• Adverse regulations can discourage landowners from making long-term forestry investments. With the exception of a few states including NC, VA, FL and KY, direct regulation of forestry is limited. This has led to a positive environment for forest investments in the South. However, local regulations impacting forest use have doubled between 1992 and 2000. Expanding population and development will likely continue this trend. Increased regulatory measures can discourage long-term forest investments.

• Conservation easements and outright purchase of land are becoming more common. While influencing a relatively small portion of the region, these programs hold promise for influencing wildlife habitats at ecosystem scales on private lands. These programs allow for continued forest management activities to accomplish their goals.

Social Impacts

• Demands for outdoor recreation will increase. Increasing population and changes in demographic characteristics such as income and median age will continue to drive increased demand for outdoor recreational opportunities.

• Forest-based recreation is largely concentrated on public lands. Federal lands and state parks support much of the forest-based recreational opportunities in the South. Recreation pressures on public lands are substantial and likely to increase.

• Conflicting demands will impact public and private lands. Recreation areas on public lands will likely be increasingly congested and conflict between various recreation user groups will increase. Given the current land ownership patterns and owner objectives, there is a limited capacity to expand forest-based recreation opportunities in the South. Conflict between recreation users and owners of private tracts is high and increasing.

• Forests are important to the quality of life in the South. Quality of life generally depends on three broad factors: economic well-being, social well-being and environmental quality. Forests are critical to all three.

Economic Well-Being: The forest products industry is located in areas where economic opportunities are limited and provide good paying jobs that would otherwise not be available. Through export of wood products to other regions, the industry contributes to local economies by bringing in income.

Social Well-Being: Employment in the wood products industry is positively associated with the proportion of owner-occupied housing and the proportion of the population that votes in presidential elections and is negatively associated with rates of crime.

Environmental Well-Being: A broad range of non-market benefits is associated with forests and forest uses, including providing high quality water and natural settings.

A Summary of the Key Findings by the North Carolina Forestry Association

The Southern Forest Resource Assessment
The Southern forest landbase has been and will likely remain relatively stable. Water quality from the South’s forests and the biodiversity of the South’s aquatic ecosystems is substantial. Impacts from active forest management activities are minor and reduced growth and forestland will, despite decline through 2040. Even with this aging, healthier forests will be viable in 2040 and beyond.

The forest land base is directly tied to the use of the land base – a dominated by privately owned forests. Markets for land and products will continue to be critical to the bottom line of the many facets of the forest and also to create a comprehensive base of information on them.

The forest land base has been and will likely remain relatively stable. Water quality from the South’s forests and the biodiversity of the South’s aquatic ecosystems is substantial. Impacts from active forest management activities are minor and reduced growth and forestland will, despite decline through 2040. Even with this aging, healthier forests will be viable in 2040 and beyond.

The forest land base is directly tied to the use of the land base – a dominated by privately owned forests. Markets for land and products will continue to be critical to the bottom line of the many facets of the forest and also to create a comprehensive base of information on them.

The forest land base has been and will likely remain relatively stable. Water quality from the South’s forests and the biodiversity of the South’s aquatic ecosystems is substantial. Impacts from active forest management activities are minor and reduced growth and forestland will, despite decline through 2040. Even with this aging, healthier forests will be viable in 2040 and beyond.

The forest land base is directly tied to the use of the land base – a dominated by privately owned forests. Markets for land and products will continue to be critical to the bottom line of the many facets of the forest and also to create a comprehensive base of information on them.

The forest land base has been and will likely remain relatively stable. Water quality from the South’s forests and the biodiversity of the South’s aquatic ecosystems is substantial. Impacts from active forest management activities are minor and reduced growth and forestland will, despite decline through 2040. Even with this aging, healthier forests will be viable in 2040 and beyond.

The forest land base is directly tied to the use of the land base – a dominated by privately owned forests. Markets for land and products will continue to be critical to the bottom line of the many facets of the forest and also to create a comprehensive base of information on them.

The forest land base has been and will likely remain relatively stable. Water quality from the South’s forests and the biodiversity of the South’s aquatic ecosystems is substantial. Impacts from active forest management activities are minor and reduced growth and forestland will, despite decline through 2040. Even with this aging, healthier forests will be viable in 2040 and beyond.

The forest land base is directly tied to the use of the land base – a dominated by privately owned forests. Markets for land and products will continue to be critical to the bottom line of the many facets of the forest and also to create a comprehensive base of information on them.

The forest land base has been and will likely remain relatively stable. Water quality from the South’s forests and the biodiversity of the South’s aquatic ecosystems is substantial. Impacts from active forest management activities are minor and reduced growth and forestland will, despite decline through 2040. Even with this aging, healthier forests will be viable in 2040 and beyond.

The forest land base is directly tied to the use of the land base – a dominated by privately owned forests. Markets for land and products will continue to be critical to the bottom line of the many facets of the forest and also to create a comprehensive base of information on them.

The forest land base has been and will likely remain relatively stable. Water quality from the South’s forests and the biodiversity of the South’s aquatic ecosystems is substantial. Impacts from active forest management activities are minor and reduced growth and forestland will, despite decline through 2040. Even with this aging, healthier forests will be viable in 2040 and beyond.

The forest land base is directly tied to the use of the land base – a dominated by privately owned forests. Markets for land and products will continue to be critical to the bottom line of the many facets of the forest and also to create a comprehensive base of information on them.

The forest land base has been and will likely remain relatively stable. Water quality from the South’s forests and the biodiversity of the South’s aquatic ecosystems is substantial. Impacts from active forest management activities are minor and reduced growth and forestland will, despite decline through 2040. Even with this aging, healthier forests will be viable in 2040 and beyond.

The forest land base is directly tied to the use of the land base – a dominated by privately owned forests. Markets for land and products will continue to be critical to the bottom line of the many facets of the forest and also to create a comprehensive base of information on them.

The forest land base has been and will likely remain relatively stable. Water quality from the South’s forests and the biodiversity of the South’s aquatic ecosystems is substantial. Impacts from active forest management activities are minor and reduced growth and forestland will, despite decline through 2040. Even with this aging, healthier forests will be viable in 2040 and beyond.

The forest land base is directly tied to the use of the land base – a dominated by privately owned forests. Markets for land and products will continue to be critical to the bottom line of the many facets of the forest and also to create a comprehensive base of information on them.

The forest land base has been and will likely remain relatively stable. Water quality from the South’s forests and the biodiversity of the South’s aquatic ecosystems is substantial. Impacts from active forest management activities are minor and reduced growth and forestland will, despite decline through 2040. Even with this aging, healthier forests will be viable in 2040 and beyond.

The forest land base is directly tied to the use of the land base – a dominated by privately owned forests. Markets for land and products will continue to be critical to the bottom line of the many facets of the forest and also to create a comprehensive base of information on them.

The forest land base has been and will likely remain relatively stable. Water quality from the South’s forests and the biodiversity of the South’s aquatic ecosystems is substantial. Impacts from active forest management activities are minor and reduced growth and forestland will, despite decline through 2040. Even with this aging, healthier forests will be viable in 2040 and beyond.

The forest land base is directly tied to the use of the land base – a dominated by privately owned forests. Markets for land and products will continue to be critical to the bottom line of the many facets of the forest and also to create a comprehensive base of information on them.
The Southern Forest Resource Assessment (SFRA) was commissioned in 1999 to document and report on the many facets of the forest and also to create a comprehensive base of information on them. The SFRA was a cooperative effort involving more than 220 scientists from the Environmental Protection Agency, the Fish and Wildlife Service and Tennessee Valley Authority. It is the most comprehensive examination of the Southern forests to date and includes public concerns about Southern forests. The U.S. Forest Service, in conjunction with the Environmental Protection Agency, Department of Commerce and Science and Tennessee Valley Authority, contributed public concerns about Southern forests. The data in this document is based on data and studies taken by the many facets of the forest and also to create a comprehensive base of information on them. The information in this document is based on a summary of over 500 pages of reviewed scientific findings. It is important to note that research of the future implies making assumptions about what will happen. The magnitude of potential changes should be viewed as "what will happen" rather than "what will happen?"

**In Their Own Words**

We examined all major forces of change, then forest land and market socio-economic factors, insect and disease impacts, and our results are among the most significant challenges we face in forest management.

**Overview of Findings**

The Southern forests are an amazing resource, and their productivity clearly proves it. Yet, ecosystems depend on the right mix of species and management practices for healthy growth. Southern forests have substantial biodiversity, and the importance of forest management on this biodiversity is substantial. We found that forest management practices have positive implications for wildlife. Young stands, especially those that follow a timber harvest, exhibit increased biodiversity. Uneven-aged management that sustains several age classes of trees can sustain benefits for many wildlife species. However, some of these benefits may be reduced by more frequent entries into the forest.

**The Forest Management and Wildlife Habitat Are Closely Linked**

Management practices have positive implications for wildlife. Young stands, especially those that follow a timber harvest, exhibit increased biodiversity. Uneven-aged management that sustains several age classes of trees can sustain benefits for many wildlife species. However, some of these benefits may be reduced by more frequent entries into the forest.

**Wetlands, Water Quality, and Climate Change**

Wetlands provide a network of refuges for many species, including migratory birds and other wildlife. Today, we are losing wetlands at an alarming rate. Wetland loss is declining. Acid deposition does not pose a significant threat to forest vegetation or to stream chemistry through the vast majority of the South and as such we can feel confident that acid deposition is not posing a threat to forest ecosystems in the South.
For the first time, we have an accurate objective picture of the status of the South’s forests. It is clear that the ecosystem is substantial. Impacts from active forest management activities are minor and have substantially increased timber inventories.

Southern forests are predominantly privately owned and long-term sustainability is relatively stable and adequate to meet future demands. The Southern forest landscape is extremely dynamic and will continue to be altered through agricultural and disease changes and other potential threats. It appears that population growth and urbanization are projected to be major factors that will impact the future of the South’s forests.

The forests of the South are the result of multiple disturbances and land-use changes. The increasing economic value of timber has been a powerful incentive to forest landowners to keep land in trees and substantially increased timber inventories. The forestland base has been and will likely remain relatively stable.

Timber Productivity

Forest management and wildlife habitat are closely linked. Upland hardwoods (oaks, hickory, maple, etc.) will continue to dominate the Southern landscape. Wetlands, Water Quality and Wildlife

Wetlands are important to wildlife and water quality and were severely degraded from agricultural and silvicultural management activities are often transitory, especially when stands are naturally regenerated. Upland hardwood development (132 million acres by 2020) and gain forested from the conversion of agricultural lands and water bodies. Sediment is the major pollutant from forestry activities and this comes primarily from roads and skill levels. Strong timber markets have encouraged landowners to keep land forested.

The increasing economic value of timber has been a powerful incentive to forest landowners to keep land in trees and substantially increased timber inventories.

Timber supply of both pulp and hardwood will remain more than adequate to meet demands. Forest products and growth are expected to expand to meet market demands for wood products while providing clean air, water and critical wildlife habitat. This also allows forest resource managers to take advantage of gains from research and genetic improvements.

The forests of the South are the result of multiple disturbances and land-use changes. The increasing economic value of timber has been a powerful incentive to forest landowners to keep land in trees and substantially increased timber inventories. The forestland base has been and will likely remain relatively stable.

Timber Productivity

The forests of the South are the result of multiple disturbances and land-use changes. The increasing economic value of timber has been a powerful incentive to forest landowners to keep land in trees and substantially increased timber inventories. The forestland base has been and will likely remain relatively stable.

Timber supply of both pulp and hardwood will remain more than adequate to meet demands. Forest products and growth are expected to expand to meet market demands for wood products while providing clean air, water and critical wildlife habitat. This also allows forest resource managers to take advantage of gains from research and genetic improvements.

The forests of the South are the result of multiple disturbances and land-use changes. The increasing economic value of timber has been a powerful incentive to forest landowners to keep land in trees and substantially increased timber inventories. The forestland base has been and will likely remain relatively stable.

Timber supply of both pulp and hardwood will remain more than adequate to meet demands. Forest products and growth are expected to expand to meet market demands for wood products while providing clean air, water and critical wildlife habitat. This also allows forest resource managers to take advantage of gains from research and genetic improvements.

The forests of the South are the result of multiple disturbances and land-use changes. The increasing economic value of timber has been a powerful incentive to forest landowners to keep land in trees and substantially increased timber inventories. The forestland base has been and will likely remain relatively stable.

Timber supply of both pulp and hardwood will remain more than adequate to meet demands. Forest products and growth are expected to expand to meet market demands for wood products while providing clean air, water and critical wildlife habitat. This also allows forest resource managers to take advantage of gains from research and genetic improvements.

The forests of the South are the result of multiple disturbances and land-use changes. The increasing economic value of timber has been a powerful incentive to forest landowners to keep land in trees and substantially increased timber inventories. The forestland base has been and will likely remain relatively stable.

Timber supply of both pulp and hardwood will remain more than adequate to meet demands. Forest products and growth are expected to expand to meet market demands for wood products while providing clean air, water and critical wildlife habitat. This also allows forest resource managers to take advantage of gains from research and genetic improvements.

The forests of the South are the result of multiple disturbances and land-use changes. The increasing economic value of timber has been a powerful incentive to forest landowners to keep land in trees and substantially increased timber inventories. The forestland base has been and will likely remain relatively stable.

Timber supply of both pulp and hardwood will remain more than adequate to meet demands. Forest products and growth are expected to expand to meet market demands for wood products while providing clean air, water and critical wildlife habitat. This also allows forest resource managers to take advantage of gains from research and genetic improvements.

The forests of the South are the result of multiple disturbances and land-use changes. The increasing economic value of timber has been a powerful incentive to forest landowners to keep land in trees and substantially increased timber inventories. The forestland base has been and will likely remain relatively stable.

Timber supply of both pulp and hardwood will remain more than adequate to meet demands. Forest products and growth are expected to expand to meet market demands for wood products while providing clean air, water and critical wildlife habitat. This also allows forest resource managers to take advantage of gains from research and genetic improvements.

The forests of the South are the result of multiple disturbances and land-use changes. The increasing economic value of timber has been a powerful incentive to forest landowners to keep land in trees and substantially increased timber inventories. The forestland base has been and will likely remain relatively stable.
Advise regulations can discourage landowners from making long-term forestry investments. With the exception of a few states including NC, VA, FL, and KY, direct regulation of forestry is limited. This has led to a positive environment for forest investments in the South. However, local regulations impacting forest use have doubled between 1992 and 2000. Expanding population and development will likely continue this trend. Increased regulatory measures can discourage long-term forest investments.

Conservation easements and outright purchase of land are becoming more common. While influencing a relatively small portion of the region, these programs hold promise for influencing wildlife habitats at ecosystem scales on private lands. These programs allow for continued forest management activities to accomplish their goals.

Social Impacts

Demands for outdoor recreation will increase. Increasing population and changes in demographic characteristics such as income and median age will continue to drive increased demand for outdoor recreational opportunities.

Forest-based recreation is largely concentrated on public lands. Federal lands and state parks support much of the forest-based recreational opportunities in the South. Recreation pressures on public lands are substantial and likely to increase.

Conflicting demands will impact public and private lands. Recreation areas on public lands will likely be increasingly congested and conflict between various recreation user groups will increase. Given the current land ownership patterns and owner objectives, there is a limited capacity to expand forest-based recreation opportunities in the South. Conflict between recreation users and owners of private tracts is high and increasing.

Forests are important to the quality of life in the South. Quality of life generally depends on three broad factors: economic well-being, social well-being, and environmental quality. Forests are critical to all three.

Economic Well-Being: The forest products industry is located in areas where economic opportunities are limited and provide good paying jobs that would otherwise not be available. Through export of wood products to other regions, the industry contributes to local economies by bringing in income.

Social Well-Being: Employment in the wood products industry is positively associated with the proportion of owner-occupied housing and the proportion of the population that votes in presidential elections and is negatively associated with rates of crime.

Environmental Well-Being: A broad range of non-market benefits is associated with forests and forest uses, including providing high quality water and natural settings.
• Adverse regulations can discourage landowners from making long-term forestry investments. With the exception of a few states including NC, VA, FL, and KY, direct regulation of forestry is limited. This has led to a positive environment for forest investments in the South. However, local regulations impacting forest use have doubled between 1992 and 2000. Expanding population and development will likely continue this trend. Increased regulatory measures can discourage long-term forest investments.

• Conservation easements and outright purchase of land are becoming more common. In support of the growing number of state and federal programs, these programs hold promise for influencing wildlife habitats at ecosystem scales on private lands. These programs allow for continued forest management activities to accomplish their goals.

Social Impacts

• Demands for outdoor recreation will increase. Increasing population and changes in demographic characteristics, such as income and median age will continue to drive increased demand for outdoor recreational opportunities.

• Forest-based recreation is largely concentrated on public lands. Federal lands and state parks support much of the forest-based recreational opportunities in the South. Recreation pressure on public lands is substantial and likely to increase.

• Conflicting demands will impact public and private lands. Recreation areas on public lands will likely be increasingly congested and conflict between various recreation user groups will increase. Given the current land ownership patterns and owner objectives, there is a limited capacity to expand forest-based recreation opportunities on public lands. In addition, conflict between recreation users and owners of private tracts is high and increasing.

• Forests are important to the quality of life in the South. Quality of life generally depends on three broad factors: economic well-being, social well-being, and environmental quality. Forests are critical to all three.

Economic Well-Being: The forest products industry is located in areas where economic opportunities are limited and provide good paying jobs that would otherwise not be available. Through export of wood products to other regions, the industry contributes to local economies by bringing in income.

Social Well-Being: Employment in the wood products industry is positively associated with the proportion of owner-occupied housing and the proportion of the population that votes in presidential elections and is negatively associated with rates of crime.

Environmental Well-Being: A broad range of non-market benefits is associated with forests and forest uses, including providing high quality water and natural settings.