

*The following policy statement was adopted by the NASF membership in NASF Resolution No. 2008-2.*

## **POLICY STATEMENT:**

### **National Association of State Foresters**

#### **Climate Change Issues, Policy and the Role of Forests**

**NASF has a deep and abiding interest in the outcome of these discussions about climate change and the roles that forests can play in reducing atmospheric greenhouse gases.** While forests are historically a significant contributor to anthropogenic increases in atmospheric greenhouse gas levels from a global perspective, they also offer major opportunities to reduce these levels. State, national and international climate change policies identify various approaches to improve the role of the forest sector in reducing emissions and increasing sequestration. Decisions on how programs to reduce atmospheric greenhouse gas levels are structured whether or not they include a role for forests, and if so, what it includes, will have major implications for forest conservation management and use. State forestry agencies have a significant stake in the outcomes of these decisions as they directly control more than 26 million acres of state forests in the United States.<sup>1</sup> Furthermore, private landowners own 424 million acres or 57% of forestland in the country.<sup>2</sup> State forestry agencies have a long tradition of outreach programs for private landowners, and are set up to play an important role in implementing programs that target these forest owners.

NASF approaches these issues from the following perspective:

- It is clear from both national and global perspectives that **forests must be a part of the solution to reducing atmospheric greenhouse gas levels.** At the global level it is estimated that forest conversion, largely in the tropics, is responsible for approximately 20% of the current annual emissions of atmospheric greenhouse gases. In the United States 44 million acres of private forestland are estimated to be at risk from housing development by 2030<sup>3</sup>; thus, emitting large amounts of carbon and eliminating forests that could sequester carbon. In addition, forest fires are increasing in severity and intensity around the country, and threaten to release untold tons of carbon currently stored in forests.
- Beyond solving the problem of forest land conversion and emissions from wildfires, **forests can play a significant role in sequestering additional carbon.** This carbon can be stored in the forest ecosystems themselves, or in products.
- **Wood from forests can also play a role in reducing atmospheric greenhouse gas levels by substituting for other materials** such as steel, aluminum, plastic – all of which require emitting more carbon than wood both in original production and throughout their life-cycle.
- **Forests can play a particularly important role in the near term,** as we can capitalize on the potential of forests and wood to sequester carbon and increase the production of renewable energy. Sustainably managed forests are a strategic asset for meeting national goals for producing renewable energy and fuels. Utilization of forest biomass to provide renewable fuels will also give land managers more options to reduce fuels, improve forest health and improve carbon sequestration rates. In contrast, other mechanisms for reducing atmospheric greenhouse gases (with the important exception of steps to conserve energy) are either years in the future, or come at a much higher price.
- **Forests and forest products already play a significant role in storing and sequestering carbon.** In fact, in the United States, forests currently store approximately 151,651 teragrams of CO<sub>2</sub>

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<sup>1</sup> National Association of State Foresters (NASF) “2006 State Forestry Statistics”

<sup>2</sup> USDA Forest Service, Forest Inventory and Analysis Program. 2006.

<sup>3</sup> USDA Forest Service Pacific Northwest Research Station GTR-636, 2005.

equivalents (TgCO<sub>2</sub>), and storage is growing at a rate of 595 TgCO<sub>2</sub> per year.<sup>4</sup> This is equal to approximately 10% of our annual emissions.<sup>5</sup> If forest loss begins to outpace forest growth, the nation's forests could become a net emitter.

- **Urban and community forests play a significant role in mitigating climate change.** Shade provided by strategically placed urban tree cover helps conserve energy and can reduce the need for additional power plants. Urban forests also generate a significant amount of wood waste which can be converted into renewable energy or alternative fuels. By removing harmful pollutants, urban forests improve public health while also sequestering carbon.
- **It is clear what we need to do as a global society in order to capitalize on the opportunity that forests present.** Actions to reduce future atmospheric greenhouse gas levels include:
  - **Keeping forests as forests.**
  - **Keeping forests healthy by protecting them from fire, insects and disease.**
  - **Maintaining or increasing onsite forest carbon stocks.**
  - **Managing forests sustainably and using wood products to store carbon and substitute for other materials** with greater life cycle and CO<sub>2</sub> emissions.
  - **Expanding sustainable wood-energy** to meet national priorities for renewable fuels and energy production and local interest in affordable home heating and transportation costs.
- **Achieving this end will require a multi-pronged approach,** including:
  - **Markets for forestry carbon offset projects** established pursuant to mandatory cap-and-trade programs.
  - **Voluntary markets** for forestry carbon offset projects entered into by willing sellers and willing buyers.
  - **Programmatic support for keeping forests as forests, keeping them healthy, maintaining or increasing onsite carbon stocking, and sustainably managing them for wood products.** These efforts are important to reward existing beneficial practices, whether or not these can meet the strict requirements for carbon offset projects, and will reduce atmospheric greenhouse gas levels below those mandated by the cap alone. Despite the fact that they may not be able to qualify for offset payments, support for these efforts could come from the sale of allowances for carbon emissions under cap-and-trade programs, as well as from other sources.
  - **Expansion and improvement of wood energy technologies, infrastructure, and production.**
- **NASF supports the development of a national wood energy program** to increase domestic production of renewable energy and transportation fuels and provide family-wage jobs in rural communities. As an ancillary benefit, emerging markets for woody biomass can provide new capital to help cover the costs of forest management practices that maintain or improve forest health and rates of carbon sequestration while also reducing emissions from wildfire.
- Regarding mandatory markets:
  - **NASF supports a national cap-and-trade program** and participation in efforts to develop an effective international program.
  - **Cap-and-trade programs should include offset projects including, but not limited to, forestry practices that can demonstrate carbon benefits which are real, surplus (additional), verifiable, enforceable, and permanent (i.e. the five-part test).** Several forestry practices should be included:
    - **Afforestation**

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<sup>4</sup> U.S. Agriculture and Forestry Greenhouse Gas Inventory: 1990-2005

<sup>5</sup> U.S. Agriculture and Forestry Greenhouse Gas Inventory: 1990-2005

- **Active management for forest products**
- **Biomass plantations and abandoned agricultural land**
- **Carbon-friendly development**
- **Urban and community forestry**
- **Avoided deforestation**

Further, these **projects should include recognition of:**

- **Carbon stored in forest products.**
- **Product substitution benefits** – that is, where wood can be substituted for materials which have higher life cycle carbon emissions.
- **Reductions in losses from fire, insect and disease.**

Further, NASF believes that the approach taken should:

- **Allow all types and sizes of landowners to participate.**
- **Require a statistically valid initial carbon stock assessment** and periodic remeasurements of carbon stocks consistent with standards for such measurements
- **Require a periodic third party review** to assure the quality of forestry carbon offsets.
- **Specify baselines appropriate for such projects with the specific type chosen depending upon what provides the best measure of additional carbon sequestered.**

NASF is acutely aware that before all of the types of projects listed above can be shown to meet the five-part test for offset projects (e.g., particularly avoided deforestation), more work is needed on certain topics, such as how to accurately estimate external leakage for some categories of projects (in some cases, it is already clear), and how to estimate product substitution benefits. NASF notes that work is being pursued to refine approaches on these issues.

Any comprehensive federal climate program should clarify who is eligible to claim credit for carbon sequestered in products and for the substitution benefits from wood products and biomass energy. Such credits could potentially be claimed by landowners, manufacturers or end-users, and programs must include measures to ensure that double-counting does not occur. Further, regardless of which entity ends up being able to claim the carbon credit, to be effective in encouraging carbon friendly forest management, at least a portion of the benefit needs to flow to the landowner.

- Regarding the voluntary markets, these should be transparent both in terms of what they provide to purchasers and the methods used to insure that these benefits are delivered.
- Regarding economy-wide cap-and-trade programs, **NASF believes that is important that mechanisms other than offsets be found to reward landowners who are already storing carbon and practicing carbon-friendly management;** and thus, avoid additional carbon emissions. As alluded to earlier, such programmatic efforts should include:
  - **Increased funding for keeping forests as forests** through programs such as the Forest Legacy Program, Land and Water Conservation Fund and others.
  - **Increased funding for efforts to reduce losses from fire, insects and disease.** These should include not only efforts to deal with catastrophic events; but in addition, efforts to reduce the susceptibility of forests to these losses.
  - **Encouraging sustainable management of forests to produce forest products, wood energy** and the array of ecosystem services that flow from forests – for example, clean water, wildlife habitat, clean air and recreational opportunities.
  - **Creation and funding of programs which allow for forest adaptation** in the face of climate change. Such efforts should include increasing the vigor of forests to withstand stress, encouraging species which are better suited to predicted climate regimes, and other activities.

- NASF is very much aware that **these programmatic and project efforts**, through both voluntary and mandatory markets, **have many co-benefits – making them, in NASF's view, more attractive than other sorts of offsets or technologies** that may be used to reduce atmospheric greenhouse gases. For example, forest ecosystems provide water quality enhancement and wildlife habitat, as well as aesthetic and recreational benefits. However, as committed as NASF is to forests and all their benefits, its members recognize **that to be credible, forest offsets must first and foremost guarantee reductions in atmospheric greenhouse gases**. This recognition underlies all of our principles and recommendations on this topic.
- In national programs of any sort, NASF recognizes that there is a wealth of lessons to be learned from existing programs, including the mandatory markets in the European Union, the Chicago Climate Exchange, the Regional Greenhouse Gas Initiative and California's registry program; and that the wisdom we can derive from these experiences should be incorporated into future programs. Beyond this, NASF believes **climate change issues will undoubtedly require adaptive management** as we learn from our experiences.
- Finally, NASF believes that **state forestry agencies are in a unique position, not only to help guide the development of these programs, but also to assist in program delivery at the local level**. Federal funds to support state climate mitigation and adaptation efforts should recognize the many important roles state forest agencies play in encouraging carbon friendly forest management.