee are audited through the Tennessee Comptroller's Office and recent statutes indicate that state policy makers have chosen to require that water utilities account for water losses in their audits. This was deemed important to some, and according to a presentation to Tennessee Water Utility Districts, it is normal for a 10-20 percent allowance for unaccounted-for-water (UAFW). However, there are Tennessee water utility districts that cannot account for over 50% of their water (Dycus, 2007). As a result, the Tennessee General Assembly passed Public Chapter 243, referred to as the utility district leak detection bill, requiring an annual assessment of unaccounted for water (Dycus, 2007). The importance of this for the purposes of this case study is to point out that state leaders regulate decisions of individual districts; therefore they are incorrectly indicating they have no role or responsibility when they clearly have the authority to require Tennessee's water utilities to have comprehensive regional plans and public transparency in their decisions.

Water utilities operate under boards that are subject to state audits and ethics standards just as all local governments. However, board appointments by county

mayors or utility board elections in those cases where rural water utilities set up independent districts or become exempted from county approval do not garner extensive citizen attention. This can be said for many county boards, commissions and committees established by state statute. Over the course of several years, the Tennessee General Assembly has approved exceptions to the general law covering rural water utility districts through what are referred to as “narrow population class” exemptions. Most of these exemptions allow the county mayor and the county commission to disengage themselves from all rural water decisions, leaving it to an even more localized board that is elected by the residents served by the district. There are several potential problems related to public accountability since few individuals know who their water utility board members are. One of the more obvious oversights of democratic accountability under the Tennessee water distribution system is the lack of representation of those rural residents living outside the municipal limits of the water utility supplying their water. For example, residents of Kimball, TN are served by the City of South Pittsburg who appoints the water utility board. Under the current system, if the City of Kimball fundamentally opposed a 5,000 acre development adjacent to their town not South Pittsburg, it has no recourse to prevent the City of South Pittsburg Water Utility from making a deal with a private developer for water services. The ethical issues surrounding rural water line extensions are certainly worth further consideration given the limited public scrutiny over a process that potentially enables private developers to make millions as a result of these local decisions.

As this case study has demonstrated, governmental fragmentation leads to poorly planned growth since water utilities are unconcerned with the future financial burdens created such as law enforcement, fire protection, solid waste and road maintenance. Of course it must also be mentioned that there is no consideration in the rural growth process to address the negative social externalities such as loss of open space for hunting and recreation, changes in view-sheds, water-shed impacts through road building and home building, traffic congestion, and most importantly the loss of identity created from gated developments separating new and existing residents.

Conclusion

In summary, it is important to recognize that water utilities play an important role in the rural growth process. Current laws, regulations, and governmental structure treat water utilities as independent governmental entities designed to provide drinking water to the public; however, as this case study has demonstrated, they are responsible for much more. Not only are they responsible for distributing a shared natural resource, they are also one of the primary determinants of where rural growth will occur. This research uncovered that there is very little public transparency in how water distribution decisions are made, and under the current system of government, water utilities are designed, regulated and audited in a way that prioritizes profitability over public needs.

Chapter V

The Tennessee Valley Authority's Approach to Economic Development in Marion County, TN

A Case Study of Public Land Disbursement for Private Residential Development

Marion County, Tennessee lies in the heart of the Southern Cumberland Plateau, split by the meandering Tennessee River. One of the unique natural features of Marion County is the Tennessee River Gorge where mountains rise over 1,500 feet on either side of the river. Just below the river gorge lies Nickajack Dam, built in 1967, creating a scenic lake that can be seen from Interstate 24 driving between Nashville and Chattanooga.

During the building of the TVA's Nickajack Dam there were several farms taken by eminent domain in order to make way for the new lake; however, there were also several farms TVA acquired that were not going to be flooded, adjacent to Little Cedar Mountain. The mountain itself lies adjacent to several agricultural fields that stretch south from Interstate-24 to Nickajack Dam. Since the TVA's acquisition of these lands, they have been used primarily for agriculture and public recreation including hunting, camping and fishing. In 2006 the TVA Board of Directors led by Chairman Bill Baxter made a controversial decision to sell public land on the Nickajack Reservoir to a private development group led by Chattanooga-based Thunder Enterprises. The following case-study chronologically lists the chain of events leading up to this decision.

The relevance of each event will be further discussed later in the chapter; a key point for the reader to note is that the original goal of the TVA's Little Cedar Mountain land deal was for the purpose of gaining public recreational amenities while allowing for residential development.

1965 A Plan for Development of the Nickajack Reservoir Area was written by the Marion County Planning Commission and the Tennessee State Planning Commission, with assistance from the TVA when Nickajack Dam was under construction and the reservoir was to be impounded (Walker, 1986).

1966-69 – Nickajack Dam was completed and the lake created. Interstate 24 was completed from Chattanooga to Nashville (passes adjacent to Little Cedar Mountain) (Walker, 1986).

1970 – Tennessee Department of Conservation authorized the preparation of "Nickajack Resort State Park, Master Plan Report" (Walker, 1986).

1973 – "The Nickajack Resort State Park Master Plan" written by engineering firm Hensley-Schmidt, recommended:

"A \$10.5 million resort state park with private enterprise responsible for providing the revenue producing facilities (lodge, restaurant, pool, camping, marina, golf course, horse-back riding, etc.) and the state providing the non-revenue producing facilities (picnicking, playground, hiking, utilities, roads, parking" (Walker, 1986).

1973 - "The Nickajack- Chattanooga Area Recreation Study," written by TVA, in cooperation with federal, state and local agencies, stated:

"The value of Nickajack State Park to the region's economy and its impact on tourism and community development should not be underestimated."

"Development needs to begin immediately on Nickajack State Park if the state is to meet its obligations for tourism, economic, and community development in the project area. State legislative approval of necessary funds for development of this park is a sound investment for all Tennesseans" (Walker, 1986).

1973 –The Tennessee Commissioner of Environment and Conservation asked his staff to investigate public/private arrangements used in other states as possible models for the development of Little Cedar Mountain (Walker, 1986).

1974 – A bill passed by the Tennessee State Legislature sponsored by Representative Shelby Rhinehart, enabling the Marion County Industrial Development Board to sell

general bonds to finance Nickajack State Park and lease it to the State (Walker, 1986).

1977 – After many delays, and mounting evidence that the development of Little Cedar Mountain as a state park would not be forthcoming, the Marion County Conservation Board, authorized by the County Court, contacted the TVA to explore possibilities of Marion County obtaining and developing Little Cedar Mountain. One option involved the county owning the land, then leasing the facilities to a private developer.

An analysis conducted by the Southeast Tennessee Development District and the Tennessee State Planning Office, recommended that a motel/restaurant and camping facility be developed and operated on Little Cedar by a private developer, preferably a national franchise (Walker, 1986).

1979 – In a meeting with representatives from local, state, and federal agencies, a member of the Department of Conservation staff mentioned the possibility of the state constructing a “rustic state park.” Questions were raised by state and federal officials, concerning whether such development would be “under-utilization” of the land. No significant action resulted (Walker, 1986 pg. 1).

1985 – Local interest in developing Little Cedar Mountain was again renewed, and contacts were re-initiated with TVA representatives (Athens-Land Management and Norris-Recreation) to explore options acceptable to TVA (Walker, 1986).

1986 – Marion County Office of Planning and Development sends official request to TVA to allow for “an element of residential and/or commercial development” (Walker, 1986 pg. 1).

July 11th, 1986 – Marion County Mayor makes formal request to the TVA Board of Directors to allow for an “element of residential and/or commercial development.”

The letter expresses “frustration” that no “public funding” for developing recreation opportunities on the TVA’s Little Cedar Mountain Tract appears “forthcoming”. Letter goes on to request that Little Cedar Mountain be designated for: “an office park, resort marina, and/or conference center” and “a small tract designated for residential development to stimulate attraction of private capital.” The letter also acknowledges that the development should “be done with respect to conservation and maximum public access” (Fitz-Gerald, 1986).

June 4th, 1987 – Letter from Marion County Joint Partnership for Economic Development promoting the Little Cedar Mountain site for development with “a combination of uses involving, but not necessarily limited to, water activities and public access” (Walker, 1987).

August 18th, 1987 - Letter from the TVA's project director for Nickajack Reservoir Lands Planning to citizens
Letter requests input "in planning for the future of TVA public land on Nickajack Reservoir" (Ambrose, William S. 1987).

September 8th, 1987- The TVA Hosts a Public Meeting at Lookout Valley High School in Chattanooga, TN (TVA, 1987)

September 10th, 1987- The TVA Hosts a Public Meeting at Marion County High School in Jasper, TN.

There were 125 interested citizens in the two public workshops. The meeting was open to the public and was likely announced in local newspapers. The TVA solicited information about 1) what they valued about the reservoir 2) what improvements or changes in the management of the TVA land around the reservoir would increase its value to them, and 3) what they foresaw as the major problems or issues regarding management of the reservoir over the next 10 years (TVA, 1987).

November 20th, 1987 - Letter from TVA's project leader for Nickajack Reservoir Lands Planning to citizens on a mailing list, enclosing a document that reports the results of the two public workshops

The letter reports that "The Nickajack Reservoir Planning Team recently met and has completed a draft of specific "reservoir objectives" which reflect issues raised by the public, as well as those from a variety of TVA program areas. Ultimately, the TVA programs will be responsible for implementing the objectives" (TVA, 1987).

February 6th, 1988 -Letter from the Chairman of the Marion County Land Development Committee to its members making "a couple of interesting notes" related to the Little Cedar Mountain tract.

First it was rumored that "the state may be considering the possibility of further investment in resort recreation projects: funding for a feasibility study has reportedly been appropriated for a tract of land in Claiborne County. Also, TVA is considering the sale, at auction, of a tract of lake-front property near Paris, TN., for recreation use." The letter goes on to note that the new TVA chairmen's plan is that board members have "specific areas of responsibility and that Mr. Runyon himself may be the one who reviews matters such as the disposition of land (such as Little Cedar) for recreational use since he has chosen to handle community relations" (Woodfin, 1988).

January 20th, 1990- The TVA released a Nickajack Reservoir Land Management Plan including comments and feedback from the two public meetings (TVA, 1990).

The non-local (Chattanooga) public meeting participants noted Scenic beauty (protect natural state; visual protection; maintain as is) as the number one priority. Economic growth did not register in the top five priorities with this group.

The participants of the local public meeting in Jasper noted Wildlife Management & habitat protection waterfowl; upland game as the number one priority with Economic Growth (creation of jobs; increase tax base) as the second highest priority.

The final plan indicated that most groups were in support of commercial recreational development on certain portions of the TVA land adjacent to Little Cedar Mountain, while most agreed that wildlife management should remain an important component of the overall plan for the 2500 acres owned by TVA in the Nickajack Reservoir.

There was an effort to have all of the TVA tracts around Little Cedar Mountain transferred to the Tennessee Wildlife Resources Agency for wildlife management.

Although there were four separate TVA tracts in question, only Tract 3 - the subject of this case study- was being considered for commercial public recreation.

Groups that individuals identified with in opposition to commercial public recreation on Tract 3 include:

The Legal Women Voters of Chattanooga
Chattanooga Council of Garden Clubs
Chattanooga Retriever Club
Tennessee Conservation League
Quail Unlimited
Ducks Unlimited (Members of Group expressed support and opposition)

Groups that individuals identified with in support of commercial public recreation on Tract 3 include:

Marion County Chamber of Commerce
Marion County's Nickajack Port Authority
Marion County Trustee
Marion County Finance Committee
Tennessee River Gorge Trust
Sierra Club
International Wildlife Federations
Ducks Unlimited (Members of Group expressed support and opposition)
The Nature Conservancy
Tennessee Department of Conservation (TDOC)
Chattanooga Area Convention and Visitors Bureau
Marion County Elected Officials signed joint letter

There were 859 formal letters sent to TVA in support of commercial recreation development on Tract 3 (TVA, 1990b).

1996 – Marion County local officials and the TVA begin a dialogue with an international private development firm Hines Interests LLC, Houston, TX now that commercial recreation has been approved (Miller, 1998).

December 1996 – The TVA completed a final Environmental Assessment (EA) for a proposal to change the land use allocation for a 620-acre portion of TRACT XNJR-3PT (Tract 3), making it available for commercial recreation, public recreation and residential development (TVA, 2005).

January 21st, 1997 – Based on the EA, the TVA issued a “Finding of No Significant Impact” to the environment and the land-use allocation for LCM was changed to allow for commercial recreation, public recreation, and residential development (TVA, 2005).

January 29th, 1997 – Letter sent from Marion County Partnership for Economic Development, Inc. to TVA Board

The letter supports changing Little Cedar Mountain’s designated use to include residential development. It is noted in the letter that “Marion County is lacking a development that will furnish our citizens and visitors an outlet for organized recreation and leisure time activities. The nearest State Park is Fall Creek Falls in Bledsoe County and we often must commute to Hamilton County if we plan a golf or tennis outing. And Marion County is totally lacking in facilities that will accommodate a convention-type meeting or gathering” (Marion County Chamber of Commerce Officers and Board of Directors, 1997).

Attached to the letter was a Marion County Land-use Profile. At the time Marion County had 32,975 acres Publicly-owned tax exempt land, 7,197 acres of protected and publicly-owned but taxable land, 53,006 acres of large corporate owned tracts used for recreation totaling 93,178 acres for recreation in Marion County, not including 50,757 acres of farmland. The Little Cedar Mountain Tract accounted for 660 acres.

January 29th, 1997 – The TVA Board holds a public meeting to consider changing designated uses on Little Cedar Mountain

TVA Board of Directors holds public meeting to consider changing the Nickajack Reservoir Land Management Plan “modify the allocated use of public recreation on Little Cedar Mountain Tract No. XNJR-3PT to allow commercial recreation and residential development on 701 acres and change the allocated use from industrial development to wildlife management on a 498-acre portion of Tract No. XNJR-1PT” (TVA, 2005b).

January 29th, 1997 - TVA Board approves changing land-use designation for Little Cedar Mountain Tract

Tract known as Little Cedar Mountain (LCM) - Tract No. 3 – (701.2 acres.) received a designated land-use of Public Recreation- According to TVA documents it was determined that this parcel had “good physical capability for intensive commercial and/or public recreation development to serve as a focal point and drawing card for Nickajack Reservoir.” The report went on to say that as a result of a recreation feasibility study conducted by the Economics Research Associates (ERA), completed in April 1989, indicated that “private sector recreation development was not financially feasible and recommended public sector recreation development.

Additional public recreation development could include a full service resort (lodge, restaurant, golf course, cabins, swimming pool, and tennis courts) in addition to expansion of the existing TVA public recreation facilities at Shell-mound Recreation Area. However, no private residential or non-recreational, commercial development will be allowed.”

The land-use designation goes on to point out, however, that “recognizing that economic conditions may change, TVA will consider proposals from the private sector for development of public recreation facilities. Such private sector proposals will be reviewed within TVA following established land use review procedures to ensure quality development commensurate with the site and to determine whether the proposal is in the best interest of the public. Evidence of the financial feasibility of the proposed development will be the primary consideration in TVA’s review (TVA, 2005b)”

January 29th, 1997- Marion County passed Resolution supporting TVA’s land use changes in the Nickajack Reservoir Land Management Plan.

Resolution indicated there was some opposition to TVA’s change to allow for residential development on the Little Cedar Mountain Tract and wanted to go on record that the county commission, a representative body of the citizens of Marion County, supported the changes.

December 12th, 1998 – Large development firm pursues Little Cedar Mountain

Article in the *Chattanooga Times* concerning TVA’s negotiation with Hines Interests L.P., an international private development firm out of Houston, Texas, about selling the Little Cedar Mountain Tract for private residential development and commercial recreation purposes (Miller, 1998)

March 1999 – The TVA Chairmen Craven Crowell issued a statement that the TVA “would not continue to pursue development of the Little Cedar Mountain project which was proposed by the Hines Development, asserting that the proposal would not result in the maximum benefit for the people who use the property. Chairman Crowell also stated that TVA would continue to evaluate requests for use of TVA

lands, but that proposals must be compatible with TVA's objective of managing public assets to benefit future generations and the environment"(TVA, 2005b pg. 5).

October 2004- A second development group, Thunder Enterprises, submits a proposal to purchase and develop Little Cedar Mountain (TVA, 2005b).

December 13th, 2004 – The TVA conducted an open house style public meeting at South Pittsburg High School to inform the public about the October 2004 proposal from Thunder Enterprises to buy and develop approximately 700-acres on Nickajack Reservoir of TVA-public land (TVA 2005b).

According to the TVA there were approximately 225 comments with approximately half of in favor and half in opposition to the proposal (TVA, 2005b).

The proposal was outlined to the public by Thunder Enterprises as a mixed use development that would include commercial, public recreation, and residential development. A map was provided that illustrated a golf course, trophy base lake, hiking trails, and several other public recreational amenities with public and private gated access (McCombs, 2004).

February 4th, 2005 – A document prepared by the developer, entitled Nickajack Shores, was presented to the *Chattanooga Times Free Press* editorial board meeting.

The document included letters of support from the Marion County Chamber and Joint Partnership, the Marion County Board of Education, the Tennessee Wildlife Resources Agency, and the Tennessee River Gorge Trust. It also included a literature and records review of the intended swap tracts for Little Cedar Mountain, with ecological surveys and color aerial photos.

May, 2005 – The TVA issues a draft supplemental Environmental Assessment as a result of a proposed development of Tract XNJR-3PT by Thunder Enterprises, with a name change from Little Cedar Mountain to Nickajack Shores.

According to the supplemental EA, the TVA notes that "the factor that has changed since the issuance of the 1996 EA is that Thunder Enterprises offers to offset the loss of public property under TVA's control with other private property that would be transferred to TVA. Such offsetting of property would help maintain the amount of property under TVA's control and public amenities and uses associated with TVA property. TVA is requesting that other potential bidders for TRACT 3 also identify offsetting or "exchange" property that the bidder would transfer to TVA" (TVA, 2005).

September 20th, 2005 – The TVA issues a re-evaluation of finding of no significant impact on the proposed development of Tract XNJR-3PT (Nickajack Shores) (TVA, 2005b)

September, 2005 – The TVA Issues Final Supplemental Environmental Assessment

It was stated that public value would be obtained by Mr. Thornton's offer to convey, as a portion of the consideration, approximately 1,100 acres of nearby Nickajack and Guntersville Reservoir land with recreational and cultural value. Public value would also be obtained by Mr. Thornton's commitment to fund the construction of a public walking trail on Little Cedar Mountain (which will remain in TVA ownership). In addition, Mr. Thornton would be required to relocate the portion of Shellmound Recreation Area affecting Tract No. XNJR-21 onto adjacent TVA property. The Shellmound Recreation Area meets the public recreation component of the land use allocation.

The TVA report stated that: "The distinguished Nickajack Shores residential/public development plan includes a gated community consisting of approximately 615 home sites including a golf amenity, fitness and wellness center, a trophy bass lake, walking trails, swimming area, marina, and club house. The plan has also incorporated additional public recreation amenities including rental cabins, RV and other camping, a boat ramp that can accommodate three boats simultaneously, walking trails, park areas, and a 100 room hotel, complete with conference and business center, workout facility and swimming beach (TVA, 2005c)

September 28th, 2005 – Under new business, the TVA Board of Directors approved the sale at Public Auction of approximately 578 acres of TVA Land on Nickajack Reservoir in Marion County, Tennessee.

Within the resolution of the TVA board, it was stated that: "TVA declare surplus and offer for sale at public auction pursuant to Section 31 of the Tennessee Valley Authority Act of 1933 .." The resolution points out that "TVA has no need of said tract for any purposes of the Tennessee Valley Authority Act of 1933." Finally, the resolution states that "it has been determined that the proposed sale is not a major federal action having significant impact on the human environment and that, accordingly, an environmental impact statement is not required" (TVA, 2005d).

February 2006- The TVA auctions 578 acres for commercial recreation, public recreation, and residential development- it was purchased by Mike Ross and Nickajack Holdings LLC with no mention of Thunder Enterprises (TVA, 2006).

June 27th, 2006- A special warranty deed was executed conveying TVA land to Nickajack Shores Holdings, LLC, signed by Michael Ross not John Thornton. The developers paid \$2,674,000 in cash and traded an additional 1,119 acres of land in three tracts back to TVA. In addition, TVA charged \$467,198 dollars to administer the transaction.

The special warranty deed goes on to outline several reservations retained by TVA related to flowage easements. In addition, the special warranty deed includes several conditions and covenants that are agreed to by the developer.

One of these conditions states that “the developers shall invest Four Million Dollars (\$4,000,000) within five years on one or more commercial recreational amenities on the Property as identified in the final development plan,” “a minimum of twenty-five percent (25%) of the capacity of the amenities chosen to meet this minimum investment requirement shall be made available to members of the general public, other than residents of any development which may be located on the property.”

The special warranty deed also states that the developer “shall ensure access to state certified public sewage systems and public water supply prior to any development on the Property. Furthermore, the GRANTEE shall not locate any septic tanks on the Property (TVA, 2006).

November 2006 – The TVA Board Community Relations Committee reviewed public comments on a new land policy that, if adopted, would end the sale of TVA-managed public lands for private residential development.

Committee Chair and TVA Board member Susan Richardson Williamson said the proposal reflects the positions of the at least 75 percent of the 900 comments received during the hearing. “We heard overwhelmingly that citizens wanted TVA lands to be used for public recreation and public access” (TVA River Neighbors, 2006).

Fall 2006 - TVA and local officials learn the main access road to Nickajack Dam was included in the surplus land sale to Nickajack Holdings LLC. Developers worked with local officials and TVA to widen and adjacent county road for access to Nickajack Dam.

Fall 2006- The city of Jasper discovers there is not an adequate water supply or sewer capacity to service the development.

January 26th – March 12th 2007- Nickajack Shores Holdings, LLC also known as Rarity Developments begins development and pre-sells \$14 million in lots with no public sewage system or public water supply.

Spring 2007 – Rarity Club Golf Course is rumored to become private.

Spring 2007 – Local leaders explore Rural Development Loan (a federal agency) to provide public sewer and water service to the development and some of the surrounding residents- The estimated 4 million low-interest government loan would be paid by Nickajack Holdings, LLC.

2007 – The new TVA Board prohibits any future disbursement of TVA land for private residential development (TVA Land Policy, 2007).

Changing Values of the TVA Board

One of the more interesting comments discovered throughout this research came during the January 1997 TVA board meeting, when Director Craven Crowell was forced to respond to the question of whether “if you have 1,000 requests for TVA property on Guntersville Reservoir in the next year, will you be liquidating or turning those lands over to developers who come to request those lands?” Mr. Crowell said, “Each case has to be dealt with individually... Each case has to be looked at on its own merits... If you’re asking me whether we have a policy where we do things like this, the answer is yes. But if you ask me how many more times we’re going to do it, that’s a hypothetical question” (Miller, 1997). As of the writing of thesis, the new board has now created a policy that would not allow for the auction of surplus TVA property for private residential development.

As discussed in Chapter II, TVA has a long history of decisions that reflect the values of board members at the time of the action. It can be seen from the chronological events, the Little Cedar Mountain designated use was changed from public recreation to include private residential development after multiple public meetings. The public input certainly did not demonstrate a mandate to create a private gated residential development with a private golf course, which was the end result for the once-public land. Local officials originally sought a state park, then a resort park with public amenities, and finally a private residential development with public amenities. Individuals and facts changed throughout the 40 year process, but it is important to note that the original effort to develop Little Cedar Mountain was

purely for the public interest in the form of a State Park for commercial public recreation. However, the final outcome indicates that Marion County citizens will be unable to access some of the amenities offered by the new Rarity Development, in particular the only 18-hole championship golf course in the county.

Between 1965 and 2007, TVA staff and local officials wrote plans for state parks, lobbied the state legislature for funds, and hosted multiple public meetings. That TVA hosted public meetings might indicate that public input was a factor of any decision that was made. Almost a half a million dollars of TVA staff time (although reimbursed by the developer) was spent on the Little Cedar Mountain Project to enable local officials, developers, TVA staff, citizens and special interests to have input as to how this one 578 acre parcel of property within a county with 320,000 acres would be used.

Since 1965, when the TVA met with locals in the old Marion County Court House to discuss the long-term uses of the land at Little Cedar Mountain, not one letter, meeting or suggestion was ever made that there should be a gated golf-course community not open to the public. The outcome of the TVA Little Cedar Mountain Land Deal ended with the TVA declaring the land “surplus” to be sold at a “so-called” public auction. Again, some of this land was taken by eminent domain from rural farm families only 50 years ago, and sold to private developers, selling lots for prices reaching \$630,000 for .79 acres of land.

The Little Cedar Mountain Project, now known as Rarity Shores, represents a long history of local efforts to get a property designated for some type of economic development-based activity. Although private residential development was supported

locally, the primary interest was for park-like public recreational facilities. Many outside of the local area are probably not aware of the long history of efforts to see a state park located at the Little Cedar Mountain property. Due to its accessibility and location, it could well have been self-sustaining financially if the state and TVA could have made it happen. Instead, the final outcome resulted in only portions of the property available for public use. Table A-1 in Appendix 1 illustrates the prices paid for the high-end private residential lots at Rarity Shores prior to any construction activity. Approximately 29 ‘less than one acre’ lots were pre-sold in three months for an average price of \$485,000 per lot.

Although there was some discussion amongst local officials concerning the infrastructure needs of Nickajack Shores, no plans were established. At the time of writing this dissertation, the Town of Jasper does not have the sewer and water capacity or infrastructure in place to service the development. The current proposal under consideration is for Marion County government and the City of Jasper to apply for a low-interest federal loan to upgrade the sewer and water infrastructure while Nickajack Holdings LLC pays the public loan payments. The details of the water and sewer situation for the Rarity Development are not clear at this time; however local officials in Jasper are working diligently to insure sewer and water needs are met as originally agreed by the local mayor. Surprisingly, it appears that after 30 years of negotiation and over \$460,000 of TVA staff time, there appeared to be only a verbal agreement to provide sewer and water to the Rarity development, without consideration of the capacity to provide the services.

The assumption drawn from “growth machine literature” suggests that local officials collude with private capital to create an economic engine that is often blind to the negative consequences of growth (Logan and Molotch, 1987). This was certainly seen at the outset of the Little Cedar Mountain Project; the Chamber of Commerce, Board of Education, the Marion County Joint Partnership, and the County Mayor spent much time and effort to support the project. However, once the TVA sold the land to Nickajack Holdings LLC, it became clear that the property would not be developed as originally planned when development plans were presented at South Pittsburg High School on December 13th, 2004. Many local residents felt this was a violation of the original purpose of utilizing private capital to build public recreational amenities, as was the fact that a ten acre river-front piece of one of the swap tracts failed to be included in the final deal. The Marion County Chamber of Commerce and Joint Partnership are no longer involved in the Rarity Development and a majority of the local builders have expressed frustration that the building requirements in the new Rarity Development are too capital intensive for them to afford to build the high-end homes.

The special warranty deed conveying the land to Nickajack Holdings LLC offers several valuable insights into the process - the final deed makes the TVA appear to have taken great care to structure the deal in favor the public interest. Firstly, it is important to note there was no public notice to the general public that the Little Cedar Mountain property was not sold to Thunder Enterprises and the development plans at the public meetings are not those now being considered. Secondly, the special warranty deed avoids the issue of whether the golf course will

be public or private, thereby keeping open the potential for the developers to fulfill their guaranteed 4 million dollar public investment obligation by building a marina and the construction of the “already public” campground relocation. This suggests TVA officials may have colluded with the private developers to allow for a private golf course, while allowing expenses to be off-set with revenue from a for-profit marina. Currently, the only local involvement in the Rarity Development involves the supply of water and sewer, and future considerations will certainly have to be made for solid waste disposal, fire and police protection and possibly increases in school enrollment. A report written by Tennessee Department of Economic and Community Development Local Planning Assistance Office in August of 1999 provided costs data related to expanding the Town of Jasper’s Urban Growth Boundary to include the Little Cedar Mountain area. It was estimated that the costs of extending water mains and other necessary equipment to provide water service to the officially proposed Urban Growth Boundary at \$316,800, sewer \$1,848,000, police \$500,000 per year, and solid waste \$100,000 initial costs with an additional \$50,000-\$60,000 annual operating cost (Urban Growth Boundary Report, 1999).

Theoretical Implications

As mentioned earlier, “growth machine theory” suggests that local officials collude with mobile capital and local private wealth to stimulate growth for the financial benefit of the economic elite (Logan and Molotch, 1987). On the surface, the Little Cedar Mountain development appears to be a clear-cut case confirming the theory. However, an important caveat is that outside wealth, not local wealth, is

driving the project - public documents and evidence also suggest that most local public officials supported the project for its economic stimulus to the community and not for their own personal gain.

It would appear that no single theory dominates the theme of this case study. There are elements of elite theory as wealthy and well-connected developers were able to work with high-level contacts within the TVA to acquire Little Cedar Mountain. There was certainly the appearance of a growth machine at work in the early stages of the LCM project as the Marion County Joint Partnership for Economic Development led the way for a pro-growth agenda, although some might interpret growth machine theory such that public officials personally profit from local government land deals. Locally elected and appointed officials did purchase land that would appreciate due to the TVA land deal; however such land investments hardly substantiate what might be considered a growth machine at work in Marion County, and there are far too many political factions amongst local officials to realistically enable collusion for profit with an elite group of businessmen.

Another theoretical discussion resulting from this case study is the debate of the economic and social benefits of rural residential development. Scholars have suggested that local governments traditionally perceive growth as a positive economic stimulus, while underestimating the costs of infrastructure and services, therefore encouraging development at higher levels than socially desirable (Oates 2001). Rarity Development will most likely create windfall revenues to Marion County government due to the tax revenue generated from the high-valued homes. Despite the additional public service costs outlined in the Urban Growth Boundary Report for the City of

Jasper (1999), costs to provide sewer and water will be covered by developer contributions and service fees paid by the new residents. However, the term “socially desirable” growth leaves much to debate as quality, accessible recreation lands are now lost to a private gated development.

Studies have argued that community characteristics such as socio-economic class will influence whether regional coalitions will develop in order to combat sprawl through growth controls (Gainsborough 2002). Although there are no existing regional coalitions to combat the unprecedented private development in Marion County, there is growing opposition to the public time and resources spent on behalf of out of town developers.

Despite public meetings about how to best utilize the TVA land at Little Cedar Mountain, it must be noted that of 28,000 residents, only a few hundred publicly recorded their opinions. The comments indicated that the general citizenry prioritized wildlife management and preservation of natural character as most important for future land use, but after analyzing the public comments and the number of participants at the TVA public meetings it becomes apparent that groups versus individuals were a driving force in the deliberations. In other words, interest groups were obviously sending out information to their members to make public comments.

Comments from Nickajack Reservoir Land Management Plan indicate the early 1990’s attempt to develop Little Cedar Mountain became more of an issue of non-local (primarily Chattanooga Elite Sportsmen) versus local economic development interests. Wealthy out-of-town quail hunters utilized the TVA property

for field trials and did not want to lose their hunting spot, while native-American groups opposed development for other reasons (TVA, 1990b). Correspondence from files of the Marion County Chamber of Commerce suggest that some felt an entire community's progress should not be thwarted by the narrow interests of a Chattanooga-based Quail hunting club and a radical fringe Native American Group. However, Chairman Crowell and the TVA Board essentially took the side of the interest of a few out-of-town groups and chose not to sell Little Cedar Mountain to the Texas-based Hines Development company but did change its policy to allow for private residential development on the Little Cedar Mountain Tract 3.

During the two separate attempts to purchase LCM, there were public meetings held for each. Two public meetings in 1987 were to obtain public input on changing the land-use designation to include residential development. A third meeting in December of 2004, according to TVA was to:

- 1) Inform the public of the request that TVA had received for a mixed-use development on Nickajack Reservoir
- 2) Provide an opportunity for the public to identify any issues to be considered in TVA's environmental review of the proposal

As a participant observer of the public open house meeting in 2004, it was evident that the only means of participant input would be in writing. The meeting consisted of a presentation by Thunder Enterprises, and there was very little time for review of the environmental assessment, since it was only received upon arriving at the meeting. Nonetheless, as mentioned in the listing of events and actions, TVA reported that approximately half supported and half opposed the project.

There were several groups and organizations involved in providing input into the Little Cedar Mountain Project through public meetings. The local groups officially promoting the LCM project through letters and resolutions were the Marion County Chamber of Commerce, the Marion County Joint Partnership for Economic Development and the school superintendent of the Marion County Board of Education, which supported the project for its economic development potential. However, it appeared from various letters that the intent of the project was that the recreational amenities would all be public and would not be for the “rich and wealthy” (Nickajack Shores, 2005). Barring late-stage local negotiations to make the golf course public, the Rarity Development will be one of the most exclusive gated communities in the state with a private golf course designed by legendary golfer Lee Trevino, and lot price points ranging from \$300,000 to \$600,000. The Tennessee Wildlife Federation, a non-profit conservation organization from Nashville, supported the project in the early stages due to the fact that more land was being added to the public domain, consistent with their official policy of “no net loss of public land” as it relates to public land disbursements. The Tennessee River Gorge Trust supported the project because Big Cedar Mountain, a swap parcel, and Little Cedar Mountain were going to be preserved in the plan which was adjacent to a parcel they already owned.

“Grass-roots Democracy” Once Again

Phillip Selznick’s (1949) case study cited a TVA official when outlining the purpose for which the TVA has acquired tracts of land:

Essential and unavoidable Acquisition: to acquire reservoir areas necessary for impoundment or flooding; to acquire those areas necessary for the construction of dams, power structures, and for the development of related improvements and operations; to control reservoir margin uses not consistent with the purposes of the TVA Act; to consummate transfer of the properties of certain power companies whose holdings and operations have been taken over by the Authority.

Desirable but not essential Acquisition: to avoid economic severance of property lines through over-purchase of entire tracts; to eliminate excessive costs of reconstruction and relocation of roads, bridges, and other improvements; to provide opportunities for development of public projects such as recreational areas, experimental grounds, game refuges, fish hatcheries and ponds, tree nurseries, etc.; to provide for the protection of reservoirs from excessive silting and surface run-off through public control of adjacent lands (Selznick, pg. 188).

There is nothing in the previous purposes for land acquisition that suggested the TVA would sell land at a later date for private residential development. One could argue that the TVA was simply responding to the local citizenry as part of its obligation to grassroots demands, or that they chose to sell the property under the auspices of economic development. However, given the evidence from the public comments, there was no overwhelming pressure from the local citizenry to sell the land purely for economic development reasons; the majority of local correspondence with the TVA cited public recreation as an equally important public goal.

Phillip Selznick aptly described TVA in 1949 as using “grassroots democracy” to mask efforts to fulfill their own agenda, and almost sixty years later one could argue this continues to be true. It is important to analyze what has been defined as “public” by TVA. During the first set of public meetings in 1987 there was considerable due diligence on the TVA’s part to solicit input via the media as to how agency land on the reservoir might be used over the next decade. According to a media fact sheet in 1987:

The new planning process is a progressive approach aimed at better management of reservoir resources through detailed computer analysis of land capabilities and suitability's and an emphasis on public participation (TVA, 1990b pg. 6)

The fact sheet went on to point out six reasons for changing the planning approach:

- 1) Increased pressure on limited land base
- 2) Environmental laws, regulations, and agency policies, that emphasize environmentally sound decision-making
- 3) Recognition of the importance of public participation in planning the way TVA land will be used
- 4) Awareness of the impact TVA land uses can have on adjacent privately owned property
- 5) The availability of computer technology capable of quickly analyzing land characteristics
- 6) Maintaining a constantly changing inventory of reservoir information

Public participation as defined by TVA involved 49 participants at the Chattanooga-based workshop and 76 participants at the Marion County workshop (where most of the Nickajack Reservoir is physically located). Each workshop broke into small groups and participants were asked a series of specific questions regarding what individuals valued about the reservoir, what improvements or changes were needed and anticipated problems and major issues. It is important to note that none of the questions asked the specific question of whether the LCM parcel should have a land-use designation allowing for residential development, nor was it asked if a public park should be allowed.

The TVA used extensive resources in gathering data, holding public meetings, and sharing results which demonstrated a clear intent to allow for public participation; however, given the final outcome for Little Cedar Mountain the legitimacy of the process should be questioned. While analyzing the legitimacy of TVA's effort to gain

public involvement is not the central subject of this dissertation, it should be noted that there is a breadth of literature on public involvement that could be applied to this aspect of the TVA land swap.

As letters have demonstrated, locals have desired a state park for many years prior to this time and it would also appear that the TVA had worked closely with them on the process. By 1987 there was an evident local effort to search out private capital investors to invest in a park-like facility, yet allowing for private residential development to satisfy the profit needs of the private sector. While the final decision in 1999 by the TVA Board resulted in the rejection of a private development proposal, a qualification was left that economic conditions might change therefore leaving room in the land-use plan for residential development in the future. From a public amenity standpoint, the late nineties development proposal by Hines Development Company was a more desirable outcome; however the TVA distinguished the Thunder Enterprises proposal for adding land to the public domain.

The new TVA board created a policy that no longer allows for residential development on public lands. It is clear the TVA Little Cedar Mountain land deal was perceived by the general public and the new TVA board as an unpopular means of accomplishing the economic development goals of the agency. Although the State of Tennessee Department of Tourism promotes retirement communities as a legitimate form of economic development and growth, there is no data available to support its merits. Additional research is needed regarding public attitudes about retirement communities, as well as a comprehensive analysis of the tax benefits balanced with long-term costs of services.

Elite Theory and TVA

As Selznick's case study from the 1940's identified a board member closely connected to agricultural interests, this modern day case study identifies a board member with close connections to the development interests. The Chairman of TVA at the time of the land disbursement was known to be a personal acquaintance of purported developer. As Selznick states, there are "specific matters of fact, for which adequate direct evidence is not available, which are considered significant by informed participants" (Selznick, 1949 pg. 184). The importance of board backgrounds lies in the fact that that the "ideals of public policy" [may] "depend upon the specific interests and backgrounds of those actually charged with the day-to-day administration" (Selznick, 1949 pg. 188). For the locals who wanted to see Little Cedar Mountain developed, it was well understood that the potential developer had personal connections to the Chairman of the TVA Board at the time; hence it was imperative that the TVA land swap take place prior to the impending expansion of the TVA Board. Local officials committed countless hours assisting in the acquisition of Little Cedar Mountain including a meeting with Governor Phil Bredesen to gain his support for the project.

The greatest evidence of the TVA collusion favoring the disbursement of the TVA lands was the format of the public meetings held in December of 2004. The public meeting was a poor example of grass-roots democracy- there were booths set up by the TVA staff to answer questions, while the developer gave an overview of the project, highlighting all the new public amenities including a public walking trail,

marina, golf course and commercial development along I-24. The concept plan for the development did not indicate the golf course may in fact be private and gated or elaborate as to future plans for the swap lands. As it turns out, TVA and not the developers, were the constructors of the public walking trail. More importantly, there was never a mention that the land would be sold to any entity other than Thunder Enterprises, yet the land was deeded to Mike Ross with Nickajack Shores Holdings LLC. Of course un-known facts may indicate that Mike Ross was actually acting on behalf of Nickajack Shores Holdings LLC in which Thunder Enterprises may have an equity interest. However, had there been more transparency on this point from the outset, local officials may not have led the public to believe that the development was not for the “rich and wealthy”, as described in a formal letter from the Chamber of Commerce.

During the public meeting there was one citizen that tried to over-shadow the developer by arguing that the development would not benefit the locals and that none of the children in the new development would attend local schools; most in attendance appeared to ignore the comments. Nonetheless, TVA did take public written comments and it was later published that approximately half of those in attendance favored the project while half opposed it. At the final meeting of the three-person TVA Board led by Bill Baxter the decision was made to sell the land adjacent to Little Cedar Mountain, as well as swap other parcels in its place. It is important to note that one of the first orders of business of the new TVA board in November of 2006 was to establish a policy that no more TVA land will be disbursed for private residential development.

The TVA chose to auction the property instead of an outright sale to Thunder Enterprises later, since it was public property. However, due to the requirement of swapping other land on the reservoir as part of the deal, there was minimal opportunity for a legitimate competing bid at this point; the auction was simply a part of the process. Thunder Enterprises had already secured the only logical swap tracts that could be bought which included Burns Island, Big Cedar Mountain, and the Clyde Boyd Farm. The developer paid for studies that illustrated the environmental and archeological importance of these tracts (Nickajack Shores Report, 2005) and there is little question that these properties had important biological features; but none of these properties had the recreational opportunities the Little Cedar Mountain Tract offered. The swap tracts were not as accessible and conducive to outdoor recreational activities (such as rabbit hunting, raccoon hunting, duck hunting, ATV riding, walking, mountain biking, hiking, fishing, camping etc.) There was not a balanced representation of the public recreational considerations in the process. Although there are ducks on Burns Island, hunters have to access it by boat; while the Little Cedar Mountain Tract had a deep water slough that could be accessed by land - now the future home of the marina. There was also a place to put a small boat in to fish a sheltered inlet outside of the Tennessee River currents - not the case with the other tracts. Big Cedar Mountain and the Clyde Boyd farm have no access to the river or lake. The Little Cedar Mountain tract was extremely accessible just off I-24 and adjacent to existing TVA recreational facilities. The LCM tract was also larger than the individual swap tracts, leaving more opportunity for multiple recreational uses at one time.

TVA Closes Door on the Public

Once the TVA acquired the exchange lands, a 2 year land-use strategy for the property was initiated without any public input. When contacted by a local greenways and trails organization about potential trail corridors on TVA swap lands, there was clear indication of resistance to local input. On exactly the same day the local greenways organization was slighted by TVA staff, and another regional resource manager from the Tennessee Wildlife Resources Agency expressed resistance for allowing trails across a 30,000 acre state forest adjacent to the TVA swap land, which was to be a part of a locally supported hiking and mountain-biking trail through a scenic Tennessee River Gorge. In one day, local citizens of Marion County learned from state and federal out-of-town bureaucrats that there would be resistance to a locally supported public trail project on public lands owned by state and federal agencies.

Conclusions

As can be seen from this case study, Marion County officials and citizens have worked since 1970 to obtain public funding to provide public recreation amenities to existing public lands without any success, leaving private capital as the only option to achieve public goals. One of the more problematic issues surrounding the Little Cedar Mountain land swap is how the term “economic development” is defined. The general consensus based on the TVA’s final ruling is that promoting and allowing for residential development on the TVA public lands no longer satisfies the economic

development mission of the TVA. There were several compelling arguments to substantiate such a change in TVA's policy in their Knoxville public hearing - many argued that private residential development often does not equate to economic progress because of the fiscal notes attached to the provision of water, sewer, roads, and law-enforcement protection, while others contended that with rapid population and residential growth in the TVA region there is no justification for selling public land for residential development for the purposes of economic growth. Finally, many argued persuasively that the TVA should not be able to sell public land taken by eminent domain to private development.

The TVA Little Cedar Mountain land deal has not yet concluded in Marion County - there are already potential violations of the special warranty deed since development has occurred without a public water and sewer system available and the Marion County Planning Commission also allowed plats to be filed and lots to be sold prior to the public infrastructure being made available. There is growing opposition to expending too much public time and resources to this project as the community learns that promises were broken concerning the public amenities. There is clearly growing criticism of the Rarity Development, but there is far too much political and financial capital at stake for Rarity Development not to receive the services it needs for the development.

This case study suggests that local water utility districts were either not consulted or simply not considered important throughout the process. As mentioned in the previous chapter, the Town of Jasper does not have the capacity to supply the private gated golf course community with water or sewer. While interviews with

local officials might produce some type of answer; there is clearly no reasonable explanation for local officials failing to consider how services would be provided to any type of development at Little Cedar Mountain. Unprecedented arrangements are being made to address the water and sewer needs of the new Rarity Development at Nickajack; past history in the county suggests that the amount of time and service offered from local elected officials was well beyond the normal assistance provided to local developers.

While the general public debated for a quarter of century over the fate of one parcel of public property, there was never a mention of how the public services would be provided for either commercial or private residential development. In addition, there was little foresight in predicting the imminent land rush that was soon to occur in Marion County, making recreational lands a rare commodity to local residents. As will be discussed in the next case study, the type of rural development in Marion County that the high-end Rarity Development has spawned may very well become much less profitable to the county purse given that a subsequent 40,000 acres of former large timber tracts in remote areas with no houses will require a much higher cost of services.

Chapter VI

The Marion County Land Rush

A Case Study on the Beginnings of Rural Sprawl

Between 2004 and 2007, as the previous case study outlined, TVA disbursed public land to a private development group to achieve the goal of economic development and public recreation. In the same three year time frame, some of the same private developers in the same county bought an additional 40,000 acres of private forestland for private residential development (Carter, 2007). Ironically, the same industrial forest was identified by the Marion County Chamber of Commerce officials in the late 1990's as recreation lands available to the public when building the case for the development of the TVA's Little Cedar Mountain Tract (Marion County Chamber of Commerce, 1997). During the time of the TVA's land swap in Marion County a land rush had ensued on the plateau surrounding Nickajack Lake and the Tennessee River - of 320,000 total acres, approximately 40,000 acres of traditional plateau forestland started to convert to rural residential development from 2002 -2007, as illustrated by Map A-1 Appendix II.

The first large tract, formerly known as the "Lewis Tract" (lower left hand corner of Map A-1) totaled 11,900 acres according to marketing documents. The land was originally purchased from George M.D. Lewis, Jr., on March 7th, 1977. Earlier records show the land was conveyed to the Crow Creek Land and Coal Company by J.F. Loomis and wife, dated November 1, 1907 (Lewis Tract, 2005). The former timber tract adjacent to the Franklin State Forest was owned by the St.

Regis Paper Company when it sold to developers in 2005-2006. At the time of the sale, the timber was being harvested by Smurfitt Stone (formerly Meade Corporation) who owned a paper-mill in north Alabama only a short distance away. The St. Regis Paper Company LLC marketed the timber tract to developers, highlighting its proximity to Chattanooga, Huntsville, Nashville and Atlanta while including the populations of each city. Under the heading of “development” St. Regis stated the following:

The Cumberland Plateau and Southeast Tennessee offer a unique development opportunity. This area has been voted among the most desirable places to live in the U.S. and has seen tremendous growth as retirement communities....

The land was priced at \$595/acre or \$7,080,500. Several separate development groups and LLC’s, including Thunder Enterprises (the developer who helped broker the purchase of the TVA’s Little Cedar Mountain tract) built several miles of road and sub-divided the original 11,900 acre tract into 300 parcels with no public water available at the time.

During the marketing of this property the developer was also seeking land to swap for the TVA’s Tract 3 (Little Cedar Mountain). The Chamber of Commerce director suggested consideration of the “Lewis Tract” as a potential swap land since it would have made a good addition to the Franklin State Forest. Concurrently, the author made efforts to work an arrangement for state acquisition of 4200 acres of the “Lewis Tract” adjoining the Franklin State Forest with the Tennessee Department of Environment and Conservation, the Tennessee Wildlife Resources Agency, the Tennessee Department of Agriculture and the Tennessee Division of Forestry, with

contact also made to the Tennessee Nature Conservancy. Prior conversations with the Tennessee Division of Forestry suggested that if the Franklin State Forest could be expanded to cover more acreage, it would warrant a full-time staff to manage recreational amenities on the land. However, once the developers learned the TVA swap land must lie on the reservoir, and this property was on the plateau, the developer decided to take advantage of the development opportunity, and purchase the 4200 acres adjacent to the forest, despite knowledge of the local conservation efforts to expand the state forest through public funds. In the end, private developers moved faster than the State of Tennessee could, or would, move on the property, and an important conservation opportunity was lost.

As a result of the State of Tennessee's inability to act in a timely manner when prime conservation properties come on the market, Governor Bredesen created the Governor's Heritage Trust Fund. As Table A-5 Appendix I illustrates, by 2006 plats were filed that included 89 parcels; property buyers were aware that well water would be their source until South Pittsburg or Sewanee extended rural water lines. Between January and November of 2006, of the 4200 acres 303 acres in 21 parcels were sold for \$2,317,350.

As outlined in the first case study, negotiations are underway for the City of South Pittsburg to extend water to this development as well as drought-ridden Monteagle, TN. Although no formal studies have been made, local sources suggest that a connector line from one city to another would need to be much larger than a rural water line extension to a few developments; therefore it is possible that two

separate water lines could extend through this remote region in order to satisfy the needs of new developments and existing municipalities.

During the same time period, an Ohio developer purchased over 10,000 acres in two separate tracts in Marion County. Within six months, as Table A-6 Appendix I indicates, this developer filed plats for 108 lots on phase one of a three thousand acre tract over-looking TVA's Little Cedar Mountain parcel. Between December 15th, 2006 and March 14th 2007, 45 of 108 lots were sold, approved by the Marion County Planning Commission, for \$3,611,350. These parcels were marketed heavily in Florida with glossy full page advertisements entitled LAND RUSH IN TENNESSE (See Attachment A-1 Appendix IV). The developer currently has a contract and local support from the City of South Pittsburg and New Hope to send a rural water line approximately 24 miles to this mountain-top development with very few actual residences. However, as mentioned in Chapter IV, there will be existing residents who will benefit from the new water source along the way while the developer pays the costs of the water line installation.

In 2007, Bowater, an international paper company, initiated a 350,000 acre land disbursement in Tennessee. It separated two former timber tracts totaling 12,000 acres in Marion County, TN to market as high-end development tracts. Bowater listed them with a realtor in North Carolina who marketed these parcels to resort developers; the two parcels known as Aetna Mountain and Jasper Mountain each have many miles of bluff view over-looking the valleys, lake and Tennessee River.

Jasper Mountain and Community Importance

After learning that the most locally utilized timber tract for recreational purposes was also being pursued for development by Thunder Enterprises, there were local efforts to address the dramatic loss of open space by attempting to conserve a portion of the 5,000 acre Jasper Mountain Bowater Tract. Unlike many of the other rural large mountain top developments, Jasper Mountain sits adjacent to local communities and can be seen by many residents of the county from their homes. In order to protect some of Jasper Mountain from residential development along the most prominent bluff-line, the author, the Marion County Chamber of Commerce, and the Tennessee Wildlife Federation (TWF) made the following series of efforts to balance growth and conservation.

February 2006 – I wrote a letter to Governor Bredesen and the Commissioner of TDEC, to help set aside land on Jasper Mountain for view-shed protection, water-supply protection and public recreation (See Letter A-2 Appendix III).

Spring/Summer 2006- State officials formed a work group to work with Bowater on acquiring key tracts in a 350,000 acre land disbursement in Tennessee. Despite several contacts to state officials to ascertain how to get Jasper Mountain on the state priority list, no progress was made. (This will be further discussed later in this chapter.)

Spring/Summer 2006 – The Executive Director of TWF and I contacted and met with Land Trust for Tennessee and Nature Conservancy in Nashville to attempt inclusion of Bowater's Jasper Mountain Tract on the State Priority List since they appeared to be involved in closed door process for prioritizing lands for state acquisition.

Spring 2006 – State officials approach Lyme Timber, a private timber investment company to acquire large portion of Bowater holdings.

March 2006 – Although we were unable to get state officials to include Jasper Mountain on the conservation priority list, I contacted Lyme Timber Management to

consider purchasing Jasper Mountain as a private investment, while public funds could be arranged for portions of the this tract to be protected.

Summer 2006- State decides to purchase approximately 13,000 acres from Bowater without Lyme Timber Capital. Lyme no longer interested in Bowater land due to limited remaining pulp-wood timber value and poor timber management practices.

Fall 2006 – It was learned that portions of Marion County ranked high in conservation value according to a State Wildlife Action Plan developed by the Nature Conservancy and the Tennessee Wildlife Resources Agency, yet was not a state or Nature Conservancy priority. (See Map A-3 Appendix II) (The dark green portions represent high priority areas). Much of the region around Jasper Mountain ranked the highest in the State of Tennessee (See Map A-4 Appendix II) (Marion County is the lower right hand county of the 5 counties identified by dotted lines).

October 12th-15th – At the National Land Conservation Conference, Lyme Timber were again approached about Jasper Mountain. Innovative Resource Solutions were approached about Jasper Mountain public-private partnership potential.

Late October- Call to national expert on conservation finance, Story Clark who directed me to a conservation and limited developer out of Philadelphia- he explained how they use private capital and limited development as a conservation tool (This was the only option for Jasper Mountain due to Bowater's insistence on marketing the 4,916 acre tract as a development property through a real estate agent in Charlotte, North Carolina)

November 20th -2006 –After getting clear indication that Marion County was not a State priority, I attempted to pull together a public-private partnership that involved limited development on Jasper Mountain. Due to high acquisition and development costs, was unable to acquire adequate local capital (Bowater or North Carolina Real Estate agent had not priced the Jasper Mountain parcel at this time.)

December/January 2007 Jasper Mountain was profiled in an issue of *Outdoor Life* December/January 2007 issue, a national hunting magazine, on the loss of public opportunities due to large timber tract sell offs.

January 31st, 2007 –With the support of local officials (See Letter A- 2 Appendix III), met with the executive directors of the Tennessee Nature Conservancy, The Land Trust for Tennessee, The Conservation Fund, The Tennessee Wildlife Federation, The Open Space Institute, The Trust for Public Land, and the Lyndhurst Foundation to seek professional assistance on a land conservation effort in Marion County.

After unsuccessful attempts to get professional land conservation organizations to take the lead on the conservation component of the South Cumberland Project, the

Marion County Chamber of Commerce Board and the Tennessee Wildlife Federation agreed to sponsor the effort.

A grant was written in the name of the Tennessee Wildlife Federation and the Marion County Chamber of Commerce, requesting 4 million dollars from the Governor's Heritage Trust Fund to leverage towards Jasper Mountain and public access easements on the adjacent RMK tracts- This effort received permission from Executive Director of the Tennessee Wildlife Resources Agency to list them as land manager during the interim should TWF receive the grant (See Appendix IV Attachment A-2)

February 2007- Created the South Cumberland Wildlife and Outdoor Recreation Corridor Initiative. (See Appendix II MapA-2) - Realized the local effort would have to be expanded to cover a larger area to get the attention of state and federal agencies, conservation organizations and Lyme.

February 2007 –Met with Bowater realtor and John Thornton to discuss Jasper Mountain and alternative development models that set aside open space and protects local view-shed.

February 2007 –Made presentations to the Town of Kimball and local leaders urging them to take proactive stance on protecting the view-shed on Jasper Mountain.

February 2007 – Town of Kimball passed resolution encouraging Bowater to help protect the view-shed of Marion County, Jasper, and Kimball Tennessee by selling their property to responsible investors.

March 2007 – Community leaders sent letters of support for a 30,000 acre land conservation project, including portions of Jasper Mountain signed by four mayors, the county mayor, the Chamber of Commerce Director, the president of the South Pittsburg Water Utility, and numerous other council member and county commissioners to Congressmen Davis, The Lyndhurst Foundation, The Land Trust for Tennessee, The Nature Conservancy, The Conservation Fund, the Open Space Institute and the Tennessee Wildlife Federation.

February 2007 – local conservation advocate met with Bowater realtor informing him of local support for setting aside view-shed on Jasper Mountain as well as efforts to coordinate a public-private partnership that would purchase the Jasper Mountain Tract.

February 15th, 2007- Letter sent to Lyme Timber seeking a public-private partnership.

May 2007 – An additional 20,000 acres owned by Regions Morgan Keegan came on the market, adjacent to the Jasper Mountain Bowater Tract and was priced higher than

timber market values, bringing total large tract land disbursements, soon to be converted to rural residential development to over 40,000 acres in Marion County within 3 years. This tract also allowed John Thornton another access to Jasper Mountain; therefore by-passing locally-owned access.

February 18th- completed federal appropriation request form to Congressmen Lincoln Davis for South Cumberland Plateau Project –Met multiple times with local Congressman and his staff to package a 7 million dollar direct federal appropriation request. Also put together letters of support from local leaders sent by the county mayor (See Appendix IV Attachment A-3).

March 14th- Sent letter to Lt. Gov. Ron Ramsey illustrating land rush on the Cumberland Plateau, supporting the North Cumberland Conservation Project and requesting additional consideration for the South Cumberland Project.

Multiple phone calls and presentations were made to local state representative, local leaders, members of the local hunting club on Jasper Mountain, local press, including the Chattanooga Times all attempting to build support for the South Cumberland Wildlife and Recreation Corridor.

March 2007 –Contacted researcher with Cornell University for advice on Conservation and Limited Development Projects throughout United States in order to package real estate pro forma for private investors.

April 2007 –Convinced TWF Board member and wealthy entrepreneur to go to New Hampshire to meet with Lyme- also invited professional business consultant and TWF board member, TWF Executive Director, and Board Member of the Nature Conservancy and State Conservation Commission at the request of the Land Trust for Tennessee Executive Director. Lyme had checked out legitimacy of group through other conservation contacts and agreed to continue talks on acquiring land for the South Cumberland Wildlife and Recreation Corridor.

April 2007- Contacted a conservation consultant and key decision-maker in the writing of the National Forest Legacy Bill- entered into contract to review Lyme proposal.

March/May 2007- Went to New Hampshire to meet with Lyme Timber- Provided 30 page pro-forma document including data on local retail market, large tract market sales, maps, business plan for limited development, and parcel profile on each RMK tract. Data was gathered from Marion County Court House and local foresters. Private consultants assisted with packaging a professional real estate pro forma. Lyme was interested but needed private investment group to purchase a portion of Jasper Mountain.

April 2007 –Local advocate packaged a separate 30 page pro-forma outlining a business plan involving private development and public take-out on the 5,000 acre Bowater Tract.

April of 2007 - Met with multiple development groups to take-out part of Jasper Mountain for development.

May 18th – Lyme requests a conference call with land conservation organizations in the South Cumberland including Friends of South Cumberland State Park, The Open Space Institute, The Land Trust for Tennessee, the Conservation Fund and the Tennessee Wildlife Federation- discussion on RMK tracts. Lyme requested a matrix outlining conservation interests on each of the separate RMK tracts.

May 18th – Met with Friends of South Cumberland and learned they raised 2-3 million in federal public funds due to previous commitment from a former TVA Board Member to set aside a land around South Cumberland State Park but did not commit conservation dollars to this effort even though one of the RMK tracts bordered the Fiery Gizzard Trail that connects the South Cumberland State Park and Foster Falls Natural Area.

May 2007 –Lyme contracts with consultant to handle the South Cumberland Plateau effort while they work on a \$143 million dollar land deal with the State of Tennessee and the Tennessee Nature Conservancy in the North Cumberland.

May 2007- Governor appropriates \$82 million towards the North Cumberland Project which involved Lyme.

June 1st 2007 – Governor’s Heritage Trust Fund awards 1 million dollars to purchase an RMK tract that will protect the view-shed of Sewanee, TN- led by Nashville-based Land Trust for Tennessee which was co-founded by Governor Bredesen, with additional funds going to the Friends of South Cumberland State Park to expand the Savage Gulf State Natural Area. None of the appropriations had the same support by local officials as the South Cumberland Wildlife and Outdoor Recreation Corridor grant request that included the protection of the Jasper Mountain view-shed.

- Jim Fyke contacts TWF to ask them to withdraw the 4 million dollar grant request until details of plan are sorted. It is important to note that TDEC and Jim Fyke established the parameters of how public land acquisition dollars would be disbursed, weighting it in favor of lands already adjacent to existing public lands. In addition, it is important to be reminded that attempts were made to get Jasper Mountain added to the state list in early negotiations with Bowater. Although Jasper Mountain was a priority for local residents and officials in Marion County, it was not a priority for the State nor major conservation organizations.

June 14th- Thunder Enterprises, through local contacts, explores the purchase of 200 acre prime access to Jasper Mountain from local conservation advocate.

June 15th- Realtor for Bowater informs me that the Jasper Mountain Property was about to sell and he was following up on his promise to give the conservation project a chance, but that time was running out.

June 22nd- Lyme Timber contract consultant comes to Tennessee to see property – fly over all Jasper Mountain Bowater Tract and RMK parcels with Lyme representative.

- Lyme Timber contract consultant does not believe Lyme will purchase land as a timber investment but felt it was a good conservation project and wanted to pursue alternative federal appropriations from the Forest Legacy fund. He agreed to research the availability of conservation dollars through TVA since most of the South Cumberland Wildlife and Recreation Corridor included two large water-sheds (one of which was an original holding of the power company TVA bought out in the 1960's).
- Lyme Timber decides not to bid on Jasper Mountain Bowater Tract.

August 2007 Thunder Enterprises makes offer on Jasper Mountain.

August 13th – A development group is found that is willing to consider purchasing Jasper Mountain and partner on setting aside half of the Jasper Mountain Property for public recreation, once public funds are made available. Same Day Bowater realtor states that property is still available to purchase.

August 14th- (Bowater realtor) verbally agrees to offer additional due diligence to new conservation-friendly development group.

August 28th- Bowater realtor informs us that the Jasper Mountain Bowater Tract is no longer on the market, indicating they have agreed to sell Jasper Mountain to someone who already has a bid on the property.

September 10th- Bowater realtor informs Tennessee Wildlife Federation the property is not under contract and that a “back-up” bid would be accepted but would not allow due diligence period.

September 25th- Contacted Bowater directly to ascertain why they would not give due diligence time to a competitive bidder. Bowater was aware of conservation effort, but informed us that we had 8-9 months to get a bid in and that the bidding closed August 13th, despite a web-site by Cardinal Real Estate indicating final offers were still being accepted. Bowater representatives expressed that they felt they had done everything they could to work with the State and conservation organizations but

that they had a good bid, and they wanted to honor their commitment to close a complex sales contract with the existing bidder. It becomes clear from this conversation that Bowater decided not to allow their realtor the opportunity to work with another bidder.

January 29th 2008- Former Chamber of Commerce director appeals to County Commission to set aside land on Jasper Mountain for public use (See Appendix III Letter A-3) Developer learns of effort and attends county commission meeting to defend his conservation background.

January 31st 2008- Thunder Enterprises closes with Bowater and Regions Morgan Keegan on 8,000 acres including Jasper Mountain, bringing their total land assets in Marion County to approximately 12,200 acres, not including the former TVA land.

The Makings of Rural Sprawl

Developers are willing to go to great lengths to acquire prime real estate property despite many hours and days of local efforts to gain support from state, federal and conservation organizations to help acquire land for permanent protection for recreation and wildlife protection. Although water appears to be a major factor, as the first case-study demonstrates, the general rule appears to be that there are no limits to where local public utilities are willing to extend their water lines. Bowater, an international paper company, touts environmental stewardship and community involvement as an important component of their mission; however, it is apparent that Jasper Mountain was going to be marketed and sold as a development tract despite the wishes of the local community. Due to the county's booming residential real estate market, not one large timber tract of the 40,000 plus acres was marketed as a timber tract; all the marketing materials put out by major timber companies selling land in Marion County were primarily promoting development and recreation. Despite the overwhelming development pressure and 11 million dollars in state and

local funding request for conservation, not one dollar was received for the public interest of preserving land for public access and use.

As this case study has demonstrated, the first action leading to large scale forest conversion is the disbursement of timber tracts to developers by commercial timber companies. While timber companies have touted their conservation values for many years, Bowater would not consider changing their disbursement process to give conservation efforts a chance. This case study will play out time and time again as 44 million acres of forest will be bought and sold over the next 25 years throughout the United States (McCombie and Larson 2007). In a final conversation with a representative of Bowater concerning Jasper Mountain, it was evident Bowater wanted to defend its environmental and conservation conscience by pointing to the approximately 13,000 out of 350,000 acres sold to the State of Tennessee.

One of the more telling indications of local collusion with developers is really based on the early stages of a land deal. Since nearly all the large timber tracts in Marion County were on the plateau in rural areas with no public water system, it is imperative that any responsible investor inquire to the local governments and water utilities as to whether services will be made available should they choose to purchase a large parcel. It is standard for realtors representing timber companies to allow what is referred to as a “due diligence” period to determine such things as water and access availability, title issues and surveys.

In Marion County for instance, developers must have a 50 foot right of way to a parcel in order to build a public road. In the case of Jasper Mountain, there was no 50 foot right of way to access this tract, forcing the private developer to negotiate the

purchase of a separate timber tract adjacent to the 4,500 acre tract, totaling approximately 8,000 acres. Fortunately for the developer, the access tract was on the side of a mountain and currently under a stone mining contract with significant timber still remaining, which afforded a way to pay for the extra expense of buying access to the prime bluff front development tract on the plateau.

As outlined in Chapter IV, developers need only to negotiate with a water utility district to pave the way for development. In the case of Jasper Mountain, there are two towns involved, but the city of South Pittsburg owns the water system in the Town of Kimball, so Thunder Enterprises needed to negotiate with only one municipality. The developer would be responsible for the expense of pumping water up the mountain and installing approximately 10,000 + feet of water line to the property at an estimated minimum cost of \$890,000. During this process there were many conversations between developers and individual local officials concerning these projects that are outside organized public meetings; the important point is that rural counties in Tennessee have not progressed with planning policies to a point that long-term growth is debated in a public format or even brought in front of the county legislative body.

One cannot discuss rural residential development without understanding the real estate market that drives it. Most of the large timber tract developments in Marion County are targeting retirees from Florida that are seeking to move half way back to their original places of residence in the Northeast and Midwest; hence the term “half-backers”. Glossy brochures can be found throughout Florida newspapers touting the inexpensive land available in the Tennessee Mountains. Ironically, the

buyers of these rural residential lots are those who are escaping the negative effects of urban sprawl in places such as Florida and Atlanta, GA. Their goals are twofold - to buy land as an investment since the per acreage price is so much cheaper than the places they come from, and to fulfill a dream of one day having a second home or retiring to the Tennessee mountains. The former reason is clearly the case in the Cumberland Plateau since courthouse records indicate a number of mountain lots that have been sold multiple times for profit with no homes being built. However, the latter is also a big reason for the rapid proliferation of rural mountain top developments. While many question the sustainability of this real estate market, one need only look to North Carolina to see the long term sustained demand for mountain top developments with scenic views and cooler temperatures in the summer. Marion County has long been a vacation and second-home spot for the wealthy, as evidenced by the high-end lot sales in the mountain-top developments as illustrated in Appendix I Table A-7.

Efforts to Balance Growth with Conservation

With such development pressure and a clear case of conservation need, why did local efforts fail to receive state and federal funds? According to information distributed by the Tennessee Department of Environment and Conservation, the Tennessee Governor's Heritage Trust Fund was established for several land conservation purposes including tourism and recreation, and protecting or restoring the state's physical, cultural, archeological, historical and environmental resources. It also mentions view-sheds, urban parks, historic battlefields, and environmental

education; Jasper Mountain seemed to be a perfect candidate for receiving public funds.

One of the lessons learned from the process is that there are many conservation organizations and land trusts that have identified lands they would like to see protected and have raised private funds, often prior to applying for grants. In other words, there is much competition for very limited funds and conservation organizations are far ahead on laying the groundwork for receiving state and federal dollars. Had State officials included Jasper Mountain in their original list of conservation properties early on, Bowater may have considered working more closely with local efforts to conserve Jasper Mountain. As noted in the time-line, efforts were made by local elected officials to bring notice to the important conservation components of this property and, in addition, application was made to the Governor's Heritage Trust Fund to leverage monies toward protecting portions of the property - no grant was awarded.

A second lesson is that many of the land trusts seek to protect lands adjacent to existing public parks and natural areas, making it difficult for new conservation areas to be created. Finally, without having a major conservation organization such as the Nature Conservancy or the Conservation Fund a project full time, it is almost impossible for a novice to pull together a complex real estate deal while competing against other worthy projects that have been on the radar screen of key state and federal policy makers for long periods of time.

In a recent conference on Quality Growth in Knoxville, TN, a key-note speaker suggested that quality growth should not rely on traditional land-use control

as a means of achieving balanced growth. The future of conservation will involve the identification of specific lands to be protected through conservation easements, public buy-out and purchase of development rights. Historically, public lands advocates, conservationists and environmentalists have looked to state growth policy acts and land-use controls as a way to balance growth and development, but as this case study has demonstrated, the current growth process is too far weighted in favor of development. State agencies, including the Tennessee Department of Environment and Conservation and the Tennessee Wildlife Resources Agency, with the help of non-profit organizations such as the Nature Conservancy, set out a state land protection priority list. Unfortunately as a result of limited local government fiscal capacity and state incentives to protect land and water through land acquisition, local conservation priorities go un-met.

As noted earlier, one of the most important lessons of the process was the realization that each request for public funds is competing against requests from professional conservation organizations that leverage private funds towards projects throughout the state on lands that have long been identified for protection by state agents. As outlined in the chronological events in this case study, conserving land through public acquisition is a very difficult task - despite numerous meetings and requests for assistance from state and federal agencies as well as private conservation organizations, the local conservation effort received no funds to leverage towards its conservation priorities. One of the biggest misconceptions in the process was that getting signed letters of support from all local officials and the Chamber of

Commerce would increase chances of receiving funds but this was apparently not the case.

One of the solutions to the dilemma would be for state and local governments to require private developments to address public needs. The Jasper Mountain Bowater Tract has three major public needs. Firstly, the Town of Jasper pulls its water from a spring at the base of the mountain, known as the Blue Hole, and it would be in the public best interest not to have field line and septic tanks on the plateau above since the soil is thin and only limestone karsts separate the plateau and water supply. Secondly, Jasper Mountain by way of location sits directly above two towns, Kimball and Jasper, TN, and is also the view shed of South Pittsburg and Interstate 24 – bluff-front housing would severely and negatively impact this view shed. Finally, Jasper Mountain has long been the recreation ground for local residents; it is accessed from the neighborhoods below with ease and the loss of this open space is a devastating blow to the quality of life for many residents in Marion County. With 5,000 acres and 10 miles of bluff-front to work with, private developers could easily set aside half of the property for conservation and recreation, while still gaining a fortune in profits from the remaining 2,500 acres.

There are several development groups throughout the U.S. that are willing to partner to achieve public goals in urban areas, particularly with re-development projects. One such group was willing to partner with TWF and the Marion County Chamber of Commerce to set aside land for the public while developing a smaller amount of land to achieve investment goals. However, under the current free market approach to growth there is little incentive for developers to risk losing profits for the

public good; therefore the only chance for balancing conservation and development is for some form of state and local funding or regulation. Time and education are the two major factors that limited a satisfactory outcome on Jasper Mountain in Marion County. It was simply not possible to build the support of professional conservation agencies in time to “take the Jasper Mountain Tract out” as they say in the land acquisition business to enable conservation solutions and public needs to be addressed.

Theoretical Implications – How the Current Growth Process Leads to Rural Sprawl

This dissertation has established that rural counties in Tennessee, such as Marion County, provide few guidelines for growth; therefore enabling the private developers to be the ones deciding how land will be sub-divided. It is important to understand their financial motivations so as to be able to predict how the landscape will change in the coming years. As this dissertation has demonstrated, without government intervention or partnership with private development, growth outcomes will most likely result in rural sprawl in those rural counties with marketable real estate. Chapter I established that one of the primary debates over rural sprawl is the question of whether it is a problem at all. Scholars have argued that freedom to choose, private enterprise not government should drive growth. Despite the apparent laissez-faire approach to growth, public services are required for private development to occur.

The process from a developer's perspective in the South Cumberland Plateau is to secure property that has sellable qualities including lake access, bluff views or streams and creeks. Once land is acquired it is important to have a good access, preferably away from unsightly trailers or low-income neighborhoods; therefore secluding developments from the local population - very few developments in Marion County involve downtown renovations or redevelopment projects.

Many of the new mountain-top developments and the new Rarity Development will be private gated communities; however developers are required by the planning commission to bond or pave roads, whether private or not. The reason that developers tend to prefer private gated communities is because this is what their market clientele prefers, to achieve exclusiveness and security. Several local agencies should have special arrangements in place to be able to enter gated communities in cases of emergency including the county sheriff's department, ambulance service and several different fire departments due to the mutual aid structure of rural fire fighting. Unlike urban sub-division standards however, rural county policies have not addressed such issues as waivers of services or specific policies as to how private residents petition to make the road public in the future. This would be an interesting topic for future research as these developments will continue to proliferate over the coming years.

One of the myths concerning growth is that local governments pay to pave roads for developers; this is not the case in Marion County. All developers in Marion County are required to build roads and pave them to a set of standards established by the planning commission and county road department. In some cases developers will

deed the road to the county, but private roads will be maintained by a home-owners association created by the developer. Many of these developments will consist more than 1,000 residents over the long-term and it is yet to be determined if there will be efforts in the future to transfer private roads to public ownership; thus leaving long-term maintenance costs to the public.

All mountain-top rural developments in Marion County are on septic systems paid for by the homeowner, and by state law, tracts 5 acres and above are exempted from sub-division plat review. According to a conference paper presented to the American Planning Association in 1999, only one other state, Ohio, had such a policy (Daniels 1999). This may prove problematic over the long-term for the new mega-developments on the Cumberland Plateau since most of the soil is shallow and sits on Limestone karsts geology. The State of Tennessee's policy on septic systems does not consider the unique geological features of the Cumberland Plateau and conversations with the state agency responsible for regulating septic systems confirms that many land buyers often learn that they cannot build homes on land they bought for residential purpose due to unsuitable soils. Of course, this generally occurs long after the original developer has sold the land and is no longer involved in the process.

Depending on the terrain, infrastructure costs incurred by private developers do not prohibit bluff developments from profitability. As noted in the outline, in order to recruit a conservation developer it was necessary to develop a real estate pro forma to estimate profitability. The conservation development plan for Jasper Mountain was to set aside the major view-shed and the water-shed for the City of Jasper water source at the base of the mountain. Although a price was not placed on

the Jasper Mountain Bowater parcel, comparable sales in the region indicated about \$1700 per acre, therefore the 4500 acre Jasper Mountain tract was rumored to be available for around \$7,500,000. Since this was close to the amount of funds budgeted by the Governor's Heritage Trust Fund for the whole state, it was evident that there was no hope of a public take-out for Jasper Mountain, meaning creative public/private partnerships were necessary if land was to be conserved.

In order to build approximately 4-5 miles of road (excluding blasting), developers of Jasper Mountain can expect to spend around \$600,000 for roads and water to the plateau will be close to \$1,000,000. The Southeast Tennessee Electric Cooperative estimates about \$10 per foot to install electricity, totaling \$100,000 for 10,000 linear feet of power lines at the developer's expense. Other costs include engineering, surveying, permitting, gates and any other private amenities such as sales offices etc. Estimations for Jasper Mountain indicate about 3-4 million dollars in development costs and approximately \$7,000,000-\$10,000,000 million dollars in acquisition costs (See Appendix IV Attachment A-4).

Based on recent sales for Marion County premium bluff lots, a conservative estimate for 200 lots over 8 years would produce around 30 million dollars in gross revenue so netting the developer 15-17 million dollars. Although these numbers are all estimates, it is important to understand the financial motivations driving the development boom in Marion County. One important point to make is that growth machine theory argues that local wealth and city officials partner on development, but there were no local developers or groups of investors with the financial capacity to spend 10 million dollars in acquisition costs.

Most of the Marion County mountain-top sub-divisions of land are designed so as to maximize the number of lots with bluff views and most developers will try to sell non-bluff acreage in larger tracts early to pay for development costs. This is where fragmentation becomes a problem, as many of the buyers of the cheap larger tracts will in turn start developing them also. There are no known developers in Marion County involved in projects that set aside large portions of the acreage for wildlife, recreation or forest management; Marion County has no zoning ordinance to encourage such action and therefore there are no requirements for setting aside land in large developments. In fact, the current Marion County Planning Commission will not approve a sub-division plat with common area without a 50-foot right-of-way for potential future development.

Researchers with the University of the South in Seawann, Tennessee (located on the South Cumberland Plateau) established a model to predict the likelihood that specific parcels of land will remain pine plantation, native forest or grassland shrub. Each of these land-cover types are predicted to cause different impacts on the environment including water quality and bird habitat. In addition, assumptions were made about land ownership, i.e. individuals or business, and whether landscapes will remain pine, native forest or grassland shrub over the next 20 years (Gottfried, et al. 2006). Other potential impacts of forest cover change will be determined by local, state and federal conservation efforts to set land aside for public recreation, watershed protection, wildlife, and forest management. In addition, one of the most important variables predicting continued forest practices is the market price of forestland. For instance, once large tracts reach a price point of above \$1000 an acre

for hardwood or \$500 per acre for a pine tract, the chances are that forestry will no longer remain the highest or best use from a market-value stand-point over the long term.

Conservation and Local Governments

The case study outlined in this chapter captures the essence of what many find happening in their communities each day. The truth behind the motivations of individual elected officials is difficult to determine; however the structure behind the decision-making process is researchable. As discussed in Chapter II, theories of federalism argue that municipalities make decisions that they perceive will help their financial situation. This case study demonstrates that neither leaders within municipalities nor local citizens have adequate legal authority or financial means to influence how, when or where growth occurs, so the only option in this case was to influence growth by seeking state and federal funding for land protection. Unfortunately, devolution has created a federal fiscal system whereby the governmental function of land conservation primarily lies with the state and federal branches of government. In other words, conservation is not a functional component at the local government level due to limited financial resources, and for this reason rural sprawl is encouraged both from a funding perspective, due to limited dollars for conservation, and a tax revenue perspective since local officials perceive residential growth as a positive influence on property tax revenues.

Conclusion

The importance of this chapter is to illustrate that while local officials agreed to a conservation friendly development on Jasper Mountain as outlined previously and also signed letters to set aside 36,000 acres which included a portion of this tract, developers continued with business as usual to acquire the property. Despite the public importance of Jasper Mountain, under the current free-market approach to growth, developers will potentially have the ability sell approximately 1,000 5 acre lots, all on septic systems, along a bluff above two towns with no local ability to oppose it. With a public water system providing service and the Tennessee Department of Environment and Conservation's 5 acre exemption for septic systems, there is little local ability to influence a development on Jasper Mountain that protects view-sheds, open space, and water quality. With 1,000 lots over the long-term this property could have more residents than most of the existing municipalities in the region, with no associated fire or police department or community hall.

This chapter demonstrates that there are public costs associated with the freedoms developers have to choose how communities grow, and it should also be noted that potential profit margins for private developers are such that a few extra million dollars in development costs for public purposes would not inhibit growth. County governments, communities and individuals do not have a voice in their own future under the current growth model. Growth and development decisions related to large forested tracts are only limited by access and water availability which is not under the scrutiny of the general public. Although strict land-use regulations could

prevent or limit the fragmentation of these forests, most rural counties are not at a point in the local planning process to legally defend themselves should they not approve a developer's plat. The following chapter offers some solutions to this important issue facing many communities throughout the United States as timber companies sell off their land assets to development groups.

Chapter VII

Governmental Solutions to Rural Sprawl

Private business decisions by the timber industry to sell thousands of acres to developers for residential development in Marion County, TN will most likely have profound impacts on the future political, social and economic fabric of the local culture. The type of rural sprawl occurring in Marion County could double populations in those areas of the county not contiguous to local municipalities or services. New demands for law enforcement, fire protection, solid waste disposal, waste-water treatment and potentially education will emerge over the coming years as buyers of mountain land start to build homes and relocate to the region.

As highlighted by this dissertation, it would appear that rural sprawl is occurring in counties with fragmented governments and limited land-use controls, leaving the future of the local landscape to private development interests. Some local observers argue that these buyers are merely real estate speculators and some land will never convert to residential developments in remote portions of Marion County. More research is needed to assist in predicting and managing the long term political, social and economic consequences of the type of rural residential development occurring on the South Cumberland Plateau of Tennessee, and throughout the United States, as timber companies continue to liquidate their prime development land.

While Marion County is only recently experiencing large timber tract conversions to rural residential development, this type of rural growth is not dissimilar to what has already occurred in North Carolina over the previous decade.

Similar research in North Carolina has resulted in some of the same conclusions drawn here where scenic landscapes are sensitive to land speculation and development driven by private pecuniary self interest operating in permissive local political arenas (Gade and Stillwell, 1986). The Cumberland Plateau, where Marion County is situated, is experiencing the same large scale mountain top developments found in North Carolina. State and local agencies intersect with developers at various stages of the development cycle, but rarely in a comprehensive manner so governmental fragmentation results in private sector-driven growth with associated social and economic costs.

While growth outcomes remain debatable, market demand in Marion County is driving the conversion of thousands of acres to residential development on lands where recreation and forestry were the primary uses. The large corporate-owned timber tracts discussed in Marion County were once available to the public for activities such as hunting, horse-back and ATV riding, but these activities have come to a drastic halt on thousands of acres for local residents in Tennessee due to extensive gated rural residential developments.

Despite local attempts to protect a portion of these lands for recreation and public use, timber companies were unwilling to give consideration to these efforts and offered their land for sale to the highest bidder. With such uncertainty and high demand for funds, state and federal agencies would not commit dollars to the South Cumberland conservation effort in Marion County, leaving little chance for the public interests to succeed. As a topic of future discussion, it would be important to note that the local land conservation effort described in Chapter VI was at a disadvantage

since state and federal agencies, in conjunction with private land trusts, had their own land protection priorities in the North Cumberland Plateau. Although future research is needed, there appears to be a cultural divide among conservation advocates who wish to protect land for public recreation such as hunting versus those who seek to protect land for ecological and environmental reasons.

While state parks, natural areas and urban greenways appear to be increasing in size and numbers, accessible community-based hunting and recreational off-road vehicle riding opportunities are rapidly dwindling. These activities have traditionally served as the primary form of activity connecting many rural Tennessee citizens to their natural environment. In a recent study conducted by the Tennessee Wildlife Federation (Carter, 2007), it became evident that the loss of hunting opportunity is of great concern to the residents of the South Cumberland Plateau - over 600 residents in two small communities in Sequatchie and Marion County signed petitions requesting state and federal leaders purchase more land for hunting, wildlife, trail corridors and water-shed protection as a reaction to the rapid residential development on the Southern Cumberland Plateau. Due to increasing demands for education and safety, spending most local governments do not have the financial resources or statutory responsibility to purchase tracts of land for conservation, recreation or water-shed protection. As a result of much of the research outlined in this dissertation, actions are being taken to address the potential negative consequences of rural sprawl in Tennessee; however the influences of governmental fragmentation must be considered in the process.

There are approximately 347 municipalities in Tennessee with populations ranging from 100 to 700,000 residents. This does not include incorporated entities such as special school districts, rural water districts, electric cooperatives or 911 emergency service districts to name a few. All of these incorporated entities provide local services that often overlap, are under-funded or are unnecessary. Whether citizens petition to incorporate as a municipality or a utility district, they often do so to maintain control of their local services instead of becoming annexed by a larger municipality. While state government tries to encourage consolidation of local services through metropolitan government or regional partnerships, continued fragmentation of local services is the prevailing norm. Historical evidence suggests that state policy leaders and bureaucrats do not have the political will or technical expertise to force local integration or seek long term solutions to the problem.

Urban and rural sprawl are clear examples of a public problem that is the product of an undesirable collective outcome of individual preferences (Bickers and Williams, 2001). At the very core of the issue are private property rights versus collective action, and since the former is much better represented in the state capital there will be an ongoing battle to pass legislation having the appearance of restricting one's use of their property as long as the solutions to the problem of rural sprawl involve land-use controls.

The term land-use control has negative connotations for most Americans, since our country was founded on a firm belief that government should limit its control on everyday lives of individuals. John Locke, the English philosopher

accredited with establishing the basic principles of how the majority of Americans view the proper role of government, developed the idea of private property rights. During the time of Locke (1632-1704) agriculture was the primary means of making a living and much of Locke's theory of private property was based on the idea that individuals who put their labor into a piece of land had a right to reap what they had sown. Interestingly, over the years this idea of private property rights was expanded to mean that any individual or corporation who legally owned a piece of property had a right to do with it as they pleased, regardless of whether or not they labored on the land or created negative impacts to the surrounding community.

Few Americans reflect on why they believe so strongly in the ideal of private property rights; nonetheless this works to the advantage of wealthy capitalists who own most of the private property in America. The American belief regarding private property allows developers to purchase large tracts of land, install infrastructure, subdivide and sell smaller tracts to individuals. As long as limited government rules in place are adhered to and a demand exists for the tracts, there is no way society can stop the problem of rural sprawl without taking collective action to either limit the use of private property or increase public ownership of the land.

According to the U.S. Census Bureau, Tennessee's population grew by 17% over a short 10-year period and the demands for local government services came with it (U.S. Census, 2007). Development is occurring rapidly, especially in the counties surrounding the four largest cities in Tennessee. Additionally, large forested tracts in rural counties of Tennessee are being sub-divided for mini-farms and bluff-front vacation homes. In both cases, only a minimum of road and water infrastructure is

required in order to sell lots and more services are usually required as residents move in. There is currently no law in Tennessee requiring land-use plans, sub-division regulations or planning commissions at the local level. Developers and realtors argue that they represent progress and jobs and thus should not be restricted from subdividing land, while the land-owners in Tennessee do not want restrictions on development because it could potentially devalue their land.

Environmental and conservation-oriented organizations in Tennessee fail to systematically address the problem of growth management in Tennessee. Many of these organizations are focused on purchasing tracts of land for conservation or simply responding to incremental legislation that might impact the environment. Conservation organizations are fragmented and weak and are not in a position to influence major policy change to encourage growth management in Tennessee.

The road builders, realtors, farmers, land-owners, local governments and developers as a group represent the powerful interests in the Tennessee legislature; they generally oppose any legislation that seeks to limit growth or have the appearance of infringing on private property rights, but unfortunately this leaves little consideration for the protection of open space and the preservation of rural heritage and culture. Tennessee's Growth Policy Act fell short of requiring that rural areas be preserved for agriculture, recreation, forest, wildlife and uses other than high-density commercial or residential development precisely because of the opposition from the groups listed above. Instead, the state left the definition of rural area to the coordinating committees, who determined that the language of the statute did not prohibit low or medium density commercial or residential development.

Approximately ten years after the passage of Tennessee's Growth Policy Act, the Tennessee Wildlife Federation made a series of presentations to environment and conservation committees of the Tennessee General Assembly in order to increase awareness of the type of rural sprawl occurring in Marion County and the South Cumberland Plateau. Maps were presented demonstrating the scale of development as well as hand-outs demonstrating potential negative consequences of the type of rural sprawl discussed throughout this dissertation (See Letter A-4 in Appendix III). One of the first questions by the Chairman of the House Environment and Conservation Sub-committee was to ask "What is the problem with people wanting to live on 5-acre tracts of land?" The general answer to this question was to demonstrate that there were potential costs to having these freedoms; nonetheless, the question clearly demonstrates that the advantages and disadvantages of rural sprawl are still being debated in the minds of powerful state legislators in Tennessee.

By outlining the myriad of actions leading to unplanned rural growth, this dissertation has specifically defined the policy problems associated with rural sprawl. One of the most evident problems in need of policy change is the non-transparent nature of rural water line extensions of Tennessee. Rural water line extensions play a significant role in the rural growth process; therefore it is evident that the general public and governmental jurisdictions responsible for the costs of this growth should have more input than currently allowed under Tennessee's governmental structure.

Solutions to Rural Sprawl

As the case study in Chapter IV demonstrated, water utilities play an important role in the growth and development process. Drawing from the basic tenets of the public choice theories of federalism, it is important to recognize that institutional design and structure influences behavior. For example, water utilities are designed to operate like a business as if engaged in a private market, but as this case has demonstrated they are public entities utilizing shared natural resources. They make decisions with profitability as their primary consideration, leaving the costs of growth to other governmental entities.

Public transparency in decision-making could easily be improved with a basic set of statutorily mandated requirements to notify the public on the specific details of negotiated agreements with developers. Public notice might include such information as, total cost of project including long-term maintenance expense to treat water, number of taps to be purchased by developer, expected revenue from the project, name of water-shed in which development is located, and notice to existing homeowners who might be impacted by septic systems resulting from the new development enabled by the water line extension. Water utilities should also be required to gain legislative body approval from other governmental entities impacted by their decisions. More importantly, state statutes should mandate local water utilities to coordinate their actions with other utilities within their water-shed to protect the long term viability of water resources including water supply and water-shed protection. Finally, state and federal agencies responsible for grants and loans

for water expansions should require a regional plan prioritizing those projects with the greatest need.

The TVA land deal outlined in Chapter V is another example of how governmental design influences decision-making. As Phillip Selznick so aptly pointed out in 1946, the TVA is an independent agency, leaving significant power to active board members to influence policy decisions based on their own preferences. A policy solution has essentially already been implemented to address this issue now that the TVA board has been expanded. Moving from a three member to a nine member board will make it more difficult for a one board member to influence decisions.

One of the most important findings of this dissertation is the discovery that conservation is not a public choice as communities struggle with the costs and benefits of growth. As Chapter VI demonstrates, the idea of conserving 36,000 acres was supported by local officials and not perceived as a threat to their tax base; however, there was no funding available to balance growth with conservation. Policy solutions might include land protection initiatives targeted towards protecting community forests or planning initiatives that merge water plans with land-use plans in order to guide more wise and sustainable growth. There is also a need for the abolishment of the 5-acre or more state exemptions for septic and plat approval since developers are taking advantage of the (original intent) of the laws.

Finally, it is imperative that a revenue source be identified to protect land and water. There are several options including a minimum surcharge on water sales to protect

water-sheds. This could be quite substantial should Tennessee agree to sell water to Georgia on a limited basis to address the Atlanta water crisis. Another creative funding solution might include the expansion of the intent of tax increment financing allowing future tax revenue from new development to be applied to purchasing land for open space and conservation. However, the policy solution with the most promise would be the passage of legislation utilizing revenue from industries that negatively impact the environment to fund land conservation initiatives.

Solutions to rural sprawl will require significant changes from the current planning structure in rural counties of Tennessee. This dissertation should demonstrate that planning is severely lacking in rural Tennessee, leaving the landscape primarily in the hands of private development interests. An alternative solution might be achieved through land protection initiatives that either compensate land-owners for public easements or out-right fee simple acquisition of important land-scapes. The challenge in this case is the lack of public funding for such initiatives, and the perception by some legislators and local officials that taking land off the tax rolls is detrimental to economic growth.

A few of these ideas are currently working their way through the local, state, and federal policy process and it is important to outline what it would take for such policy solutions to reach the forefront of a legislative agenda. Dennis Palumbo paraphrases Roger Cobb and Charles Elder, who argue that agenda setting is the most important phase in policy-making by pointing out that if a matter is kept off the agenda nothing will be done about it, and what is not done may well be more important than what is done (Palumbo, 1987). In the case of addressing the negative

consequences of unplanned rural sprawl, what is not being done is far more important than what is being done.

The first substantial analysis of how problems come to be defined and of how that affects the analysis of public policy came in the mid 1980's when David Dery wrote *Problem Definition in Policy Analysis* (1984). Scholars and practitioners alike are keenly aware that the formulation of a problem definition is paramount to finding solutions. According to Dery, a definition of the situation often describes the causes of that situation and he goes on to argue that unless we know the roots of a problem or the "real" issues are known, there cannot be hope to solve it.

The cases outlined in this dissertation would likely not qualify as rural sprawl under the definitions outlined by previous studies since there are not yet high rates of housing and population in Marion County, according to the 2000 U.S. Census. Of the houses that are being built, the owners are either retired or using them as a second home; therefore the primary issue of traffic congestion defined by commuter variables do not apply to the rural mountain top developments described in this dissertation. In order to bring the growth issues facing the rural South Cumberland Plateau counties to the policy agenda, it is necessary to re-define rural sprawl to include counties that have high rates of fragmentation in areas that are not contiguous to existing municipalities. The current problem on the South Cumberland Plateau is not a result of population increases but more of unnecessary land fragmentation.

Deborah Stone has written extensively through the years on how political actors use symbolism. She argues there is a "systematic process with fairly clear rules of the game by which political actors struggle to control interpretations and

images of difficulties” (Stone, 1989, pg. 282, and Stone, 1997). David Houston and Lilliard Richardson (2000) reinforce this notion by pointing out there is often competition among various interests to define problems. Therefore, by studying problem definitions, researchers may determine which issues will rise to the political agenda and so explain outcomes of the policy process.

Houston and Richardson describe various components of problem definitions which, when combined, confirm Stone’s systematic process. Each of these components can be found repeatedly throughout the applied policy research journals. In order to apply them to the issues outlined in this dissertation, written in italics are examples of how the policy process might play out to address the issue of rural sprawl.

First, identify a societal condition that needs to be remedied through government action: *rural sprawl*. Second, provide statistics and descriptions of relevant events as evidence to empirically demonstrate the perceived condition: *40,000 acres of forest converted to residential development*. Third, identify causes to allocate blame or provide an explanation: *fragmented local governments, un-planned and non-transparent rural water line extensions, lack of general planning, lack of state funds for land conservation*. Fourth, develop a complete definition articulating a set of solutions that would remedy a problem: *public transparency, water planning, and special rules and regulations for mega-developments on the plateau*. Fifth, use key values and symbols to dramatize the problem that needs to be addressed: *Loss of Culture, Marion County Land Rush Brochure demonstrates how out of town developers devalue our natural assets*.

By systematically outlining the problem of rural sprawl and sharing information through written materials and multiple meetings and conversations, local officials in Marion County are now considering a land acquisition committee to see if funds can be raised to protect a portion of Jasper Mountain. Significant political pressure is being placed on local officials for spending an excess of time and effort assisting well-capitalized out-of-town developers. At the state level, several senators and representatives have requested the Tennessee Wildlife Federation draft legislation to address some of the more obvious policy problems associated with rural sprawl including fragmented and unplanned water distribution decisions and poorly planned development.

Future Research Needs

According to Michael Barzelay: “The purpose of public management research is to improve how public officials and citizens frame and solve collective action problems” (Barzeley, 1993 pg 305). The political science and public administration literature is lacking in research into how federalism and government service funding models impact local policy decisions related to growth. Additional case studies of local decision-making would help further develop conceptual models of understanding why local officials often promote growth at the expense of other public needs such as protecting open space. In addition, more data is required to clearly define the long term costs of rural sprawl. Current build-out models fail to consider the local decision-making process behind each separate governmental entity that allows for rural sprawl to occur. For instance, many tie future road maintenance costs

to growth; however in Tennessee road budgets are primarily funded through state gas tax funds and not local revenues. This is important because arguments that sprawl is associated with long-term costs to local governments are not accurate if the services are primarily state funded. This is the same for municipalities who run their water services to rural parts of the county without having to bear its future costs for other services.

Another important research need is to build a model for identifying the apparent lag effect between when rural communities should implement significant land-use controls versus when they actually do. Development taxes are a good measure of when county elected officials have determined that developers should pay their way. There are 14 counties in Tennessee that have adopted and implemented either a development tax or impact fee to offset the costs of growth. As Table A-4 Appendix I indicates, it was no surprise to find most of the growth counties surrounding Nashville have a tax to off-set the costs of growth. However, there were also four counties that are not urban fringe counties and have populations below the median state average (U.S. Census Bureau, 2000); the only explanation can be that not all responses to growth are the same in each county. There appear to be a few of the ninety-five counties in Tennessee that have made early efforts to off-set costs associated with growth (Tennessee County Tax Statistics, 2006). The question remains whether the growth controls existed prior to the actual large scale subdivisions of land. Based on this notion, one can expect that as the new residents begin to actually build homes and live in Marion County, local demands for development taxes to off-set costs of growth will occur.

Finally, normative discussion of what constitutes socially desirable growth in the context of rural sprawl is needed. While urban sprawl literature has effectively identified such negative externalities as traffic congestion and air pollution, the immediate effects of rural sprawl are not quite the same. One of the more important consequences of rural sprawl from a local perspective is the immediate impact on local recreational pursuits as thousands of acres are no longer accessible. In the case of the South Cumberland Plateau of Tennessee it could be argued that hunting and other outdoor recreational pursuits have defined the local culture over generations and that within a very short time period local life-styles will change as a result of the rural sprawl identified in this dissertation.

Conclusions

As this dissertation has illustrated, federal, state and local institutional fiscal structures prevent reasonable balance to the growth process often resulting in developments without a public water source. As a result of the research for this dissertation, policy problems have been outlined and potential solutions are moving through a policy process that may ultimately address the issues. However, at the core of the debate remains the belief by some state and local leaders that the free-market and individual choice, not government intervention, is the best way to determine how, when and where growth will occur.

From a methodological stand-point it is difficult to study preferences related to rural sprawl since direct democracy ballot initiatives are virtually non-existent in rural Tennessee. However, academic studies in California have researched whether

residents and citizens have different incentives regarding growth than do elected representatives. One study analyzed 553 state and local ballot measures related to growth throughout the United States and found 46% of the pro-growth measures passed while 59% of the slow-growth measures passed (Gerber and Phillips, 2003).

Just as a participant observer of the development occurring in Marion County, most would assume that there is a distinct difference between the incentives of elected representatives and local residents. However, the context and variables driving those incentives would quite likely be different than one might find in major urban areas. While not a scientifically rigorous study, the feedback results from the TVA Little Cedar Mountain project offered a rare glimpse of citizen preferences related to growth. Many citizens expressed strong support for land remaining open for wildlife and recreation, while elected officials supported development (TVA 1990b).

Another important consideration when discussing growth is the source of private investment capital driving the local real estate market. The bulk of the development projects occurring in Marion County, TN, are primarily funded and controlled by out-of-town real estate investors. However, each development group has taken great care to recruit local residents to assist with their development projects- local contractors, real estate brokers and home-builders are the prime candidates to assist with major development projects. Even casual observers of Marion County's land rush by private out-of-town investors can see the influences of wealth and power on local businessmen as they compete for access and involvement in multi-million dollar development projects. Rarely are there questions in the local

media regarding the potential long term negative consequences of rural residential developments, as an example *The Chattanooga Times* tends to highlight the developer and their project as if it were supported by everyone locally.

Between 1995 and 2004 an estimated 35 million acres of timberland have been sold in the United States, including 40,000 acres in Marion County, TN as Table A-3 of Appendix I illustrates. Most of these developments in Marion County will not have municipal sewer systems and will be serviced by miles of rural water-lines through rocky terrain. Some continue to make a case that rural sprawl embodies the freedom for individuals to choose how they want to live; therefore the private market should determine how local communities grow (Gordon and Richardson, 2001; Gordon and Richardson, 2000). Again, as the Marion County case study demonstrates, real-estate developers are dependent on local water utilities being willing to extend their services over long distances so the notion of a free, private real estate market is not an accurate description of how growth occurs.

Local decisions by public utilities help determine growth, and without some limit to how often water lines will be extended, combined with an apparently infinite number of Florida retirees willing to move to this region and county, there is nothing to prevent all large forested tracts from becoming fragmented in this community. One of the most environmentally concerning outcomes of the rural sprawl described in this dissertation will be the high rates of residents that are not on public sewer systems yet are located on limestone bluff topography. At this time, there is very little knowledge of how this might impact water quality as septic systems age.

It is important to note that five years ago in Marion County it would not have seemed as necessary to consider the negative consequences of growth, since growth was slow and incremental. As many other rural communities throughout the United States, Marion County faces the risk of only discovering the need to consider controlling growth and setting aside important landscapes for public uses only after the land has been fragmented by multiple parcels. Anecdotal evidence suggests that local leaders and county commissioners in Marion County are conflicted on the issue of governmental control of growth, but not for the reasons outlined in elite theories of growth. As pointed out in Chapter II, in contrast to elite theories of growth, one must consider broader ideological preferences when seeking understanding of rural attitudes and perceptions of growth. Private property rights and limited government involvement are an important part of the rural belief system, which might explain why land use controls are not becoming established in rural communities.

This dissertation seeks to offer a perspective on the profound impacts of recent land-use changes affecting landscape and culture of the South Cumberland Plateau of Tennessee as timber companies divest of their industrial forests for rural residential development. The case studies represent a unique glimpse of the fragmented governmental structure in Tennessee and the resulting growth outcomes. As the policy literature has shown, policy solutions require clearly defined policy problems and that has been the intent of this thesis from a practitioner's perspective.

Another important contribution to the scholarly dialogue is a new understanding of how locally elected officials engage in the growth process depending on the financial goals of their governmental jurisdiction. Rural residential

development has different financial outcomes for each unit of government; water utility boards and municipalities gain revenue, while county commissioners and county mayors arguably inherit the long-term costs. This dissertation also demonstrates that land conservation and land-use controls are often not politically or financially viable options in the early stages of growth in rural counties.

Finally, growth machine theory and elite theories of growth fail to address a type of rural sprawl driven by out-of-town as opposed to local wealth. Although local officials and elites played some part in the development of the former TVA land as well as helping to get services to rural parts of the county, there is no evidence to suggest that local officials personally profited from the new development, but emerging local back-lash towards development in Marion County is clearly indicating they were too close to the process.

Developers in Marion County are still negotiating with municipal utilities for sewer and water, while the county commission and planning commission are left with approving platted developments that very few local citizens seem to favor. It could be argued that the public choice of limiting, controlling or off-setting residential development is, in fact, not an option under the current system. Policy changes at the local and state level are needed if local communities are to have a voice in how they grow.

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APPENDICES

APPENDIX I: TABLES

Table A-1- Lot Sales at Rarity- Former TVA Tract 3

Acreage	Sale Date	Price
0.93	2/22/2007	\$ 535,000
0.92	2/2/2007	\$ 325,000
1.02	1/31/2007	\$ 490,000
1.02	1/30/2007	\$ 490,000
1	2/6/2007	\$ 500,000
1	2/22/2007	\$ 500,000
1	2/28/2007	\$ 500,000
1	2/2/2007	\$ 500,000
1	3/12/2007	\$ 425,000
1	1/26/2007	\$ 500,000
0.92	1/26/2007	\$ 540,000
0.93	1/26/2007	\$ 600,000
0.91	2/14/2007	\$ 545,000
	2/6/2007	
2 lots	2/6/2007	\$1,140,000
0.82	2/9/2007	\$ 365,000
0.98	1/26/2007	\$ 305,000
0.96	2/12/2007	\$ 520,000
1.03	2/2/2007	\$ 290,000
0.885	1/30/2007	\$ 565,000
0.94	1/12/2007	\$ 530,000
0.99	1/26/2007	\$ 505,000
1.28	1/26/2007	\$ 390,000
1.28	1/26/2007	\$ 390,000
2 lots	2/6/2007	\$1,140,000
0.84	2/28/2007	\$ 595,000
0.79	3/1/2007	\$ 630,000
1.11	2/2/2007	\$ 270,000
24.555		\$14,085,000

Monthly Sales		
Jan-07	Feb-07	Mar-07
11	15	2

Table A-2 - Marion County Vacant Lots Inventory

Figure	Statistics
27,880	2003 estimated population of Marion County
4,025	# of rural unimproved vacant lots below 15 acres in Marion County
373	# of Rural unimproved bluff lots with no houses in 2001
494	# of Rural unimproved bluff lots with no house in January 2007
151	# of Rural Bluff lots with houses in Marion County in 2001
254	# of Rural Bluff lots with house in Marion County in 2007
103	# of houses actually built on bluff lots in 6 years in Marion County

Table A-3 - Marion County Land Ownership Facts and Figures

<i>Figure</i>	<i>Statistics</i>
25,000	Approximate Number of Acres of Timberland converted to non-agricultural uses, primarily rural residential development in past three years in Marion County.
105,271	Acres in Tracts Less than 100 acres throughout the history of Marion County
40,000	Expected Number of Acres in Tracts above 100 Acres converted to rural residential development in Marion County within 3 years; nearly half as much than the previous 200 years
214,737	Remaining Acres of Timberland in Tracts Greater than 100 Acres
320,007	Number of Acres in Marion County
110,801	Number of Acres in Marion County under Corporate, Investment Group, or Multiple Partner Ownership
515	Number of Parcels above 100 acres in Marion County
165,392	Number of Acres in Marion County under out-of-county ownership – More than half of the county.
292	Number of Parcels in Marion County under out-of-county ownership
100%	Percentage of farmers answering yes out of thirty surveys when asked the question: “Aside from your farm, do you feel most developable farms in the Sequatchie Valley will be converted to non-agricultural uses in the next 25 years?”

Most Data Gathered from Marion County Courthouse Records

**Table A-4 – Marion County Statistics Compared to Counties in Tennessee with
Development Taxes**

<u>County</u>	<u>2000 Population</u>	<u>Pop.Rank of 95</u>	<u>Est. 2003</u>	<u>Pop.Rank of 95</u>	<u>Pop.Gain 1990- 2000</u>
Marion	27776	50th	27880	52nd	3,093

<u>County</u>	<u>2000 Population</u>	<u>Pop.Rank of 95</u>	<u>Est. 2003</u>	<u>Pop.Rank of 95</u>	<u>Pop.Gain 1990- 2000</u>
Bedford	37,586	41st	40,253	36th	7,175
Cheatham	35,912	46th	37,364	39th	8,772
Dickson	43,156	31st	44,935	31st	8,095
Fayette	28,806	49th	32,289	44th	3,247
Hickman	22,295	64th	23,352	59th	5,541
Macon	20,386	66th	21,023	62nd	4,480
Marshall	26,767	57th	27,537	53rd	5,228
Maury	69,498	17th	73,198	16th	14,686
Montgomery	134,768	8th	141,064	8th	34,270
Robertson	54,433	26th	58,181	22nd	12,941
Rutherford	182,023	6th	202,310	5th	63,453
Sumner	130,449	7th	138,752	9th	27,168
Williamson	126,638	11th	141,301	7th	45,617
Wilson	88,809	15th	95,366	12th	21,134

Table A-5 – Small Parcel Sales on Former Lewis Tract

OWNER	SALEYEAR	PRICE	DEEDBKPG	UPDATED	Acres
SAMPLES GEORGE ERNEST	2004	68000	337/1673	10/18/05	1.87
ADKINS DON E JR	2005	32000	365/505	03/17/06	9.32
CATALFO CHRISTOPHER L	2006	75000	369/700	03/29/06	5.80
TORRES RICARDO ALFONSO	2006	46000	368/258	03/09/06	5.55
LEON DOMINGO J	2006	45000	370/208	04/11/06	10.89
GALVEZ CHRISTIAN	2006	45000	371/327	05/11/06	7.82
CARMONA LUZ ADRIANA	2005	33000	363/822	02/21/06	7.19
GUERRERO GIOVANNY	2006	50000	370/664	05/01/06	7.62
PRINGLE CLIVE ETAL	2005	85000	364/740	02/10/06	12.96
MORENO OSCAR S ETUX	2005	25000	363/868	02/13/06	9.45
CANALES PABLO ETUX	2005	30000	353/838	02/14/06	10.39
ROJAS ALEXANDER ETAL	2005	25000	352/1216	02/15/06	6.20
NORDELO OSWALDO ETUX	2005	25000	352/1204	03/30/06	6.14
FLORES NERY	2005	15000	353/316	02/14/06	4.79
GLASGOW KARL E ETUX	2005	59000	354/976	02/14/06	9.36
DIAZ GERARDO	2005	57500	354/62	03/30/06	8.13
AMADOR ONAN ETUX	2004	143700	349/1011	06/21/06	6.89
DIAZ ORESTES	2005	75000	360/762	04/17/06	8.63
DIAZ ARODY ETAL	2005	75000	357/1370	02/14/06	7.62
FUENTES RENE	2005	35000	354/1307	03/30/06	6.48
ESPINOSA HORACIO ETAL	2005	28800	354/1317	03/30/06	6.15
ROJAS PILAR	2005	40000	357/840	02/21/06	9.34
HERSTIK BERNARD TRUSTEE	2006	50000	367/1353	08/21/06	6.67
DIAZ JOVANKA	2006	59000	368/269	08/21/06	9.11
BUSH ELLSWORTH L	2005	30000	365/519	02/13/06	5.93
CHAPARRO CECILIA	2005	38000	366/1579	03/17/06	6.23
DE CASTRO MARCEL F ETUX	2005	30000	353/828	02/14/06	10.31
CHAPARRO ANIBAL A ETUX	2005	75000	357/1381	02/14/06	7.49
DE OCA JESUS MONTES	2005	30000	353/808	02/14/06	10.45
SANCHEZ ARIEL	2005	22500	362/339	02/14/06	4.74
DE CASTRO OSWALDO F ETUX	2005	30000	353/818	02/14/06	8.47
FIERRO LEOPOLDO	2006	69000	368/1057	03/07/06	14.87
FIERRO LEOPOLDO	2006	69000	368/1057	03/07/06	14.87
CORNEJO ERNESTO	2005	40250	359/694	04/11/06	5.11
HERRERA VICTOR	2005	35000	366/324	02/14/06	5.12
VALERO HUMBERTO	2005	40250	360/773	03/30/06	5.48
HERNANDEZ JOSE A	2005	40250	362/1509	03/30/06	6.73
SOTO FERNANDO	2005	40250	359/1016	04/06/06	5.85
RAMOS LOURDES ETAL	2005	35000	361/504	03/30/06	4.89
DOLCINE DANIEL	2005	40000	361/1395	02/14/06	4.89
RUBI HARRY	2005	35000	360/781	03/30/06	4.81
PAULD HENRY	2005	35500	365/510	03/07/06	9.20
BRYAN LANCELOT A	2005	39100	366/316	03/07/06	7.24
BRYAN BLANCH M	2005	39600	366/713	03/07/06	5.08
GONZALEZ FRANCISCO C ETUX	2006	47040	368/1338	03/07/06	8.68

Table A-5 Contd. – Small Parcel Sales on Former Lewis Tract

Table A-5 Continued					
SALDANA ANA C	2006	50000	371/726	05/16/06	7.03
CAMARGO FERNANDO JOSE	2005	88000	363/826	03/30/06	7.26
RODRIGUEZ GILDA N	2005	85000	363/853	03/30/06	12.86
GLARIA PEDRO	2005	75000	365/907	03/23/06	8.31
ROBLES VICTOR	2006	46000	371/733	05/16/06	10.86
BRYAN MARGARETH M	2005	42550	366/705	03/23/06	4.83
RAMIREZ KARINA A	2005	34000	371/1466	05/23/06	5.12
TOTAL		\$2,503,290			397.10

6,303.94	Price Per Acre/No Water/ 20 miles from Interstate
	From 2004 to Feb.2006
48,140.19	Average Lot Price
7.6365187	Average Lot Size

Table A-6 Sequatchie Pointe Sales (45 of 108 Parcels Sold B/W 12/15/2006 and 3/14/2007)

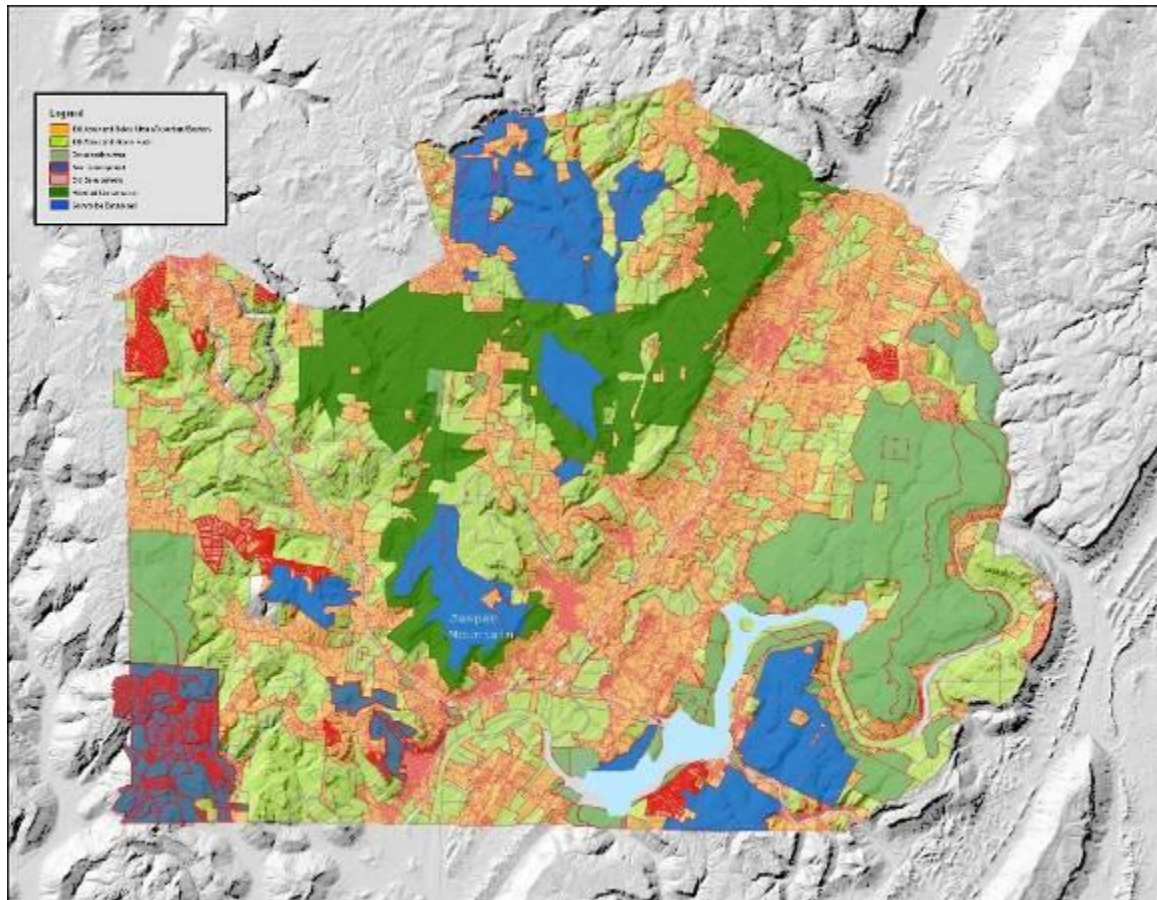
Map/Parcel	Acreage	Sale Date	Price
152 004.03	2.57	½/2007	\$ 35,000
152 004.05	8.44	12/15/2006	\$ 130,000
152 004.07	6.85	12/12/2006	\$ 119,000
152 004.08	5.14	1/19/2007	\$ 119,000
152 004.09	4.16	12/29/2006	\$ 79,900
152 004.10	4	½/2007	\$ 102,400
152 004.11	4.12	12/12/2006	\$ 59,900
152 004.12	4.84	12/13/2006	\$ 70,000
152 004.13	4.28	12/15/2006	\$ 60,000
152 004.14	3.35	2/1/2007	\$ 82,900
152 004.16	7.44	3/16/2007	\$ 95,000
152 004.17	6.83	3/30/2007	\$ 130,000
152 004.18	7.89	2/19/2007	\$ 200,000
152 004.19	9.84	2/19/2007	\$ 200,000
152 004.22	6	1/30/2007	\$ 115,000
152 004.23	5.03	3/14/2007	\$ 46,000
152 004.26	2.26	2/7/2007	\$ 50,000
152 004.29	2.51	1/15/2007	\$ 89,900
152 004.30	3.78	1/15/2007	\$ 119,900
152 004.31	3.58	1/15/2007	\$ 124,900
152 004.32	3.4	1/15/2007	\$ 124,000
152 004.33	1.98	1/15/2007	\$ 39,900
152 004.34	1.68	1/15/2007	\$ 29,900
152 004.35	5.49	12/12/2006	\$ 129,800
152 004.36	4.68	12/12/2006	\$ 129,800
152 004.37	4.57	12/21/2006	\$ 60,000
152 004.38	4.15	12/15/2006	\$ 65,000
152 004.39	3.97	12/21/2006	\$ 64,900
152 004.40	3.01	2/8/2007	\$ 54,750
152 004.43	3.99	12/15/2006	\$ 70,000
152 004.45	5.45	1/15/2007	\$ 99,900
152 004.48	4.27	2/19/2007	\$ 62,000
152 004.50	7.1	2/23/2007	\$ 85,000
152 004.53	2.5	1/15/2007	\$ 40,000
152 004.60	2.99	12/12/2006	\$ 52,500
152 004.74	3.36	½/2007	\$ 49,500
152 004.75	3.53	2/7/2007	\$ 49,900
152 004.76	2.75	12/18/2006	\$ 39,900
161 001.11	2.84	1/31/2007	\$ 29,700
161 004.62	3.36	2/7/2007	\$ 55,000
161 004.63	2.8	12/15/2006	\$ 49,900
161 004.64	3.41	1/15/2007	\$ 49,900
161 004.65	3.52	½/2007	\$ 102,400
161 004.69	2.97	½/2007	\$ 48,900

Table A-7 - Recent High-End lot Sales in Marion County, Tennessee

Date	lot size	Sale Price	Deed Reference
Elder Mountain			
Jul.27,2006	1.87	\$ 300,000	375-540
March 16,2006	1.64	\$ 250,000	369-527
Sewanee-Monteagle Properties			
December 29,2006	4.33	\$78,000	381-813
Sep. 16, 2005	12.66	\$120,000	361-1077
Jump-Off			
Jan. 28, 2005	3.4	\$92,000	351-848
Raven's Den			
Jul. 19, 2006	6.76	\$110,000	374-1086
Sept. 15, 2006	8.09	\$ 160,000.00	377-739
Clifftops			
Oct. 11, 2005	5.03	\$90,000	363-9
Jun. 8, 2005	5.11	\$ 230,000.00	356-1562
Sequatchie Pointe			
Jan. 30, 2007	6	\$ 115,000	383-1198
Dec.12, 2006	6.85	\$ 119,000	381-1315
Dec. 15,2006	8.44	\$ 130,000	381-1307
Dobson Developments			
Aug. 11, 2006	8.73	\$ 135,000.00	375-1350
Aug. 11, 2006	6.02	\$ 125,000.00	375-1344

APPENDIX II: MAPS

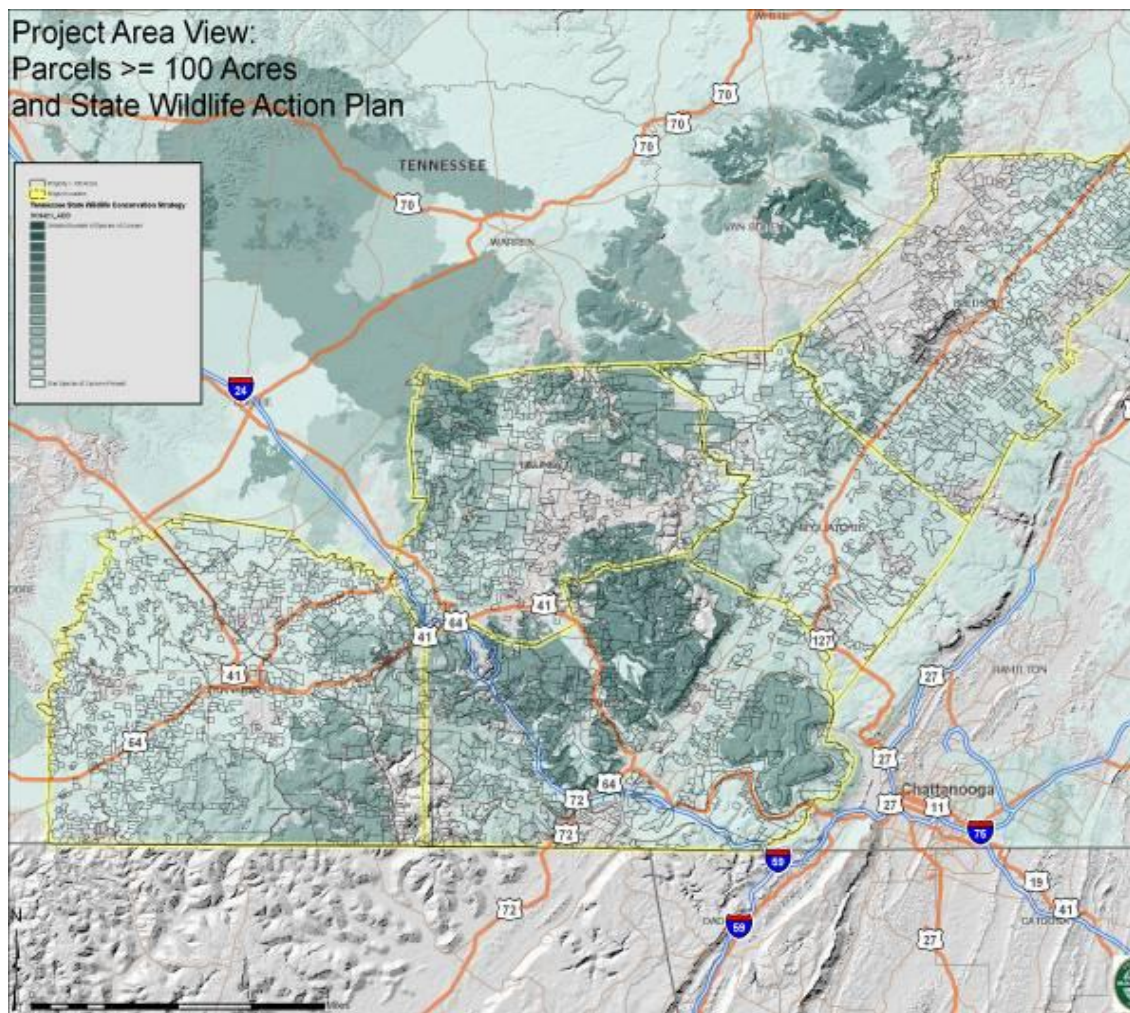
Map A-1 – Large Timber Tract Conversions to Rural Residential Development in Marion County



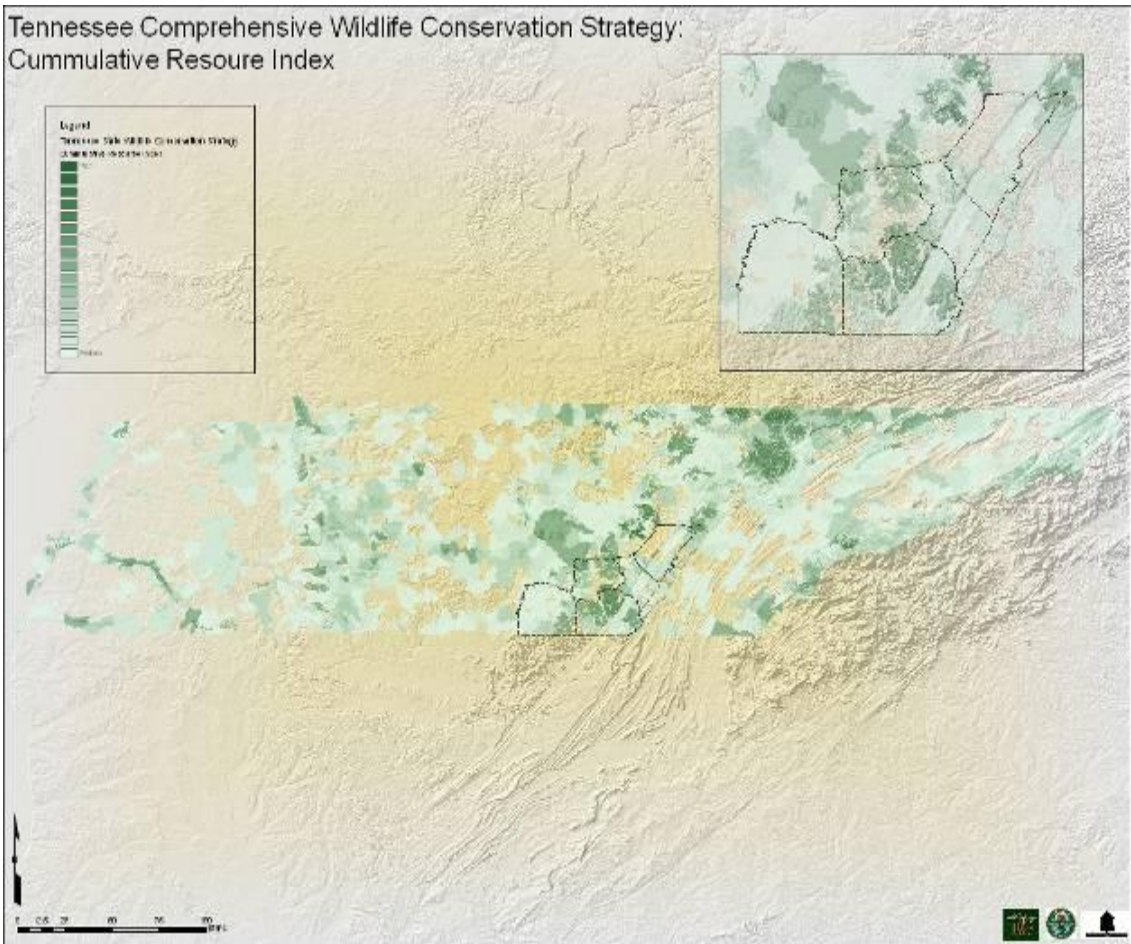
Map A-2 – Timber Tracts Identified for Conservation in Marion County



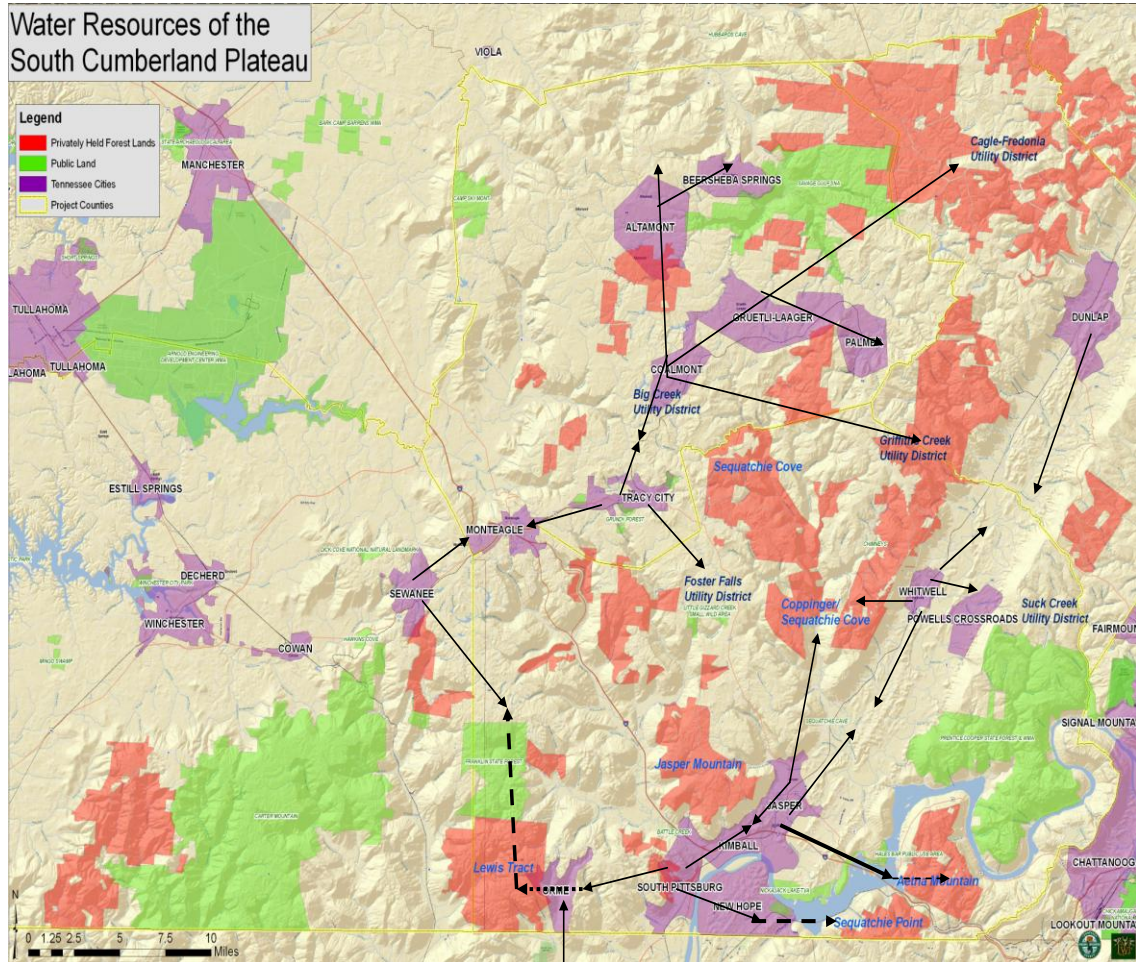
Map A-3 – High Priority Habitat Lands in Marion County identified by the Tennessee Wildlife Resources Agency and the Tennessee Nature Conservancy



Map A-4 – State-wide High Priority Habitat Map



Map A-5 Water Distribution Network



APPENDIX III: LETTERS

Letter A-1- Letter Requesting Information from TVA Concerning Little Cedar Mountain Land Sale

August 29th, 2007

TVA FOIA Officer
Denise Smith
400 West Summit Hill Dr. WT 7D
Knoxville, TN 37902-1499

Dear Ms. Smith:

I am writing for a Freedom of Information Act request for documents and information related to the formally known Little Cedar Mountain Project now referred to as Nickajack Shores. I currently have the Draft Supplemental Environmental Assessment from May 2005.

I am requesting a copy of the Board Package Memorandum and Resolution prepared by TVA for the Little Cedar Mountain/Nickajack Shores Project. I am also requesting any additional documents or information relating to agreements made with the private development group Thunder Enterprises to provide public amenities including walking trails, campgrounds, golf course etc, including time-frames, required expenditures, and purchase price.

If there is any official information relating to internal policy of how TVA staff plans to oversee the Little Cedar Mountain/Nickajack Shores project to insure private developer fulfills obligations through oversight this would also be much appreciated?

Finally, I am also requesting TVA's official process of how TVA staff determines future land uses on the Swap lands related for LCM including Big Cedar, The Boyd Farm, and Burns Island.

The dates of this information should be in the latter part of 2005 or 2006.

I am willing to pay up to \$100 for your time and effort.

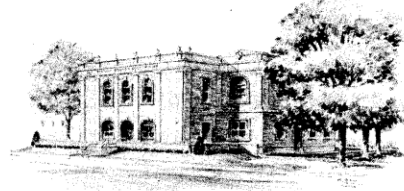
Thanks for your time.

Sincerely,
Daniel Carter

Letter A-2 – Letter requesting assistance in setting land aside in Marion County for conservation

HOWELL MOSS

COUNTY MAYOR, MARION COUNTY
P.O. BOX 789
JASPER, TENNESSEE 37347
(423) 942-2552
FAX (423) 942-1327



Dear Bruz Clark- The Lyndhurst Foundation; Jeannie Nelson- The Land Trust for Tennessee; Scott Davis- The Nature Conservancy; Rick Wood- The Trust for Public Land; Rex Boner- The Conservation Fund; Marc Hunt- Open Space Institute; Mike Butler- Tennessee Wildlife Federation:

As community leaders and interested citizens living in Marion County we are writing to seek your assistance in a land conservation effort that will set aside approximately 30,000 acres for outdoor recreation including hunting, working timber management, view shed protection, water quality, and habitat enhancement for threatened and endangered species. Marion County's natural beauty and location, like many counties in the Cumberland Plateau, have been targeted for both good and bad mountain top development. Unfortunately, as you well know, sometimes growth can reach beyond desirable and healthy limits once hot real estate markets are established. We believe Marion County may be reaching this breaking point, where we have to start making concerted efforts to set aside some of our traditional hunting and outdoor recreation lands from residential development.

Residents of Marion County have worked together to establish a vision of a South Cumberland Outdoor Recreation and Wildlife Corridor that will primarily consist of properties of high conservation and recreation value and connect the South Cumberland State Park, Foster Falls- Fiery Gizzard Trail, and Chimney's Natural Area. This area will include two well-known watersheds we call the Sequatchie Cove and the Fiery Gizzard. As a local resident, these Coves are truly our "last frontier" in Marion County and in the past few years, much of this land has changed hands by out of town real estate speculators. Jasper Mountain sits between these two Coves and will soon be sold by Bowater and we would like to protect this view-shed. There are a few additional large tracts that could be acquired in the region to bring together a 30,000 working community landscape. We are asking you to help us set aside a few of the last remaining large tracts Marion County before out of town real estate speculators acquire them.

Attached you will find data that shows how 40,000 acres are being developed, or soon to be developed, in just a short time frame, and all of these acres have traditionally been managed for timber, wildlife, and outdoor recreation. As you will see from the December/January Issue of Outdoor Life Magazine, our hunting tradition is very quickly being lost to rapid real estate speculation by out of town capital. **Although we welcome investment in our county, we also believe it is important to set aside some of our last great places for future generations.**

We need your help now in helping us set aside a few of our last remaining large tracts in the South Cumberland Plateau. Our local community is united and we have a plan that we hope will make Marion County known world-wide for its balanced approach to development and conservation. We believe that 30,000 acres will only be the beginning and that surrounding counties will join us to set aside some land for future generations to enjoy. We ask that you partner with us as we seek to accomplish our vision of a South Cumberland Outdoor Recreation and Wildlife Corridor in Marion County.

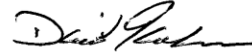
Sincerely,



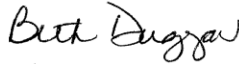
Mayor Howell Moss
County Mayor



Mayor Billy Simpson
Town of Jasper



Mayor David Jackson Marion
City of Kimball



Beth Duggar
President, Marion
County Chamber
Of Commerce



Mayor Mike Killian
City of South Pittsburg



Mayor Mark Meyers
City of New Hope



Attorney Charles Jenkins
Camp Glancy Ministry Association
Sequatchie Cove

***Letter A-3- Chamber of Commerce Director's appeal to Marion County
Commission to set aside land for public use on Jasper Mountain***

To: **The Marion County Commission and the Citizens of Marion
County**
From: **Bobby Brad Carter, Executive Director Marion County Chamber
of Commerce**
Subject: **Marion County Land Acquisition**

Dear County Commissioners and the Citizens of Marion County:

Within 5 years, over 40,000 acres of Marion County's rural mountain land will have been sold and developed by primarily out of town real estate speculators, including most all of South Pittsburg Mountain, Ladds Mountain, Aetna Mountain, and soon to be, Jasper Mountain. We must insure that we do not compromise our way of life by allowing development to occur that pollutes our water, takes away all of our open spaces, and costs the existing residents over the long-term due to poor planning.

Although we can't change what is happening, we can try to save a few of our last remaining timber tracts for our children and grandchildren to enjoy. There are few remaining large tracts in the Fiery Gizzard, on Jasper Mountain, and Whitwell Mountain. One thing is for sure, if we do nothing locally to keep some of this land for local residents to enjoy, it will soon be bought, sold, and gated just as the other 40,000 acres.

Of all the protected land in Marion County, Prentice Cooper State Forest, Franklin State Forest, River Gorge Trust Land, and TVA land, there is no local input or control of how and when it is used. This is why Marion County should make it a priority to establish our own public forest, managed by local citizens.

If the Marion County Commission agrees that this should be a priority, we will need to send representatives to Nashville and Washington to lobby for additional funds, just as if it were a new road or industry. The Governor, and many others throughout or state, are aware of the extraordinary number of acres of development in Marion County. Although it appears impossible to raise enough money to purchase land for public uses, other communities have done it, and we can too, with the full support of the Marion County Commission.

If you will commit to this as a priority, your legacy will be remembered for many generations. **I hope the county commission will establish a land acquisition committee, representative of the county, to explore how we might purchase land for our grandchildren to enjoy.**

Sincerely,
Bobby "Brad" Carter

*Letter A-4 – Hand-out material to Environment and Conservation Committees of
the Tennessee General Assembly*

**Water and Development Issues on the South Cumberland Plateau
Building a Case for State Action**

**Tennessee Senate Environment and Conservation Committee Report
Presented By: Daniel Carter
Contract Consultant for the Tennessee Wildlife Federation**

January 16, 2008

Tennessee State Senate Environment and Conservation Committee Report - Overview of Water and Development Issues on the South Cumberland Plateau

- Real estate speculators who buy remote forestland at cheap prices per acre will potentially financially benefit from drought- related state and federal water grants that enable miles of new rural water line extensions.
- Rural water line extensions through remote forested areas covering thousands of acres to developments with no houses, while existing residents are out of water and current infrastructure needs updating.
- Approximately 437 water utility boards in Tennessee that essentially control where rural developments will occur, with little or no public input.
- Local planning commissions under guidance from the State Office of Local Planning have local rules allowing developers to use well water as the source of water for lot approval, when there is often insufficient or poor quality well-water available, especially on the plateau.
- Approximately 1/3 of counties in Tennessee without a basic set of sub-division regulations. Some of these are drought-prone plateau counties experiencing major development. Even those with planning commissions are not achieving quality growth.
- Limited state and federal support to help drive locally-driven conservation initiatives

Local Government and Conservation

We have discovered that contrary to public and political belief many local leaders and citizens support land conservation for their local areas. For instance, in Marion County where I am from, 600-800 hunters have been displaced from their traditional hunting grounds as a result of speculative and potentially damaging and irresponsible real estate development. This and other recreational land losses have led citizens and local officials to call for the Governor and others to help our county protect some of our last best places for wildlife and recreation in the county for public use. The conservation of these lands has proven to be good for rural economies while at the same time not costly to them – since services such as water, fire police and others do not have to be provided. However, we have also learned the hard way that public

funds at the state and federal level for land conservation and the processes for accessing those funds are not easily accessed by local communities.

Public funds (both state and federal) require that other monies be brought to the table to match or leverage land conservation dollars. While this approach makes sense and does invite highly leveraged land conservation successes – it places the future of land conservation in the hands of a limited few who may or may not share the land use values of rural Tennesseans who love to hunt, fish, ride horses etc. More specifically, for rural Tennessee counties trying to access some of those funds and who are challenged annually with meeting a budget for schools, roads and jails, accessing these funds via locally generated revenues is very difficult.

However, having said this, we want to make it clear that the Tennessee Wildlife Federation and our partners strongly support traditional land conservation efforts and the successes they have produced. The Governor's Heritage Trust Fund has proven highly successful and beneficial to Tennessee, as has the TWRA Wetlands Acquisition Fund. The lands that have been conserved to date provide vitally important wildlife habitat that helps to (1) avoid increasing the number of threatened and endangered species, (2) providing valuable lands for wildlife, hunting, fishing and recreation, and (3) supporting rural economies with these activities. In this area, we just want to bring to your attention the difficulty rural counties face when wanting to protect a piece of land highly valuable and important to wildlife and their citizens. Additionally, we see the demand for land conservation at local level to be greater than the supply available.

State Role in Rural Water Issues

Rural water utility boards exert tremendous power in controlling where new water lines are placed in rapidly growing real estate markets. These decisions are rarely made based on comprehensive plans that take into consideration long-term water supply capacity or public input on where residential development should occur. There is rarely any coordination between county planning commissions and rural water utilities. Local governments make decisions based on the institutional guidelines placed upon them by state statutes and regulations.

The State of Tennessee and federal agencies like Rural Development have tremendous influence on local actions related to rural water. There are several examples of state and federal grants for water projects that may not reflect the wisest use of our natural resources due to the lack of mandatory water planning. TWRA, TDEC, TDOT, and ECD each play a separate role whether it is technical assistance, regulation, funding, or environmental mitigation, however there remains little to no effort to address the important issue of how we plan our local decisions related to water.

State Role in Fraudulent Real Estate Practices

The State of Tennessee has a role in insuring state licensed surveyors do not cut corners, investigating developers and rural land speculators that falsely inflate land prices to raise appraisal values to avoid capital gains taxes, and protecting consumers from false advertising and misleading information about property they purchase. All of these activities are clearly illegal and require no new laws or funding, however it must be made an enforcement priority by the appropriate authorities. Leaving justice in the hands of individual lawsuits by consumers is not adequate since they generally do not have the financial capability to protect themselves from well-capitalized developers and land speculators. Local courts will continue to see exponential increases in land disputes due to fraudulent practices by some real estate speculators, surveyors, and developers. There are plenty of honest and decent real estate professionals, surveyors, and developers in the rural development business and many will both support and applaud state action to address and prevent these fraudulent activities.

State Role in Addressing Land-use Issues

Marion County, Tennessee is experiencing over 40,000 acres of speculative real estate development on the Cumberland Plateau in a three to five year time period as timber companies dispose of land assets. This is a national phenomena with over 44 million acres expected to change hands in the next 25 years. Even with a planning commission, there is very little a rural county can do to protect some of its important recreation land, even when there political support to do so. Marion County officials would like to buy at least one of the large timber tracts that serves as a community forest above its municipalities, but will be unable to do so without state matching funds. This one large tract will be valued between 7-10 million dollars, which is equivalent to the entire amount of the Governor's Heritage Trust Fund. State leaders should place a high priority in supporting local governments willing to spend local funds towards land conservation. There is a real opportunity to set an example of how local governments can make their own conservation priorities, if state leaders will support a potential local bond initiative in Marion County through matching funds.

One of the primary reasons for setting aside the 5,000 acre timber tract in Marion County is that it lies on the plateau above two cities and many neighborhoods. Under the current state requirements, developers can place 1,000 homes on the bluff above our town, all on 5-acre lots with septic systems. The mountain is primarily sand-stone and lime-stone and the Town of Jasper's water source is at the base of the mountain. The State of Tennessee and the State of Ohio are the only two states that have plat approval exemptions on lots 5 acres and above. While this exemption was probably meant to provide a service to farmers who wanted to sell tracts to family members, today it is being abused by real estate speculators creating so-called "mini-farms." In addition, TDEC should be able to confirm that there are many rural lots on the Cumberland Plateau in counties without planning commissions that do not meet

septic requirements once purchased by unsuspecting buyers. This is unnecessary and needs to be addressed through regulations and legislation. Finally, the Cumberland Plateau is unique geological landscape, due to its karsts geology, and warrants special regulations and attention on the issue of sewage and mega-developments. Local governments and citizens are left powerless on this issue. Extensive planning and zoning rules that are legally defensible will take many years for these communities to establish, and it will be too late by this time.

It is unacceptable that approximately 1/3 of Tennessee counties still do not have a basic set of sub-division regulations. There may be a handful of these that are still not experiencing rural residential growth, but many of these counties are letting developers file plats freely without installing infrastructure properly, or at all, in many cases. One of these counties has a municipality that almost completely ran out of water for its own residents, while thousands of new residential lots are being platted and sold a few miles down the road in a county without a planning commission.

APPENDIX IV: ADDITIONAL MATERIAL

Figure A-1- Glossy Brochure Found in Orlando, Florida Newspaper for Development in Marion County, TN

Sequatchie Pointe
One of the reasons for...

The Tennessee Land Rush?

1. Cost of living is 17% below the national average
2. Electrical Power Rates, 3rd Lowest in USA
3. No State Income Tax, Low Residential Property Tax
4. No Hurricanes, (Lower Homeowners Ins.)
5. Year 'round average temp 60°

RAND McNALLY Retirement Guide
Rates this area #4 in the U.S. to retire!

Come Visit Us! \$9900
\$400.00 Value for **3 Days/2 Nights Hotel Stay**

- FREE Continental Breakfast Every Morning
- Plus \$200 Travel expense reimbursement when you tour the property

Call for Reservations
1-800-763-0085
772-263-3775
or 772-263-3776

Reservations must be paid for by Major Credit Card (*99) you may reschedule, however there are no refunds! Offer can expire without notice. This is a one time only offer.

10/13/2007

1

Attachment A-2 – Grant Request to Tennessee’s Heritage Trust Fund for Land Acquisition for Conservation Purposes

Project Summary

South Cumberland Wildlife and Recreation Corridor- Phase One

The Tennessee Wildlife Federation is on the cusp of completing a 15,000- 20,000 acre land transaction that includes working forest easements, public land, trail corridors, and connectivity to existing public lands that will be primarily funded through private capital.

Local residents of the South Cumberland Plateau support this effort due to experiencing an unprecedented number of acres lost to land speculators from throughout the United States. Court-house records indicate never seen before land transactions by speculative real estate development interests. While most recognize that some development and growth is needed and desired for economic reasons, many local citizens are also concerned that without public conservation dollars, we will forever lose the opportunity to set aside a few of our last large tracts of land for public uses including hiking, horse-back riding, hunting, fishing, camping and other outdoor recreational pursuits.

Natural Resources

Many of the parcels identified within Phase One of the South Cumberland Recreation and Wildlife Corridor rank high in conservation value according to TWRA’s State Wildlife Action Plan.

Geography –

The First Phase of Corridor will primarily cover what is known as the Fiery Gizzard Water Shed- along the Fiery Gizzard Trail connecting the South Cumberland State Park and in Grundy County and TVA’s Foster Falls Small Wilds Area. Most of the land is will encompass scenic coves and some plateau. The Corridor will connect to a recently acquired 1200 acres out of the Bud Werner Tract. Future phases of the South Cumberland Wildlife and Recreation Corridor will connect to the Chimney’s State Natural Area, Sequatchie Cave, and eventually to Savage Gulf State Natural Area.

Acquisition Purposes and Physical Improvements

Heritage Trust Fund dollars will also help set aside approximately 1000 acres on the Jasper Mountain Bowater Tract most of which is a one-mile view-shed overlooking I-24, and the Towns of Jasper, Kimball, and South Pittsburg, TN. Once acquired, the Tennessee Wildlife Federation will take the lead in partnering with private development, state agencies, non-profits, and the Marion County Chamber of Commerce Greenways and Trails Committee to create a sporting complex, community center, trail system, and wildlife management area connecting the 1000

acre tract with the Fiery Gizzard Tracts along with potential future phases of the corridor extending into Sequatchie, Bledsoe, Grundy, and Van Buren counties.

Regional Planning Efforts

There are several foundations, non-profits, and local organizations interested in protecting the parcels identified within the South Cumberland Wildlife and Recreation Corridor. Most importantly, project leaders have acquired signatures of support from all local mayors, county mayor, Chamber of Commerce Executive Director, as well as several other prominent community leaders.

Property Ownership

Lyme Timber Management will own the property to be managed as a timber investment while permanent conservation easements and public access will initially be managed by TWRA in partnership with TWF until a satisfactory local management model can be established. Lyme will manage the timber assets while TWF will raise additional private funds to develop additional recreation opportunities throughout the corridor.

Adjacent Property Boundaries
(See Enclosed Maps)

1. Tennessee Heritage Trust Fund Goals

As outlined in the project overview, with the added support of the Heritage Trust Fund, the South Cumberland Wildlife and Recreation Corridor will serve as a landmark conservation effort that strategically involves public, private, and non-profit organizations.

Goals of the South Cumberland Wildlife and Recreation Corridor

- Desire to protect as much of the Jasper Mountain and Fiery Gizzard watershed area as possible for continued conservation management and public use
- Create a “win-win” development and conservation project that makes sense for both the environment and reasonable economic growth of the local community
- Desire to protect view shed above the city of Jasper and Kimball Tennessee that is also seen by 36,000 motorists on I-24 each day.
- Desire to create a series of interconnected back-country trails and public access to large tracts of land for multiple recreational pursuits
- Sacrifice limited space to development in order to facilitate establishment of conservation control over major area

- Take advantage of long-bluff nature of Jasper Mountain to maximize limited-development principals – limited number of high-dollar lots, minimal roads, etc.
- Limited development in this context means use of less than 25% of the total area acquired, working in conjunction with public groups and a conservation minded timber management company
- Major “insider” tie-ins may assist in project due to local knowledge of land access issues, and favorable relationships with key local landowners. For instance, Carter tract access not assured to outsiders.

Below is an outline of how private investment plays a part in this project:

Limited Development with Lyme & Public Funding

- Lyme acts as land bank for acquisition of all major tracts – Bowater, Carter, RMK, and D Roberts Farm = total 15.3 K acres (depends on RMK sales information), \$ 16.8 mm if Lyme only buys land listed on investment prospectus at recommended asking price
- Investor Group acquires key 1500 acres of Bowater and Carter tracts from Lyme for access; Investor Group later purchases an additional 2500 acres from Lyme for conservation and amenity to private development; TWF/State acquires 1000 acres public land restricted to use during day-light hours- includes 10 mile trail system along bluff, fishing lake, community center, sporting complex
- Initial Acquisition Cost for Investor Group = 2,500,000= 1500 acres @ \$2000 per acre
- Lyme and TWF, etc. (with Land Trust partners such as TNC, Land Trust for Tennessee etc.) arrange for public take-out of \$4 mm for conserved lands \$4 mm applied for through Governor’s Heritage Trust Fund, \$7 mm in federal request to local Congressmen by Marion County Chamber of Commerce, Lyndhurst has strong interest in project
- Public Take-out affects 11,000 acres
- Land trust arranges purchase of Doff Roberts Farm for Lyme

- Lyme later sells Doff Roberts and Jasper Mountain (with pre-arranged conservation buyers through TNC that would benefit from conservation easements) for \$3,500,000= Roberts + 500 RMK acres sold in 3 tracts- approx 1000 acres total and \$3,500,000- 2500 acres for remaining Jasper Mountain
- Lyme's security by banking project will be the 2500 acres of prime bluff view property overlooking valley and towns with paved road, water, and power at the developer's expense and no conservation easement at this time- minimum value as raw bluff-front land with utilities=\$3,000 per acre at \$7.5 mm
- Lyme controls timber management on 9,000 remaining acres under working conservation easements, has total of \$3.3 mm invested, owns 9,000 acres and has exit value based on future values of timber producing lands.

2. Project Importance

Threatened or Endangered Species

Fish, Wildlife, Plants, and Unique Forest Communities

As mentioned earlier, the majority of the South Cumberland Wildlife and Recreation Corridor rank's high on TWRA's State Wildlife Action Plan. One of the parcels within the corridor lies within what is known as the Sequatchie Cove that may be home to the endangered Peregrine Falcon and Grey Bat. (Maps Attached)

Water Supply Protection- The South Cumberland Corridor encompasses multiple parcels within the two largest water-sheds in the Sequatchie Valley. The Jasper Mountain property sits above the primary water supply source for the Town of Jasper known as the "blue hole" which is the headwaters of Town Creek- also home to the endangered Royal Snail. The Sequatchie Cove parcel listed on the Corridor serves as a main tributary to the what is known as the Big Sequatchie River which also serves as a water supply to the Town of Jasper.

Public Access- One of the core components of the South Cumberland Wildlife and Recreation Corridor is not only to purchase public access and conservation easement to the majority of the property, but to leverage private capital to access them as mentioned with the 7 -20 mile multi-use trail corridor on Jasper Mountain.

Scenic- As outlined earlier and seen from the attached maps, there are multiple scenic characteristics of the project. First, the 1000 acres on Jasper Mountain is the prominent bluff line seen from I-24 and all municipalities in the region. In addition, many of the Fiery Gizzard parcels identified serve as the view-shed for the nationally recognized Fiery Gizzard Trail.

Historic/Cultural/Archaeological – There are several known Native American cave dwellings and habitations throughout the parcels identified as well as a long lost “Summertown Community” on Jasper Mountain that once served as a retreat to urban dwellers almost a century ago (historical knowledge is limited)

Mitigation of Environmental Issues- There are no known environmental issues associated with parcels identified.

3. Threatened

These parcels are under imminent conversion (see attached maps)

There are no legal protections to protect parcels from fragmentation. There are no easements or zoning in the county. All properties are up for sale at the moment. Approximately 30,000 acres adjacent to corridor has been converted from forestry/timberland to rural residential development within 3 years. The land in question is primarily forestland.

All parcels within the corridor are currently listed with realtors and are being marketed as development tracts. The Jasper Mountain Parcel can be seen on Cardinal Real Estate’s web-site out of Charlotte, NC. The RMK parcels are also listed in several parcels, some with asking prices and others with bid packages. With the Heritage Trust Fund leverage, Lyme Timber Company will make an offer on all of RMK’s holdings in the region encompassing approximately 15,000 acres and the 5,000 acre Bowater Parcel. If this project does not come to fruition- there is little question land speculative interests and not timber companies will acquire these properties due to the limited marketable timber at the time, combined with the development purchase prices.

4. Strategic

As outlined earlier, the project is only Phase One of a broader multi-county initiative to set aside lands for wildlife and outdoor recreation. There are multiple conservation organizations that have also identified the Fiery Gizzard and Sequatchie Cove as priority areas including the Conservation Fund, The Nature Conservancy, The Land Trust for Tennessee, The Friends of the South Cumberland, The Marion County Greenways and Trails Initiative and the Tennessee Wildlife Federation. Most importantly, the view-shed on Jasper Mountain is of paramount importance to the local citizens of the region (please refer to letter from county mayor). Also, the corridor is directly linked to the recent 1200 acre Bud Werner tract acquisition by the Conservation Fund.

The State Greenways and Trails Plan identified the Sequatchie Trail as a historic trail that may encompass this corridor. The State Greenways and Trails Plan also

identified the Big Fiery Gizzard Creek as a watershed that meets multiple ecological criteria. The entire project area also lies entirely within the Cumberland Plateau.

Finally, the entire project area excluding the portion of Jasper Mountain identified for private and limited conservation development is ranked high according to the State Wildlife Action Plan.

Budget/Funding Information

The Tennessee Wildlife Federation is currently funded through the Lyndhurst Foundation and The Tennessee Wildlife Resources Agency and will be requesting additional planning funds to expand the South Cumberland Wildlife and Recreation Corridor in the next few months.

The Marion County Chamber of Commerce and TWF have also requested 7 million in Forest Legacy dollars to leverage toward project (no imminent revenue expected), however project leaders believe federal dollars will be leveraged should the project get under way.

TWF will also seek at further assistance from the Lyndhurst Foundation should the Governor's Heritage Trust Fund approve this grant.

Attachment A-3 – Federal Appropriation Grant Request to Local Congressman

REPRESENTATIVE LINCOLN DAVIS
FY08 APPROPRIATIONS REQUEST FORM

PLEASE RETURN IN ELECTRONIC FORM TO BRANDI.LOWELL@MAIL.HOUSE.GOV OR
JOSEPH.EAVES@MAIL.HOUSE.GOV

NO LATER THAN
FEBRUARY 20, 2007

1. PROJECT NAME: SOUTH CUMBERLAND WILDLIFE AND RECREATION CORRIDOR
2. PROJECT SPONSOR: TENNESSEE WILDLIFE FEDERATION
3. CONTACT NAME & INFORMATION: DANIEL CARTER, 150 CARTER FARM ROAD,
JASPER, TN 37374- PHONE: 423-255-6704
4. BRIEFLY DESCRIBE THE SPONSORING ORGANIZATION'S MAIN ACTIVITIES
(PUBLIC, PRIVATE,
NON-PROFIT, ETC) AND THEIR REGIONAL AND NATIONAL SIGNIFICANCE:

THE TENNESSEE WILDLIFE FEDERATION IS A NON-PROFIT WHOSE MISSION IS TO:
champion the conservation, sound management and enjoyment of Tennessee's
wildlife and natural resources for current and future generations through stewardship,
advocacy and education.

PROJECT INFORMATION

1. PROJECT DESCRIPTION- PLEASE BE AS DETAILED AS POSSIBLE AND DESCRIBE
THE PROJECT'S REGIONAL AND/OR NATIONAL SIGNIFICANCE:

Local officials in Marion County in partnership with the Tennessee Wildlife Federation are leading an effort in the South Cumberland Plateau to structure a public-private land conservation project involving approximately 30,000 acres in two phases. The project is supported by local governments due to its balanced approach to development and conservation. Public benefits include easements for multiple use trails connecting existing public lands, public access and conservation easements protecting important view sheds, and fee simple public land acquisition on portions of certain tracts. Private benefits include timber rights, continued private ownership of most of the land at a discounted price due to public purchase of easements, and out-right ownership of portions of tracts suited for limited development.

The corner-stone of the project involves a 5,000 acre Bowater Tract, currently for sale, that serves as the view-shed for the city of Kimball and Jasper, TN. Application has been made to the Governor's Heritage Trust Fund to leverage public funds to set aside approximately half of the Bowater tract for public recreation and view-shed protection. The remaining portion of the property will be privately owned for limited development and/or wildlife management purposes.

There are approximately 25,000 acres surrounding this Bowater Tract that are primarily corporately owned and ranked as high priority conservation areas according to the Tennessee Wildlife Resources Agency. In addition to state funding requests, the Tennessee Wildlife Federation in partnership with local officials and community leaders are seeking a federal appropriation to purchase development and public access rights to most of these properties, assuming willing sellers.

In addition, there are two tracts suited for fee simple acquisition due to endangered species habitat and three smaller tracts currently on the market that can be purchased by private capital, placed under conservation easements, and re-sold to pre-arranged conservation buyers willing to allow public access to the larger corridor.

Project leaders are currently formalizing a business plan that utilizes this project as a model for similar projects in high growth areas with local public support for balancing conservation and development. The business model recognizes that limited federal and state conservation dollars should leverage private capital, when possible, to meet public objectives.

2. Does The Project Have Confirmed Support From Other Members Of The House or Senate? If Yes, Which Members? Have talked with Alexander's staff briefly
No

3. DOES THE PROJECT INVOLVE ANY OTHER ORGANIZATIONS IN TENNESSEE OR OTHER STATES? IF YES, LIST THE ORGANIZATIONS.

SEEKING FUNDING ON ONE PORTION OF THE CORRIDOR FROM THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION'S GOVERNOR'S HERITAGE TRUST FUND.

FUNDING

1. TOTAL PROJECT COST (I.E., INCLUDING ALL FUNDING SOURCES AND ALL YEARS):

			Total Investment by Public and Private Dollars
35528	Acres Conserved	\$32,095,800	

**SEE
ATTACHMENT**

2. AMOUNT YOU ARE REQUESTING FOR THIS PROJECT IN FISCAL YEAR 2008 (YOUR FY 2008 REQUEST SHOULD NOT EXCEED THE AMOUNT THAT WILL BE USED IN ONE YEAR):\$7,000,000

A. IS THIS IN THE PRESIDENT'S BUDGET?NO

3.PROVIDE A COMPLETE BREAK DOWN/BUDGET OF THE AMOUNT YOU ARE REQUESTING FOR THIS PROJECT IN FISCAL YEAR 2008 (FOR EXAMPLE, SALARY \$40,000; COMPUTER \$3,000 ETC. PLEASE NOTE THAT OTHER THAN HEALTH RELATED PROGRAMS WITHIN THE LABORH BILL, CONSTRUCTION FUNDS WILL **NOT** BE GRANTED. APPROPRIATORS DO NOT FUND "BRICKS AND MORTAR.") ALL FOR EASEMENT ACQUISITION

4. WHAT OTHER FUNDING SOURCES ARE CONTRIBUTING TO THIS PROJECT? WHAT AMOUNT DOES EACH OF THESE FUNDING SOURCES CONTRIBUTE?

STATE MATCH(S):

LOCAL MATCH(S):

PRIVATE MATCH(S): \$7,000,000

5. HAS THE POTENTIAL RECIPIENT RECEIVED FUNDING FOR THIS PROJECT FROM ANY FEDERAL AGENCY CURRENTLY OR IN THE PAST FIVE YEARS? IF YES, INCLUDE INFORMATION ON THE AMOUNT OF FUNDS, THE YEARS RECEIVED, AND THE NAME OF THE FEDERAL AGENCY AND PROGRAM PROVIDING THE FUNDING.

NO

6. APPROPRIATIONS BILL FROM WHICH YOU'D LIKE TO REQUEST (IF KNOWN):

☐ AG

☐ SCIENCE/COMMERCE/STATE/JUSTICE

☐ DEFENSE

☐ ENERGY & WATER

☒ INTERIOR/ ENVIRONMENT

☐ LABOR/HHS/EDUCATION

☐ HOMELAND SECURITY

☐ MILITARY QUALITY OF LIFE/

VA

☐ FOREIGN OPS

☐

TRANSPORTATION/TREASURY/HUD

PLEASE ANSWER THE FOLLOWING (IF UNKNOWN, LEAVE BLANK):

AGENCY:

ACCOUNT:

(PLEASE NOTE THAT THE ARMED SERVICES SUBCOMMITTEE REQUIRES ITS OWN, ADDITIONAL FORMS FOR DEFENSE AND MILCON REQUESTS. IF YOU NEED THESE FORMS PLEASE ASK FOR A COPY).

**PLEASE RETURN IN ELECTRONIC FORM TO
BRANDI.LOWELL@MAIL.HOUSE.GOV OR JOSEPH.EAVES@MAIL.HOUSE.GOV
NO LATER THAN
FEBRUARY 20, 2007**

Attachment A-4 – Estimated Development Costs For Jasper Mountain

Estimated Development Costs- Jasper Mountain

\$900- \$1200	Cost of Surveying 5 acre tract depending on common boundaries
\$200	Amount per acre for Stormwater Permitting – Notice of Intent Surveying Costs with 200- 5 acre lots (costs will be spread over 5 years)
\$ 399,600	
\$ 100,000	Stormwater Permitting for 500 acres (includes future lakes)
\$ 499,600	TOTAL

Water

9,000 linear feet of water line

100,000 Gallon Tank for 200 Families

2 Pump Stations

4 Pumps

Costs will depend on Rock- 6 inch line- \$25 per foot

\$ 825,000	Construction and Supplies
------------	---------------------------

\$ 90,000	Permitting
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\$ 915,000	TOTAL (this expense can be bonded)
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Roads

12,000 Linear Ft.

\$12.82 per ft. Base

\$9.68 per ft. Tar and Gravel

\$22.50 Total per ft Cost for Tar and Gravel

\$8.88 Ashpalt

\$31.38 Total Cost per ft. with asphalt

\$25 per foot to clear and build road- barring blasting at Bluff

\$8 per ton for Gravel Base

\$5 per ton to haul Gravel

\$28-30	per linear foot asphalt
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\$25	Price per foot W/O Rock
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\$30,000	for rock on 10,000 linear feet
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\$384,000.00	Total Cost for Surfacing Road
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\$250,000.00	
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\$664,000	TOTAL
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one ton per linear foot for base (depends on soil and dampness)

Southeast Tennessee Electric Cooperative Information

Over-head Expense to Developer

\$4.65 per ft.

\$735 refund per house within 5 years

750 feet free to house

\$41,850	9,000 linear feet overhead
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Underground Power- 3 inch conduit	
Ditchwork = \$2.00 per foot	
\$5.30 per ft	lines alone
\$10 per ft installed	
\$100,000	9,000 linear feet installed

Estimated Development Costs

\$ 499,600	Engineering/Surveying/Permitting
\$ 915,000	Water
\$ 664,000	Roads
\$ 100,000	Electricity
\$ 200,000	Facilities/Sales Cabin/Work Shed
\$ 300,000	4 bedroom Guest Lodge
\$ 225,000	Gun Club- Trap and Sporting Clays
\$ 200,000	Equestrian Facilities
\$ 25,000	Entrance Gates
\$ 500,000	Green Fields/habitat/Dozer/
\$ 250,000	Lake-Pending Permitting
\$ 150,000	Trail Building
\$ 4,028,600	Total Development Costs

Estimated costs to provide 10,000 linear feet of roads and utilities

\$ 250,000.00	Engineering/Surveying/Permitting
\$ 100,000.00	Underground Electricity
\$ 915,000.00	Water
<u>\$ 600,000.00</u>	Roads
\$ 1,865,000.00	Total Development Costs

	Trail Development- Forestry Mulcher- 10-20 miles
	6-8 foot wide multi-use trail
	\$1500 per acre= 5,500 linear feet of trail
\$ 30,000	20 miles of trails

Vita

Daniel Carter received his Bachelor of Science Degree from Middle Tennessee State University and a Master of Public Administration from The American University in Washington, DC. He spent eight years as a county government consultant with the University of Tennessee's County Technical Assistance Service. He is currently working as a contract consultant with the Tennessee Wildlife Federation researching land-use changes in the Southern Cumberland Plateau. Daniel is also a businessman, forest-land owner and farmer in Jasper, TN, serving on several boards and committees including the Board of Trustees of Grand-view Medical Center, Appointed Representative on the Marion County Joint Economic and Community Development Board, and Chairman of the Marion County Chamber of Commerce Greenways and Trails Committee. Daniel is the father of two young children who he hopes will enjoy the natural assets of the Southern Cumberland Plateau just as he has over the past 36 years.