Investment in State's Cooperative Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>FY 2019 Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Forestry and Open Space</td>
<td>$0</td>
</tr>
<tr>
<td>Cooperative Lands - Forest Health Management</td>
<td>$529,870</td>
</tr>
<tr>
<td>Forest Legacy</td>
<td>$1,410,000</td>
</tr>
<tr>
<td>Forest Stewardship</td>
<td>$228,721</td>
</tr>
<tr>
<td>Landscape Scale Restoration</td>
<td>$126,000</td>
</tr>
<tr>
<td>State Fire Assistance</td>
<td>$1,533,291</td>
</tr>
<tr>
<td>Urban and Community Forestry</td>
<td>$235,000</td>
</tr>
<tr>
<td>Volunteer Fire Assistance</td>
<td>$213,987</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$4,276,869</strong></td>
</tr>
</tbody>
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NOTE: This funding is for all entities within the state, not just the State Forester's office.

Program Goals

- The cooperative programs are administered and implemented through a partnership among the State of South Carolina, the USDA Forest Service and many other private and government entities. These programs protect and promote the health and productivity of forestlands and rural economies. Emphasis focuses on timber and other forest products, wildlife, water resources, rural economies, and conservation practices.
- The overarching goal is to maintain and improve the health of urban and rural forests and related economies as well as to protect the forests and citizens of the state. These programs maximize cost effectiveness through the use of partnerships in program delivery, increase timber volume, increase forestland value, and improve sustainability, and the programs do so in a voluntary and non-regulatory manner. The programs are a significant aid to retaining working forests.

Key Issues

- The State continues to focus on two key initiatives: protecting South Carolina forest resources and further developing the awareness of the contributions these resources make to the economy and quality of life for SC citizens.
- Other key issues include invasive species, natural resource sustainability, population growth and urbanization, changing landowner goals, endangered and threatened species, physical/social/mental health benefits, urban canopy cover, forest parcelization/fragmentation, and scenic resources/outdoor recreation.
- Wildland fire emergency response capacity declined in recent years due to funding cuts. With the improving economy and funding, more firefighters have been added and additional new equipment (enclosed cab tractors, transports, firetracks and engines) has been purchased. A major initiative was launched in 2013 to replace all open cab tractors and restore numbers of firefighters to a sufficient level for an average fire season. Forty-nine percent of tractors have been replaced.
**Selected Facts**

<table>
<thead>
<tr>
<th>Facts</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>4,625,364</td>
</tr>
<tr>
<td>Acres of Forest Land</td>
<td>12,857,041</td>
</tr>
<tr>
<td>Acres of Nonindustrial Private Forest Land</td>
<td>9,712,000</td>
</tr>
<tr>
<td>Number of NIPF Landowners</td>
<td>301,000</td>
</tr>
<tr>
<td>Acres of Federal Land Under State Fire Protection</td>
<td>926,000</td>
</tr>
<tr>
<td>Acres of Private Land Under State Fire Protection</td>
<td>12,730,912</td>
</tr>
<tr>
<td>Number of Rural Fire Departments</td>
<td>539</td>
</tr>
<tr>
<td>Cities and Towns</td>
<td>269</td>
</tr>
<tr>
<td>Forest Based Employment</td>
<td>35,116</td>
</tr>
<tr>
<td>Economic Impact of Forestry (by rank)</td>
<td>3</td>
</tr>
<tr>
<td>State Forestry Budget (All Sources)</td>
<td>40,330,095</td>
</tr>
</tbody>
</table>

**FY 2019 Accomplishments**

<table>
<thead>
<tr>
<th>Accomplishments</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landowners Receiving Educational or Technical Assistance</td>
<td>3,674</td>
</tr>
<tr>
<td>Acres Covered by New or Revised Forest Stewardship Plans</td>
<td>10,298</td>
</tr>
<tr>
<td>Acres in Important Forest Resource Areas Covered by New or Revised Stewardship Plans</td>
<td>5,311</td>
</tr>
<tr>
<td>Volunteer Fire Departments Assisted</td>
<td>5,000</td>
</tr>
<tr>
<td>State Fire Communities Assisted</td>
<td>100</td>
</tr>
<tr>
<td>Coop Forest Health Acres Protected</td>
<td>2,250</td>
</tr>
<tr>
<td>Forest Legacy Project Acquisitions</td>
<td>47</td>
</tr>
<tr>
<td>Communities Provided Urban Forestry Program Assistance</td>
<td>77</td>
</tr>
<tr>
<td>Population Living in Communities</td>
<td>2,844,039</td>
</tr>
<tr>
<td>Provided Urban Forestry Program Assistance</td>
<td></td>
</tr>
<tr>
<td>Urban Forestry Volunteer Assistance</td>
<td>6,200</td>
</tr>
</tbody>
</table>

**Program Highlights**

**Cooperative Fire Protection**

State Fire Assistance (SFA) provides funding to support wildland firefighting operations throughout the state. Preparedness funds are used to supply Personal Protective Equipment, water handling equipment and supplies, training (wildland and leadership), air operations support, and upgraded communications equipment. The SC Forestry Commission’s (SCFC) Computer Aided Dispatch System, consistently recognized as one of the best in the country, is also maintained with these funds. SFA mitigation funds in the amount of $125,752 were used by the SCFC to provide assistance to 22 communities in the wildland urban interface. SFA mitigation funds in the amount of $62,851 were used for fuel mitigation on 31 tracts. Wildfire Hazard and Risk Assessments were completed for 19 communities. Over 220 Community Wildfire Protection Plans have been developed covering approximately 722 communities. The Firewise Mobile Exhibit was used on 3 different occasions by the SCFC and USDI Savannah River reaching over 6,000 people. The Volunteer Fire Assistance (VFA) program helps rural fire departments support their fire prevention and suppression efforts by building capacity to respond, especially in the wildland urban interface. $238,697 of VFA funds were allocated to 74 fire departments. There are 699 Communities at Risk that VFA grants have helped protect. The Federal Excess Personal Property Program (FEPP) and Firefighter Property Program (FFP) programs are other ways the SCFC works with rural fire departments to increase their firefighting capacity by providing equipment and vehicles on loan from the USDA Forest Service. There are 3,623 pieces of equipment on loan to approximately 321 departments throughout the state, valued at $19.5 million.

**Economic Action**

The impact of the forest industry on South Carolina's economy has grown from $17.4 billion in 2006 to $21.2 billion as of 2018. The industry segment using small-diameter wood remains strong, and the solid wood product industry has largely recovered from the past recession and housing downturn. There are 95 primary and 784 secondary, or value-added, forest product mills in the state that support a total of 98,306 jobs.

South Carolina has an abundant resource with more standing wood inventory than ever recorded. The wood supply is balanced between hardwood and softwood forests as well as between natural pine and planted pine stands. However, wood supply projections point to a decline in small-diameter pine until tree planting increases. Projections of large-diameter pine inventory continue to increase creating an opportunity for economic growth.

The SCFC owns two forest tree seedling nursery and tree improvement facilities in support of forest
landowners and tree planting. The Tree Improvement Program, headquartered at Niederhof Forestry
Center, includes 1.5 generation longleaf pine and 3rd generation loblolly pine seed orchards. Taylor
Nursery is being operated under the management of ArborGen as part of a 10-year contract that includes
the production and sale of forest tree seedlings. Up to 5 million pine and hardwood seedlings will be
produced specifically for South Carolina forest landowners at SCFC-approved pricing.

The Environmental Management program also falls within the Resource Development Division. Ongoing
training programs have routinely resulted in 95+% compliance rates with state-approved Best
Management Practices. Specialized BMP Foresters work with landowners and loggers to minimize
impacts to water quality and site productivity.

**Forest Health Protection**

In 2019 southern pine beetle (SPB) activity increased within McCormick and Edgefield Counties, based
on spring trapping data. All spots were on Forest Service land and had factors that increased the risk of
SPB outbreaks, including overstocking, susceptible species (shortleaf pine), and drought. We continue to
work with the Forest Service in the State of South Carolina to use management strategies on these spots,
as well as identifying other areas at risk and applying mitigation strategies. Approximately 180 acres of
forest susceptible to SPB were thinned pre-commercially. One thousand five hundred eight four acres of
pines were planted at reduced densities to decrease susceptibility to SPB. Oak wilt continued to be a
problem in water oaks in Aiken, Barnwell and Lexington Counties.

Conversations with landowners strongly suggest that the outbreak of oak wilt started after the 2014 ice
storm; broken limbs allowed insect vectors carrying the fungal pathogen into the vascular tissue of the
tree. Cogongrass infestations have been detected in 13 SC counties, but only five of these were active in
2018, covering less than 20 acres. Hurricanes Florence (2018) caused little immediate damage, but the
excessive flooding may have reduced root mass on trees that were in saturated soil all winter. Hurricane
Michael had dwindled by the time it reached South Carolina. Hurricane Dorian caused some light damage
south of Charleston The summer of 2019 was dry and we continue to see spotty mortality of susceptible
trees from the sandhills to the piedmont region. Ips engraver beetles took advantage of weakened pines
in the areas of the state that experienced drought.

**Forest Legacy**

South Carolina was one of the first states to participate in the Forest Legacy Program (FLP) and has been
a national leader in acreage and funding. To date, the South Carolina Forest Legacy Program has
completed 10 fee-simple acquisition projects (65,961 acres) and two conservation easements (12,080
acres). In total, 78,041 acres of working forest land and valuable wildlife habitat has been protected
across the state. The FLP is unique in South Carolina in that it resides within the SC Department of
Natural Resources, specifically in the Wildlife and Freshwater Fisheries Division. A TWS Certified Wildlife
Biologist is the coordinator of the program. During FY19, four potential project tracts were investigated.
The FY20 FLP Acquisition Grant known as the "Saluda Rivers Connector Project, Pacolet-Milliken Tract"
(850 acres in Greenville County, SC) has received preliminary approval for funding but has not yet closed.
The new FY21 submission is the "Rasor Tract Project (691 acres in Laurens County, SC) which is still
being considered by the Ranking Committee.

**Forest Stewardship**

A goal of the SCFC is to conserve and manage working forest landscapes in our state to achieve multiple
objectives. The Forest Stewardship Program is our primary vehicle to promote the informed management
of forestlands and to provide landowners with the technical assistance they need to successfully manage
their forests. The SCFC continues to emphasize Forest Stewardship Plan development and landowner
recognition programs, focusing efforts on priority areas identified in the state's Forest Action Plan. Private
forestry consultants have historically played a very active role in producing Stewardship Plans for private
landowners across the state, but decreased federal funding for the program over the last few years has
eliminated our ability to partner with the private sector for consultant-written plans. Thus, the number of
new and revised plans completed by consulting foresters has decreased significantly. However, recent
additional state funding for Forest Stewardship employee salaries should reverse this trend in FY20 by
allowing funds for consultant-written plans.

Currently 283,086 acres are enrolled in the Forest Stewardship Program in SC with 134,066 of these
acres in Important Forest Resource Areas. Implementation monitoring indicates that approximately 80%
of South Carolina's current Forest Stewardship Plans are being implemented. In addition to adhering to
the standard implementation monitoring protocol(8,16),(993,982) for FY19, SCFC included additional evaluation of specific management outcomes that have resulted from the implementation of Forest Stewardship Plans. Results indicate that Forest Stewardship Plans are having a positive impact on specific management outcomes of interest in SC, resulting in more retention of working forests and increased timber production which generates more forestry jobs. Results also indicate that landowners with Forest Stewardship Management Plans are significantly more likely to be engaged in active management of their woodlands.

Urban and Community Forestry

Although federal funding for the SCFC's Urban and Community Forestry program this year remained near the base level, agency Urban Foresters were able to provide technical and educational assistance to 51 communities, 15 non-profit organizations, 4 educational institutions, and 42 other entities. In July 2018, the SCFC received state appropriations for U&CF program salaries. The federal grant has been modified to reflect that federal appropriations will not be used for the funding of U&CF programs salaries. Federal funds will be utilized for operations, including a pass-through project to help create a guide for incorporation of urban forestry and green infrastructure in comprehensive plans. This guide was completed in FY19. The consolidated grant was also utilized, through a competitive RFP process, to assist 5 communities with street tree inventories and to help urban staff in one community pursue the certified arborist credential. With the assistance of a Landscape Scale Restoration (LSR) grant, the SCFC partnered with the Green Infrastructure Center (GIC) and the NC Forest Service to create a Conservation Development Guide. Two developers in each state provided assistance with this project. An additional LSR grant was awarded in 2016 to study the impacts of urban tree canopy on storm water runoff. This grant has also been completed. The SC Forestry Commission has begun work on an LSR grant titled “Creating Resilient Coastal Forests in the Southeastern United States.” This project will map the extent and intactness of forest cover for several coastal communities; develop risk assessments and future forest cover projections; and create coastal forest resiliency plans.

Contact Information

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