

# Understanding the Wildland/Urban Interface

## What YOU Can Do to Help with Interface Issues

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**M**ost counties in Alabama have been experiencing a population increase during the past 30 years after losing population during much of the first half of the 20th Century. In March 2006,

Baldwin County became Alabama's lone representative on a new list of the 100 fastest-growing counties in America. The U.S. Census Bureau showed that Baldwin County gained about 6,000 new people between July 2004 and July 2005

for a 3.8 percent growth rate. Other Alabama counties are also experiencing high population growth.

Fast growth and development creates changes in land use. Much of this growth is spreading from the cities and towns into subdivisions which join forestland and agricultural lands. This *wildland/urban interface (WUI)* is defined as the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or natural areas.

This influx of population has created challenges for landowners, residents, and government officials. New residential and commercial development demands new roads, schools, supporting infrastructure, and other challenges.

### The WUI is Growing

Alabama continues to experience changes in private forestland ownership. Large blocks of industrial and non-industrial forest ownerships are being sold and divided into smaller parcels, complicating forest management and potentially affecting their viability for a number of

### 10 Fastest-Growing Counties

County	Population Change
Shelby	44.2
Baldwin	42.9
Elmore	33.9
Lee	32.1
Blount	30.0
St Clair	29.5
Autauga	27.6
Bibb	25.6
Cherokee	22.7
Chilton	22.0

### 10 Fastest-Declining Counties

County	Population Change
Sumter	-8.5
Perry	-7.0
Dallas	-3.7
Macon	-3.3
Calhoun	-3.3
Wilcox	-2.8
Marengo	-2.4
Butler	-2.3
Greene	-1.8
Dale	-1.0

Changes in Alabama Population 1990-2000

US Census Bureau

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functions and values. Land transactions involving large tracts that are sold to multiple owners are referred to as *land parcelization*. These large areas of land now have multiple parcels. For example, while many of these may remain predominantly forestland, the owners' primary objective might shift from timber production to wildlife management or recreation. This may be hardly noticeable except for more (or fewer) roads, harvesting activities, and gates. In other cases the large tracts are broken into many small tracts which are subsequently subdivided and developed.

*Forest fragmentation* takes place where forested areas are broken into smaller patches and interspersed with non-forest areas. It occurs when large, continuous forests are divided into smaller blocks, either by roads, clearing for agriculture, industrial, or residential development. Both terms (land parcelization and forest fragmentation) reference changes in the forest structure; for WUI proposes these changes are simply referred to as fragmentation. South-wide, 60 percent of the forest still exists in blocks greater than 100 acres where fragmentation is less of an issue.

## Development is Increasing in Forest Fire-Prone Areas

As development expands into forested areas of the state, there is an increasing forest fire risk due to human factors, particularly in those parts of the state which have high fire potential. Residents in the WUI must become **Firewise** in order to protect their homes and property.

## Predicting Development's Net Effect on Forestland

Homeowner demands for more space and a favorable economy stimulate real estate development. Across the nation, however, only a small percent of forestland will become interface. One must be careful not to become alarmed by what they see regarding development when looking out the windshield while traveling. Most of the developments we see or hear about are concentrated along coasts, in the Piedmont, and around major metropolitan areas. It is estimated that about 11 percent of all wildland (forestland, agricultural land, and rangeland) will experience interface. Total U.S. forestland in 2002 was 746.9 million acres. The estimated net loss of forestland to development and other land use

changes is 31.0 million acres by 2050. This calculates to only 4 percent net loss of forestland.

## What Lands are Being Developed?

Alabama is experiencing more forestland being developed than other states on the average. This might be expected considering the state is 71 percent forested.

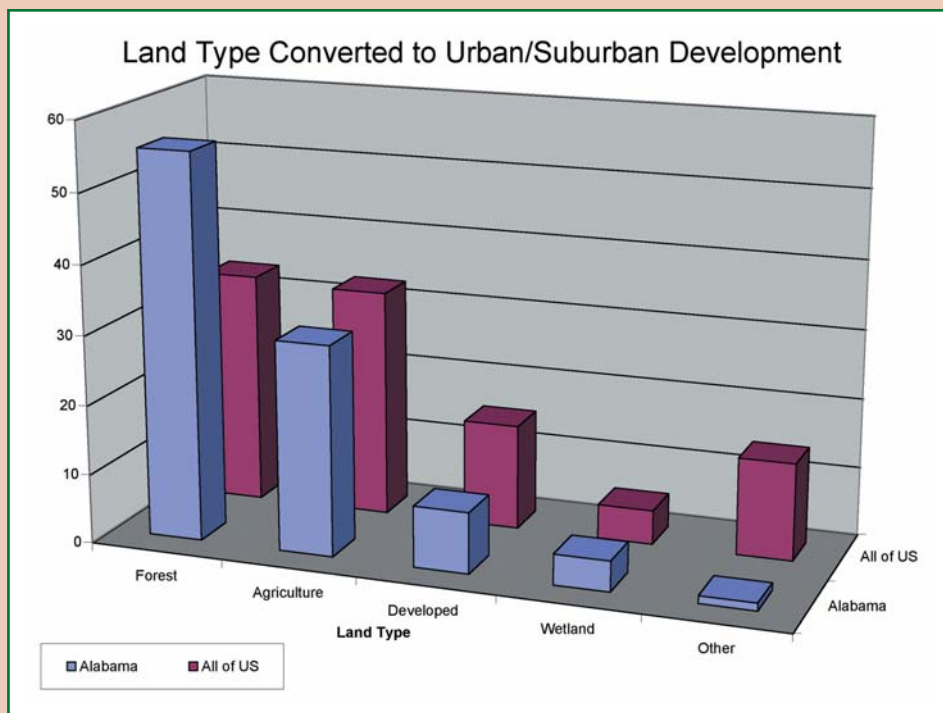
## What Will the Interface Demographics Look Like?

Expansion of the WUI is creating new challenges and opportunities. Demographics of the people moving out of the cities and into the WUI will determine their attitudes about forestry. Consider these projections for the years 2000-2030:

- The population is expected to increase 24 percent,
- Percentage of Hispanic, African-American, and Asian population is increasing,
- The number of people aged 65 and older will double, and
- New landowners of different age and ethnic groups may differ in opinion in how they value and use natural resources compared to those of traditional landowners.

## Interface Issues

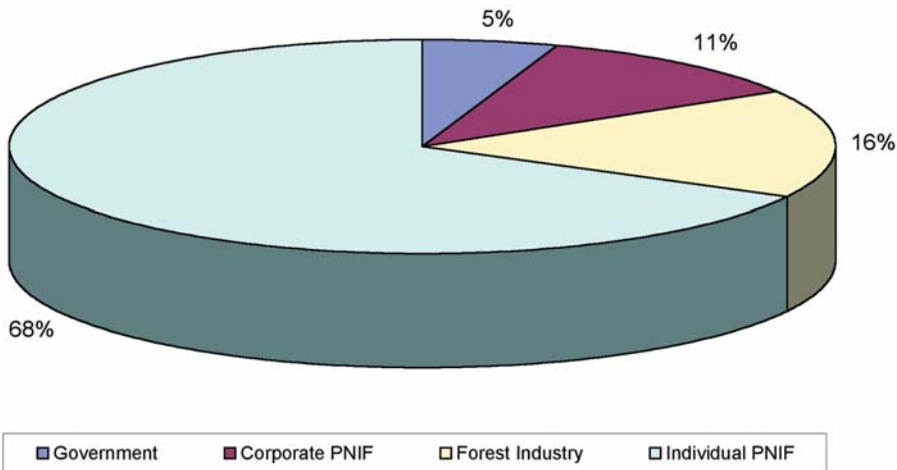
In 2003, key WUI issues were examined in six southern states by twelve focus groups (173 participants) representing natural resource management, industry, development, conservation, planning, and other related fields. Common themes included: increasing land development, transportation issues, challenges to managing natural resources, changes to ecosystems, ineffective planning, and conflicting perceptions and values. The focus group representing the Birmingham area cited lack of vision and leadership; lack of comprehensive planning; water quality and quantity; and education of homeowners, developers, and decision makers.



Percent of Total Urban Growth

USGS 2003

## Timberland Ownership in Alabama



Percent of Alabama Timberland by Ownership Class

USDAFS 2000

### Interface Concerns

Just how are we experiencing the effects of this wildland/urban interface? These concerns differ based on landowner perceptions. The list includes:

- water quality/water quantity,
- non-native invasive plants,
- nuisance wildlife,
- forest fragmentation,
- prescribed burning,
- air pollution,
- groundwater recharge,
- timber harvesting,
- urban heat island effect,
- wildfire,
- increasing land value,
- sprawl,
- endangered animals and plants,
- new road construction,
- hunting regulations,
- increased taxes, and
- wildlife habitat loss.

### Who Are These New Interface Landowners?

It will help to understand who the new interface landowners are by looking at who owns the forestland now. In Alabama, 68 percent of the forest is owned by small and large private owners, most of which is family owned – farmers, families, individuals, partnerships, and trusts. Forest industry owns just over

16 percent, corporations own 11 percent, and government owns 5.3 percent of the state's forestland.

Across the South, most of the family forest owners hold less than 50 acres. The majority of these, 56 percent of the total family landowners, own less than 10 acres. These small tract owners own only 6 percent of the total family forestland, but South-wide they number 2.4 million strong. Who will represent the interests of Alabama's new interface landowners – the Alabama TREASURE Forest Association, Alabama Forestry Association, Alabama Forest Owners Association, Alabama Farmers, or some new group? Are these landowners significantly important to forest sustainability? What bearing will the new interface

landowners have on other forestry issues? What type of professional services and agency programs would best serve interface landowners?

These small tract landowners are not adverse to forest management. They are however more concerned about protecting amenities and ecological qualities than maximizing timber income. These new interface landowners are willing to harvest timber and manipulate vegetation, but they are particularly interested in enhancing the environment, aesthetics, privacy, and a better quality of life. Almost half of the new interface landowners would be willing to accept less money from a timber sale if the logging actions protected other forest qualities.

New small tract owners fall into six markets according to forest ownership needs and abilities. The following is a description of people who recently bought small acreage forests (2 to 50 acres) in Virginia. These patterns are relevant throughout the south:

- Absentee investors** (9 percent) – the group least likely to manage their land and will probably sell it in less than seven years.
- Career professionals** (13 percent) – own an average of 17 acres, are highly educated and likely own other tracts of land, but are not actively involved in forest management.
- Wildlife enthusiasts** (16 percent) – are concerned about wildlife, with little interest in managing or cutting timber, owning an average of 32 acres.

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- **New pioneer farmers** (21 percent) – are eager to engage in forest management, but only 50 percent do so; average holdings are 40 acres.
- **Planners** (21 percent) – the wealthiest group, usually politically connected, average 70 acres and actively manage their land, are prime candidates for the services of consulting foresters.
- **Young families** (19 percent) – desire a family and community life, own an average 14 acres, and are willing to pass land on to the next generation.

Forestry professionals and associations desiring to address the interface concerns might consider: new methods of reaching these landowners, working to develop trust, finding tools to produce amenities and ecological quality, working with landowners to develop a management plan for their property, helping small tract owners find producers and a fair market for their harvested products.

## How Difficult Will It Be to Maintain Forest Sustainability in the WUI?

There are many challenges facing both large and small landowners in and around the interface. To the new interface, small tract landowners: limited small-scale management options, limited markets for traditional forest products, and lack of information and assistance from agencies. To forest managers: limited use of prescribed fire, concern with smoke and liability issues, increased wildfire occurrence, and a need for new methods of hazardous fuel reduction.

**Recreation** concerns: more people in the interface bring on more people seeking recreation in adjacent forestland from diverse users; there is a need to provide more recreation opportunities for these

users on public lands with the potential for conflict between different user groups.

**Wildlife** concerns include: maintaining and restoring wildlife habitat, and balancing the desire for wildlife contact with wildlife nuisance complaints. Deer and black bear often conflict with human activities in the interface areas where populations of these species are present in the adjacent wildlands.

In some locations, **economic and tax issues** are a concern: ad valorem taxes tend to increase in developing areas

Another means a seller may take is to sell land while *retaining oil and mineral rights*. This may discourage subdivision.

Some larger industrial forest landowners may sell large tracts of timber with *fiber supply agreements* attached. The agreements may call for long-term fiber supply guarantees.

Another alternative for large landowners to keep large tracts of forestland natural is by selling the land with agreements that the land will be managed to the standards of the *Sustainable Forestry Initiative (SFI)* program.

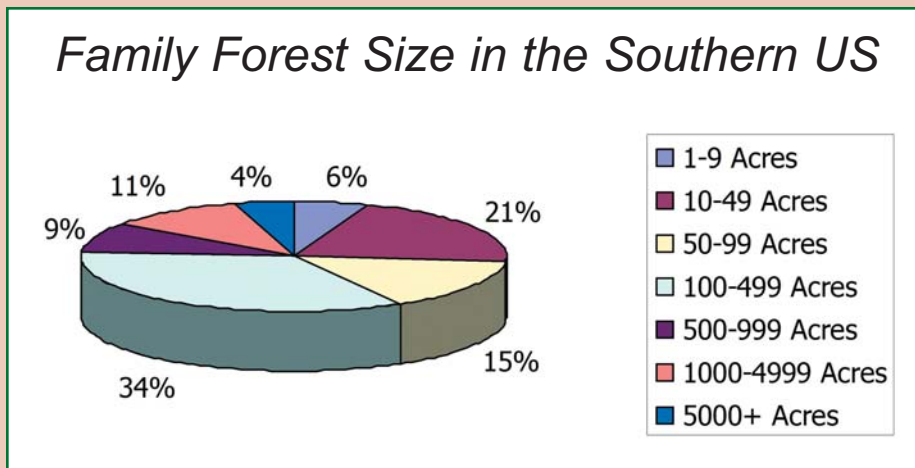
Private landowners may choose to allow some of their land to remain natural in perpetuity by entering it into a *conservation easement*. A conservation easement is a voluntary, legally binding agreement that limits certain types of uses, or prevents development from taking place on a piece of property now and in the future.

Another factor which may slow

wildland development is the increasing cost of gasoline. Larger numbers of urban residents may choose to remain in cities.

One way to address urban sprawl is by **Smart Growth**. It directs development towards existing communities already served by infrastructure. Smart Growth seeks to utilize the resources that already exist in neighborhoods, reducing greenfield development pressure into forests or farmland. Smart Growth developers also consider brownfield development of older suburbs and abandoned industrial areas. Smart Growth is more town-centered, transit and pedestrian-oriented, and provides for mixed use: housing, commercial, and retail. These residents travel shorter distances for most of their work, shopping, and cultural activities.

An important factor for promoting Smart Growth is *home rule* - local gov-



Percent of Acres Owned by Size Class

Source: *Family Forests in the South - 2003*, Butler and Leatherberry

thereby affecting the ability of the forest landowner to manage or retain their forests. Heirs are sometimes forced to subdivide or sell family land in order to pay estate taxes.

## How Forest Owners Can Help Slow Urban Sprawl

Forest ownership changes do not necessarily cause land use changes. The sale of timberland to *conservation groups and non-profits* is one way to ensure land will remain natural.

Landowners wishing to sell their land and desiring to see it remain natural may consider selling it to *other large landowners* who also desire to keep it natural. Although there may not be any guarantees, the best to consider might be large estates, large pension funds, or financial groups interested in timber, wildlife, and recreation.

ernments handle local matters in planning, infrastructure, and urban zoning – with fewer limitations by state legislatures.

What is significant about all of this is that we as landowners, land managers, and resource professionals should be aware of what is taking place and strive to work with planners, government officials, and developers to ensure that interface development is done in a responsible manner. As urban communities and their associated developments expand into the forests, management decisions concerning fire protection, recreational uses, wildlife, and environmental issues become more complex. We can help by encouraging developers to minimize conflicts with forest management.

### What Can Forest Landowners Do?

As landowners we must continue to promote the use of prescribed burning and herbicides. We should also continue with voluntary best management practices to maintain water quality and strive to protect private ownership rights. We must educate the public on the benefits of these practices and principles for forest sustainability.

We can help further if we:

- Maintain an active membership role in a landowner association.
- Develop an understanding of WUI issues and their interrelationships.
- Provide science-based information about potential natural resource consequences of land use decisions.

- Become aware that urban and new interface constituencies will have an increasing influence on state policies affecting land and forest management.
- Familiarize ourselves with growth and development ordinances in our own areas.
- Become part of the land use decision-making process.
- Support tax incentives to forest landowners in order to keep ad valorem and estate taxes low, thereby helping ensure forest sustainability.
- Work with a variety of audiences to build partnerships.
- Resolve conflicts by translating forestry into familiar terms.
- Encourage improvements in the urban environment in order to slow the expansion of population into the natural areas.

We all desire to keep our forest resources healthy and productive. There are lots of things we can do - whether or not development is headed our way. ☪

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Kendra and Hull. *Motivations and Behaviorism of New Forest Owners in Virginia*. 2005.

[www.firewise.org](http://www.firewise.org)

[www.interfacesouth.org](http://www.interfacesouth.org)

[www.smartgrowth.org](http://www.smartgrowth.org)

**For current information on the Southern Pine Beetle situation in Alabama, visit the Alabama Forestry Commission web page at: [www.forestry.state.al.us](http://www.forestry.state.al.us)**



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