

Southern Group of State Foresters – Issue Paper

Subject:

Wildland Fire and Forest Fuels on Private and State Lands

Situation:

Typically the South experiences a larger number of wildfires than any other region in the nation. “Human caused” fires are the leading cause of wildfires most likely due to the population density in the South. Because of climate conditions, fire season in the South is a year round problem with increased intensity in the spring and fall. The South’s extensive network of roads, dense forest and population, has led to the development of homes and other structures throughout most of the forested areas of the South, and put them at risk from wildfires. Vegetation types, long growing seasons and high growth rates often necessitate fuels reduction on short cycles (as frequently as 2-3 years in some forest types) in order to keep them manageable. Smoke management considerations and fragmented ownerships complicate prescribed burning opportunities, but mechanical fuels treatment is cost-prohibitive except in very limited circumstances. Not only can the fire management and suppression capabilities within each state be enhanced, but in the South a tremendous opportunity exists to enhance the preparedness and prevention activities to help reduce the number and size of wildfires. The Firewise program has been successful at reducing fire starts and protecting structures from wildfire but countless existing homes remain at risk and new homes continue to be constructed in high hazard areas. Presently, there are no disincentives (insurance, building codes) in place to address these worsening conditions.

Background:

The majority of forestland in the South is privately owned and highly fragmented into small, individual parcels. Only eleven percent of Southern forests are publicly owned (six percent national forests). It is the responsibility of state forestry agencies to suppress wildland fires occurring on private and state lands. With the continuing consolidation of forest industry and increasing divestiture of their lands, assistance to states in suppressing wildfires is diminishing across the region. Aside from the loss of wildfire capacity by groups external to the state forestry agencies, rural firefighters provide much needed assistance to state forestry agencies in protecting homes and structures in the wildland urban interface along with rapid initial attack capabilities.

The Southern Wildfire Risk Assessment was put into use in 2007 to allow modeling and determining communities at risk across the region. The risk assessment provides an excellent tool to explain the fire situation in the South and can be used strategically in a variety of ways (*APPENDIX I*).

Some of the primary findings of the risk assessment include:

- The South has almost 34,000,000 acres in the upper one-third of Fire Occurrence Areas.
- The South has a tremendous number of wildfires per year. During the study period (1997-2002) the South averaged 68,295 wildfires per year.
- Over 5 million acres in the South are in the upper one-third of the Wildfire Susceptibility Index Rating (wildfire threat).

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- 4.8 million acres in the South are in the upper one-third of the Level of Concern Index Rating (wildfire risk).
- There are 88,000,000 acres of Wildland Urban Interface in the South which is over half of the total WUI in the nation; with North Carolina having the most WUI, 12,772,477 acres (14.4%).
- Communities at Risk Rating – There are a tremendous number of communities in the South and all of them have at least some risk from wildfire.

Level	Number of Communities	Percent Communities
Low	19,656	16.60%
Moderate	48,110	40.70%
High	39,032	33.10%
Very High	11,285	9.60%
Total	118,083	100.00%

NOTE: Census data used more than one polygon to identify some communities. On the ground verification will be needed to determine if these are separate communities or if some of them should be combined and to verify risk.

The Risk Assessment made clear better fire reporting is needed in the South. Many fires suppressed by volunteer fire departments are not included in the SWRA. Implementing a more accurate fire reporting system will ensure a more complete capture of fire incidents which provides the necessary documentation of the existing fire problem in the South. This will also provide the data necessary to support on-going monitoring of the risk.

Relevance to the South:

Suppressing wildland fires and managing forest fuels are not unique to the South, but the complications surrounding these activities (e.g. changing ownership patterns, wildland urban interface expansion, and smoke/particulate management) are clearly growing at a faster rate in the South than other parts of the country. Fire suppression is an important component of any fire management program. The Southern fire situation is unique in that enhancing preparedness and prevention capabilities can pay huge dividends and over time potentially reducing the amount of suppression funding necessary.

SWRA creates the opportunity to play a major role in how fire planning is handled across the South in years to come by being able to prioritize where the risk of catastrophic wildfire is highest, and thus indicate where the need for hazardous fuels mitigation projects, fire prevention projects and additional firefighting resources may be most needed.

Because so much of the region is within the wildland-urban interface where protection of life and property dominates suppression goals and drives up costs, there are opportunities to lead in the development of creative fuels treatments, fire-smart design, development of urban land uses and improvements, and institutional (insurance, code, statutory) measures to deal with all aspects of wildland fire.

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APPENDIX I SWRA as a Strategic Tool

1. To quantify and display the amount of wildland urban interface (WUI) in the South.
2. To display treatments of hazardous fuels in relationship to WUI and infrastructure.
3. To quantify and display the susceptibility of communities and infrastructure to wildfires.
4. To estimate and display changes in fuel type as a result of various fuels treatments for a 10 year period.
5. To show southern fire managers where their fire mitigation efforts can most effectively be focused and which mitigation efforts would be most efficient in a particular area.
6. To quantify the effect of fire mitigation efforts on reducing the risk to communities.
7. To analyze the effect of moving, adding or reducing fire suppression resource initial dispatch locations.
8. To communicate wildland fire risk to the general public. Support for CWPPs and the FIREWISE program can be facilitated once the public better understands the wildfire risk. An example is Florida's "Are you living in the Red" program.
9. To assist in gaining legislative understanding for initiatives and budget requests. An example is Texas' effort to show how additional personnel and equipment would reduce wildland fire response time in high occurrence areas.
10. To assist government officials including county planners, analyze alternatives in community and land use planning.
11. To assist businesses. Businesses will be better able to structure their activities if they understand the likelihood and potential impacts from wildland fire. For example, insurance companies will be able to develop a more appropriate and actuarially correct rate structure. The tourist industry can better prepare itself to deal with impacts from wildland fires, such as smoke, destruction to scenic viewing areas, etc.
12. To communication with Congressional appropriators. Congress is putting increased emphasis on prioritizing national fire plan activities. The SWRA is a tool that will allow us to do that and show the results.
13. To assist initial attack and large fire support decisions (by providing information such as communities and other values at risk, fuels etc.)