



**Tennessee Wildlife Federation
Final Report**

**Development, Land-use Policy, and the Future of Agriculture,
Forestry and Hunting in the Southeast Cumberland Plateau**

Building Local Support for Land Conservation

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Table of Contents

Acknowledgements and Introduction	Page	3
Building a Case for Land Conservation	Page	4
Success Stories -Changing the Dialogue on Growth	Page	5
Data and GIS Summary	Pages	6
Presentations and Highlights	Pages	8
Rural Lands Project	Page	11
Concluding Thoughts	Pages	12

Appendix

Conservation and Planning Forum Re-cap	Pages	14
Marion County Three-Star Community Priorities	Pages	18
OIR-GIS Services Digital Request Form	Pages	21
Farming Survey	Page	24
Hunting Survey- Rough Draft to UT	Page	25
Quality Growth Conference Program Speakers	Page	27
Tennessee Out-of-Doors Article	Pages	30
Community Conservation Letter to Congressman	Pages	32
Outdoor Life Article on Loss of Hunting	Pages	34
Sample County Facts and Figures Sheet	Page	40
Community Letter to Conservation Organizations	Pages	41
NBII Potential Contributions to Rural Lands Inst.	Pages	43
Sample Petition to Support Conservation Effort	Page	46
Thank You Letter from Monteagle Rotary	Page	47

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We would like to express my sincere appreciation to the Tennessee Wildlife Federation (TWF), The Lyndhurst Foundation, and The Tennessee Wildlife Resources Agency (TWRA) for allowing me the opportunity to engage in such an important endeavor. We would also like to thank Andrew Carroll for doing such a tremendous job incorporating GIS data into a power point presentation that captures how our landscape is changing.

Introduction

The Tennessee Wildlife Federation is pleased to present its final report on development, land-use policy, and the future of agriculture, forestry and hunting in the southeast Cumberland Plateau. This report will include numerous documents outlining the various meetings and presentations associated with the project as seen in the Table of Contents. The primary audience for this document is those who funded the project; however, there have been several groups and individuals who have requested a copy of this report. The project leaders have decided to include useful documents into the report so that others can not only get a true sense of the multi-faceted approach when attempting to build a case for land conservation; but also to allow others to be able to replicate the process.

Prior to this project, there was only anecdotal information about land-use changes occurring in the southern Cumberland Plateau. It is now known that, within four short years over 188,000 acres of former timberland has or will soon change hands in the Marion, Grundy, Franklin, Sequatchie, and Bledsoe counties. Since most large timber tracts are in remote areas and can often only be seen from the air, the parcels were labeled and identified on hard-copy maps with TWRA State Wildlife Action Plan (SWAP) data in the background, and provided copies to local officials.

Thanks to Andrew Carroll, the study was also able to integrate satellite imagery into a power point presentation. This allowed us to display images of the local landscape in a way that illustrated a clear visual understanding of the immense size of future and existing residential development tracts when compared to existing residential areas. Throughout the presentations, this proved extremely provocative and compelling, as the scale of the land use changes on the plateau were explained. This new technology has given much better understanding of the imminent threats to habitat and outdoor recreational opportunities the southern Cumberland Plateau is facing within only a few years.

Building a Local Support for Land Conservation

Early during this project, we determined that the utilization of available technology was going to be a critical in our ability to relay to the public important land use and land change data. The use of geographic information systems (GIS) software and commonly available computer presentation software was an efficient and effective methodology allowing us to tell the story you will read in this report. This story is a powerful one that quantifies what many have felt has been occurring in our study area – the wholesale loss of important un-fragmented wildlife and recreational lands of the southern Cumberland Plateau.

Our presentation was organized to first illustrate a critical moment in time on the Cumberland Plateau. There is clear evidence from county courthouse records that the Plateau is in the midst of a very real land rush, at a time when timber companies are selling off their large tracts. Most of these properties have bluff views, which are the primary characteristic that makes them ideal for retail buyers of mountain land. It was understood by our audiences that although the project is designed to be objective and factual, the ultimate goal is to build a case and local support for land conservation.

One of the most compelling findings of our research was that many of the large tracts targeted and marketed for development lie in the heart of high priority conservation areas identified in the SWAP. Our presentation clearly demonstrated this process of events through a series of GIS maps. We stressed that the TWRA plan had done an excellent job in prioritizing important landscapes for threatened species, but that they needed the help of local citizens and leaders to insure these habitats are protected.

We specifically illustrated some of the negative consequences associated with large-scale developments on the plateau including poor subdivision design (due to the limited role of local governments) limited water supply, and loss of outdoor recreation opportunities. Finally, we stressed the importance of saving some of the last great places in the region for wildlife, outdoor recreation, and watershed protection. The final message was that there is no reversing fragmentation and by protecting some our last great places we will ensure that future generations can enjoy our landscape just as we have.

The most important part of this message is that we are promoting something positive versus trying to only stop something negative. We offered a rough sketch of a vision for a South Cumberland Wildlife and Recreation Corridor that would serve many purposes including wildlife and watershed protection, outdoor recreation, and sustainable forestry. We informed audiences of conservation efforts in the northern Cumberland Plateau where large tracts of land are being conserved in perpetuity through creative public-private partnerships; whereby sustainable forestry is utilized as an economic tool to keep large tracts intact. The message was that we can easily achieve similar conservation goals if we establish our own conservation vision for the southern Cumberland Plateau.

Success Stories - Changing the Dialogue on Growth

The following is a listing of “success stories” we experienced during this project and that we feel helped change the dialogue on land development, growth and land conservation in the study area.

- Brought attention to the conservation needs of the southern Cumberland Plateau region of Tennessee to state agencies and conservation organizations.
- Clearly demonstrated model for building local support for land conservation
- Advised and assisted similar efforts in the northern Cumberland Plateau by writing a step-by-step guide to our approach.
- Demonstrated how to utilize state parcel and base-map data for conservation purposes.
- Since the project’s inception, data has helped local officials throughout the region understand the broader implications of the long-term negative impacts of a recent land rush. One community group interested in growth issues we spoke with, felt that the presentation was so compelling that they may need to expand their focus area.
- Partly due to this project, county and city leaders are supporting greenways, trails and conservation corridor efforts through resolutions and letters to state conservation leaders, including Governor Bredesen. Local leaders have independently noted in public presentations that in four short years 40,000 acres of traditional forestland will be converted to rural residential uses in one county alone (this is a statistic from this project). In addition, we have discovered new efforts by the Tennessee Department of Economic Development’s Local Planning Division to develop their own growth maps. (These were not in existence prior to this project)
- Many local officials were extremely excited about this project, because they were aware of what was happening, but did not have the resources themselves to make a compelling case that something must be done about the negative consequences of the type of growth that is occurring in their communities.
- The real success stories, however, will take time to unfold now that the specific problem has been identified. We expect that at least one county will create a planning commission, only partly as a result of this project. Most importantly, we believe the message has offered an expanded understanding of growth by offering citizens and local leaders a vision of how we can enhance our quality of life through land conservation.

Data and GIS Summary

Step by Step Guide to Data Collection South Cumberland Project

1. **State Base-Mapping Data** - Acquire Digital County Base Maps and Parcel Data from Dennis Pederson with the Office of Information Technology (not all counties are available at this time- Due to project time restraints we digitized parcels 100 acres and above in three of our project counties.) E-mail dennis.pederson@state.tn.us and request the OIR-GIS Services Digital Data Request Form- You can also contact Gayle Moore at 615-532-3835 for more information within the State Comptroller's Office.
2. **Parcel Data** - Parcel information includes data from the courthouse retrieval system- Once this data is acquired, the GIS technician put all owner information in an excel spreadsheet. On average the counties we studied had 300-500 parcels. We saved the master file for each county and created a new file where we deleted all locally owned parcels. We saved a second file where we deleted all parcels owned by individuals- A good indicator of development is when you see LLC in the owner name. Of course you will also recognize corporate lands like Bowater, RMK, RGGGS Minerals (old mining land) etc. (Sample Spreadsheets Attached)
3. **Maps** - We then narrowed down the tracts to 20-30 large timber parcels and highlighted them on the main base-map, which is an aerial photo of the land
4. **County Facts and Figures** - We created a one-page facts and figures map for individual counties to illustrate the total county acreage and acreage under out-of-town and corporate ownership. This is important information since most of us were unaware that on average about 50% of the landscape is owned and controlled by out-of-town corporations that are now transferring these tracts to out-of-town development groups.
5. **SWAP Data** - We then overlaid SWAP data to see if there was an overlap of large timber company tracts and LLC/Development tracts.
6. **Local Contacts** - Having local knowledge and contacts was a great assistance in narrowing down where growth is occurring and what large tracts are on the market- Surveyors, Assessors of Property, and Register of Deeds are great resources to learn what is happening in a county. We spent a lot of time talking with folks explaining what we were trying to do. One of our key points about TWRA was that they have done a great job at identifying and prioritizing important habitats. In other words, "no one wants to stop growth and development, we just want make you aware of some of the important habitats in your county and see what can be done to protect them". This approach appeared to resonate well with local leaders and citizens, because it is balanced and reasonable.

7. **Vacant Lots Inventory-** Assessor's of Property and the Division of Property Assessments within the State Comptroller's Office have the ability of querying courthouse data to determine how many vacant lots are in a county. We were also able to find historical data on how many vacant lots were available in 2001 and the present. These data told us the rate of building versus land speculation in a county.
8. **Water** - One of the most important indicators of where mountain top sub-division has and will occur is the availability of water. We are still working on acquiring water line data, a difficult task. We believe this to be biggest growth and development issue in the South Cumberland Plateau. Water plants and infrastructure are generally inadequate for the number of lots that are being platted, a fact that captured many people's attention.
9. **Forestry Survey** - We interviewed most loggers and foresters in the region. In short, these individuals felt there is very little hope for the future of forestry and agriculture as key industries in the region in the future. Although forestry will not cease to exist, it will no longer be the highest and best use from a land value standpoint. Land prices are already beyond a point where tracts can be bought and utilized for forestry or agriculture as part of a legitimate business model. In other words, trees will not grow and cows can not be raised fast enough to outpace the price individuals will pay for small mini-farms or retiree tracts. Loggers and foresters are indicating that we are moving towards a recreation and residential based economy, which is confirmed in the recent increase in land values. More telling of this fact is that we found many traditional foresters are moving into the real-estate and development business.
10. **Agricultural Survey** - We surveyed 35 large land-owners at a regional cattlemen's association annual banquet to determine attitudes and opinions on land prices, agriculture, and development. We found that most farmers in the valley were primarily part-time and they felt that most farms above the flood-plain in the Sequatchie Valley would be developed for rural residential development in the next twenty-five years.
11. **Presentations-** Each county has multiple civic organizations that are seeking presenters each week to talk about issues that are important in their local communities. Additionally, after the enactment of Public Chapter 1101, Tennessee's Growth Management Law, each county formed a joint economic and community development board that is required to meet four times a year. These civic organizations offered great opportunities to get our information and message out to local leaders and decision makers.

Presentations and Highlights

January 19th, 2007 – Met at TWRA Regional Office in Crossville, TN to give overview of project and seek a greater understanding of the role of local planning in the growth process

Participants: TWRA Staff and local planning experts.

- This was a very informative meeting for all concerned and appeared to be the first time local planning and wildlife experts had met to discuss the important issue of how to balance growth with conservation in Tennessee (Meeting Highlights, Agenda, and Participant List Included in Appendix Section)

February 7th, 2007 – Met with Staff of Tennessee’s Department of Economic and Community Development’s Local Planning Division to become more educated on planning issues in region and to inform staff of project scope.

Participants: All local planners working for ECD in the southern Cumberland Plateau

- A few months after meeting, the ECD Local Planning Staff replicated project by creating a large tract inventory and county-wide growth map for Marion County

February 21st and 22nd- Made presentation to the Governor’s Land and Water Forum presenting findings of project- Estimated 50-100 participants

Participants: State Agency Land Managers, Land Trusts, Environment and Conservation Officials, Conservation Board Members, and others with a general interest in Land and Water issues.

- Ten individuals personally expressed appreciation for the presentation, requested copies of power point, wanting to know how to do similar work in other parts of the state.

March 20th, 2007 – Made presentation to the Tennessee Wildlife Federation Board of Directors

- Primary objective was to bring awareness to the project, highlighting the rapid rates of rural residential development in the southern Cumberland Plateau and its long-term impacts on hunting and wildlife habitat.

March 30th, 2007 – Presenter at Plain Talk on Quality Growth Conference in Knoxville, TN (Conference Bio and Panel Description Attached)

Participants - Economic development professionals, developers, conservationists, academia, and citizens interested and concerned about growth in Tennessee

- Invited to speak by Dr. Wolf Naegeli, Program Chair for event, after seeing presentation at the Governor's Land and Water Forum.
- High level of interest from conference participants that resulted in many discussions with attendees that extended several hours beyond the close of the conference.

April 23rd, 2007 – Invited to speak to the Cagle Mountain Water Utility District in Sequatchie County

- Water Board and directors were very interested in project and particularly concerned that their quality of life was changing now that they were losing access to the large timber tracts they once enjoyed for outdoor recreation – in particular hunting.
- There was particular mention that Savage Gulf State Natural Area just down the road did not allow hunting.
- Board members felt they had enough growth in the region and did not have the water supply for much of the anticipated growth.
- Everyone was completely supportive of land conservation for the purposes of outdoor recreation.

May 29-30, 2007- Invited to Tennessee Valley Corridor Summit by U.S.G.S. NBII project coordinator

- The National Biological Information Infrastructure (NBII) is an electronic information network that provides access to biological data and information on our nation's plants, animals, and ecosystems.
- U.S.G.S NBII Director offered a partnership role should project move to a more formal Rural Lands Project model (See attached Document- "NBII Potential Contributions to the Tennessee Rural Lands Project")
- For more information about group see <http://sain.nbii.gov>

June 14th, 2007 – Presented to Marion County Joint Economic and Community Development Board- Western Sizzlin- 25 minute presentation

Participants- Mayor of Jasper, Kimball, Whitwell, New Hope, Monteagle, City Manager of South Pittsburg and Whitwell, County Mayor, Chamber of Commerce Executive Director, Marion County Newspaper, several additional local leaders

- Presentation instigated lengthy discussion on water issue in the southern Cumberland Plateau and led to the addition of greenways and trails as a priority

for Marion County in the Tennessee Department and Economic and Community Development's Three Star Program. (See Attached).

June 21st, 2007 – Presented to community group in Sewanee, TN concerned about local growth issues

Participants- primarily citizens

- The presentation was well received, but most importantly led to several additional invitations to speak to other groups.

June 27th, 2007 – Presented to Monteagle Rotary Club

Participants- Business owners

- Presentation was well received and led to several invitations to speak to other groups. We were very pleased that real estate professionals were in support of and appreciated the notion of balancing growth with conservation.

July 10th, 2007 – Presented to Marion County Sertoma Club

Participants – Civic Leaders

- Invited by club president that attended presentation on June 14th. Most everyone wanted to know what they could do to help solve the challenges facing the county.
- Everyone signed a petition to support a Wildlife and Recreation Corridor for the purposes of wildlife habitat protection, outdoor recreation, watershed protection, continued forest management, and trail connections.

July 10th, 2007 – Marion County Sertoma Club

Participants- Civic and Business leaders

- Many attendees wanted to know what we could do to save some of the last great places from development in Marion County

July 12th, 2007- Coordinated meeting between TWRA non-game experts and the Franklin County Planning Director to discuss how SWAP data can be integrated into the local planning process.

Participants: Technical and Planning experts in Franklin County, TWRA wildlife planning coordinators, Andrew Carroll- GIS Expert, and Daniel Carter

- This was a very productive meeting where we learned how TWRA might play a role in the local planning process in Franklin County
- Planners were also impressed with presentation and invited us back to present to a joint meeting of the Franklin County Commission and Planning Commission.
- TWRA Staff requested a similar process take place in Cumberland County.

July 13th, 2007 – Sequatchie County Joint Economic and Community Development Board

Participants: Local Leaders

- The presentation was well received and participants wanted us to return and speak to the County Commission and a local farming organization.

July 14th, 2007 – Invited by the Friends of the South Cumberland State Park to their Cumberland Wild event.

Participants: Conservation-minded Friends of the South Cumberland.

- Made presentation to small group of about 10 individuals - Was very well received- Invited to speak to the Grundy County Commission.
- Representative of Friends of South Cumberland requested a similar process for Rhea County.

Upcoming Presentations

July 16th, 2007- Bledsoe County Commission

- * There are several additional speaking invitations expected.

Rural Lands Project

Due to the success of this project, the Tennessee Wildlife Federation with advice and insight from several planning and conservation experts throughout the state developed a concept plan for a Rural Lands Project in Tennessee. The vision is to bring together state and local resources to not only assist rural counties and municipalities to achieve wise and thoughtful planning, but also provide hard data and information to state policy makers who are seeking better ways to achieve thoughtful growth and conservation in Tennessee.

Tennessee is at a crossroads, where its natural beauty and friendly culture have led to population trends indicating rapid growth over the next several years. Therefore it is time for our state leaders to place significant human and financial capital into an entity

solely dedicated to promoting the wise use of our natural resources through education, research, and advocacy. A balanced result of conservation and development will require strong state and federal leadership, adequate conservation funding by our state legislature, and wise planning by our local leaders. One of the primary goals of the Rural Land Project, should it be funded, is to show people HOW to achieve a balance between economic development and conservation goals.

Concluding Thoughts

Expanding our Priorities

During this process, we learned a great deal about not only the politics of the growth process but the politics of the conservation process. One thing is very clear, we all want to save our own back yards and there are limited financial resources to leverage towards land acquisition. We think it is very important for anyone trying to make a difference in the hearts and minds of local leaders about land conservation, to be sure to disclose their agendas and be empathetic to the fact that many of us enjoy our landscapes for many different reasons. To date, many of our land conservation efforts are less inclined to support hunters, recreational vehicle riders, and horse-back riders, yet the reality is that these are the primary recreational pursuits of most residents of the southern Cumberland Plateau.

We must expand our scope of purposes when prioritizing how, when and where to spend funds for land acquisition for conservation. Since this project involved the economic factors contributing to large scale timber land conversions to rural residential development, we witnessed and confirmed instances where conservation dollars were inadequate to provide long-term conservation and recreational opportunities on the southern Cumberland Plateau. Most importantly, determining priorities for spending taxpayer dollars must be a more open process.

Citizens of the southern Cumberland Plateau also want to protect those open spaces that lie adjacent to existing communities. These parcels may represent tracts as small as 100 acres, but they serve as a sanctuary where children and families have recreated for generations and are now slated for development. We have identified several parcels within walking distance of local communities that should not be overlooked for land acquisition for public uses. Traditional land conservation efforts have overlooked the protection of lands that communities often have access to from their back door. As a result of this project, we offered another means of prioritizing land protection we titled the “Community Forest Project.”

Growth Controls do not Achieve Conservation Goals

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. Studies have consistently indicated that the latest national trend to establish growth boundaries through land-use planning simply has and will not

work. The future of land conservation will involve the identification of specific lands to be protected through conservation easements, public buy-out, and purchase of development rights. In other words, local land-use policies may control the timing of development, but they will never serve as a means of achieving conservation over large-scale landscapes.

Water, Water, Water

One of the greatest influences on growth in the next few years will be the availability of water. Most local officials recognize that there is a serious water supply issue, and there are several efforts to move towards a regional water supply network where water can be brought in to smaller utilities on the Plateau from areas like McMinnville and the Tennessee River in Marion County. Feasibility studies have been completed by the Southeast TN Development District illustrating high price tags for regional water supply development. During the course of this project, we have suggested to local leaders that water supply funding should also incorporate watershed protection as part the over-all plan. In order to engage in this process it will be crucial to have an entity like a Rural Lands Project to play a roll in this process. This is an excellent example of how we can balance growth and development by protecting land, while at the same time increasing water availability.

Building a Conservation Base

As this report has outlined, rural residential growth and fragmentation in the southern Cumberland Plateau shows very little signs of abating any time soon. As a conservation community, we must put more thought and research into the ideas and concepts we have presented in this report. Most importantly, land trusts and state agencies must not view conservation as a one year, once in a life-time, competitive land grab while relatively short-term political support exists. We should all work together to expand the land conservation base of supporters by developing conservation projects that intimately touch the lives of communities. As we have demonstrated, with accurate information and data, local leaders and citizens will embrace land conservation as an important component of their community's vision if they are pursued to do so.