



**Roundtable on Sustainable Forests**

*A Partnership for the Future*

# **SUSTAINABLE FORESTS**

# **ACTION STRATEGY**

**Prepared by the Roundtable on Sustainable Forests**

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## Executive Summary

America's forests, which comprise one-third of the nation's land area, are as diverse as the communities that own, occupy, and steward them. One size certainly does not fit all, yet we all have a collective reliance on our forested lands as well as a collective responsibility for their well-being. An enhanced collaborative approach is required that engages the American people and stakeholders in managing, conserving and restoring both our National Forests and other non-federal forest lands. A special emphasis for privately-owned forests, which represent two-third of the nation's forests and supply over 90% percent of our timber, is needed.

Key disturbing trends identified when data from the first *2003 National Report on Sustainable Forests* is compared with the *2010 National Report* include: 1) a substantial decline in the health of the nation's forests; 2) an increase in conversion of forests to non-forest uses; and 3) an increasing dependence on private lands and foreign imports for U.S. forest products consumption. The *Sustainable Forests Action Strategy* builds upon these significant trends by identifying challenges and opportunities within the forest sector, followed by nine recommended actions that can be taken now to improve the conservation and sustainable management of the nation's forests.

The *Action Strategy* was developed through a robust national dialogue among a diversity of interests by the Roundtable on Sustainable Forests (RSF), which is an open and inclusive alliance committed to [sustainable forest management](#) on public and private lands in the United States. For too long, forest battle lines have been drawn and debated on issues that are not helping our forests achieve their strategic potential. When the right issues have been identified, proactive and practical steps have not been taken. The RSF believes its recommended actions can be achieved in the next two years, are relatively inexpensive, and leverage existing programs. These nine integrated actions will also build an important foundation for future work:

- Protect and Manage the Nation's Most Valuable Forested Watersheds.
- Support National Data Gathering and Reporting.
- Enact Dedicated Funding Sources for Wildland Fire Suppression.
- Heighten Awareness of Forests Benefits.
- Develop and Support Pilot Landscape Level Sustainable Forests Projects.
- Encourage Local Governments to Consider Forest Resources.
- Analyze the Impact of Tax Policies, Incentives, and Barriers to Sustainable Management of Private Forests.
- Maintain and Diversify Markets that Facilitate Forest Conservation and Sustainable Forest Management.
- Integrate Urban Forestry in Federal Initiatives Aimed at Sustainable Communities and Green Infrastructure.

## I. Introduction

On August 14, 2009, the United States Agriculture Secretary Tom Vilsack delivered a speech outlining his national vision for America's forests, using the guiding principle of conservation defined by the first Chief of the Forest Service, Gifford Pinchot. That is, we shall address the stewardship, management, protection and wise use of our natural resources for the good of most over the long-term. The Secretary characterized his vision with an "all lands" approach to forest and rangeland stewardship, focusing on programs designed to accentuate community health and wealth, with an emphasis on clean and abundant water.

America's forests, which comprise one-third of the nation's land area, are as diverse as the communities that own, occupy, and steward them. There is a mosaic of forest types and ownership/tenure patterns that span our country, all playing distinctly different roles and purposes such as public forests, tribal forests, commercial private forests, family-owned woodlands, and urban forests. One size certainly does not fit all, yet we all have a collective reliance on our forested lands as well as a collective responsibility for their well-being.

It is time to change the way we view and manage America's forestlands with an eye towards the future challenges of climate change and opportunities of green jobs. This will require an enhanced collaborative approach that engages the American people and stakeholders in conserving and restoring both our National Forests and other non-federal lands, with a special emphasis on privately-owned forests.

The *2003 National Report on Sustainable Forests* was the first of its kind to be done in the U.S. The *2010 National Report*, which can be [downloaded](#) from the USDA Forest Service's website, used similar data, based on internationally agreed to criteria and indicators, providing an opportunity to "connect the dots". Disturbing trends identified when data from two *National Reports* are compared include: 1) a substantial decline in the health of the nation's forests; 2) an increase in conversion of forests to non-forest uses; and 3) an increasing dependence on private lands and foreign imports for U.S. forest products consumption.

The *Sustainable Forests Action Strategy* builds upon these trends, identifying current challenges and opportunities within the forest sector, followed by nine recommended actions that can be taken now to improve the conservation and sustainable management of the nation's forests. It was developed through a robust national dialogue among a diversity of interests by the Roundtable on Sustainable Forests (RSF), which is an open and inclusive alliance committed to [sustainable forest management](#) on public and private lands in the United States. The RSF believes these actions can be achieved in the next two years, are relatively inexpensive, and leverage existing programs. These integrated actions will also build an important foundation for future work.

The *Action Strategy* includes three annexes. Annex 1, *Significant Recent Changes in Forest Conditions and Trends*, which is attached to this document, is derived from data presented in the 2003 and 2010 *National Reports*. Annex 2, also attached to the document, describes the stakeholder process and identifies the team that developed the *Action Strategy*. Annex 3, which can be downloaded at [http://www.sustainableforests.net/docs/SFAS .doc](http://www.sustainableforests.net/docs/SFAS.doc), is a collection of eight *Issue Papers* that contributed to the RSF's formulation of priority actions.

## II. Developments, Challenges and Opportunities

Although the net forest area in the U.S. has been relatively stable (Indicator 1<sup>1</sup>), this national statistic masks significant place-based challenges in relation to declining forest area and fragmentation, as well as trends in forest health and forest benefits that have significant implications for the future of the nation's forests. For example:

- **Forest Health.** There has been substantial decline in the health of the nation's forests, and many of the stressors can be expected to increase with climate change. These include insect infestations, disease outbreaks, droughts, and fires. Of note is a three-fold increase in insect-caused mortality in last decade (Indicator 15).
- **Forest Protection.** The area of protected forests on public lands has changed little since 2003 (Indicator 2). However, mechanisms for private lands protection are growing in importance. Payments for environmental services were estimated at \$553 million in 2007 (Indicator 27). Federal payments have been relatively stable, but payments from private entities in the form of carbon offset purchases, conservation easements and outright land purchases have increased 38 percent in the last three years alone and now account for over a third of total payments identified in the report.
- **Forest Conversion.** Converting forests to non-forest uses, particularly suburban development, is leading to declines in the ecosystem services that forests provide to society. Forest fragmentation continues at a steady pace (Indicator 3), with increasing intensity in the eastern forests.
- **Forest Growth and Consumption.** Net growth in timber stocks currently exceeds harvest by a considerable extent in all regions of the U.S. (Indicator 11). There has been a growing gap between production and consumption, with the difference filled by imports (Indicator 26).
- **Forest Harvests.** Private lands produce 91 percent of the nation's wood production compared to 86 percent in 1952 (Indicator 10).
- **Forest Recreation.** Only 15 percent of privately owned forest is open for public recreation compared to 25 percent in 1985-86 (Indicator 41).

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<sup>1</sup> Indicator Data is from 2010 National Report on Sustainable Forests

Taking concrete steps to retain forest land and improve forest health, becoming more energy self-sufficient, and providing jobs for the nation's green economy makes sense. With these goals in mind, the following challenges and opportunities set the context for the Action Strategy.

## 1. Forest Conversion and Fragmentation

**The Challenge:** Conversion of forests to non-forest uses, particularly suburban development, is leading to declines in the benefits that forests provide to society. Not only are the fringes of towns and cities being adversely affected, so are more rural areas as vacation and retirement homes proliferate and properties are sub-divided. Forest fragmentation, the breaking up of forests into smaller and smaller pieces, continues as the average size of family forest ownership has fallen to 17 acres. These forest losses can have a negative impact on environmental quality in terms of wildlife habitat, water quality, and opportunities for outdoor recreation.

**The Opportunity:** New models for sustainable community ownership and management of forests, where clustering of development allows residents to hold a shared ownership in the remaining working forest, can be created. The increasing number of forest landowners can bring new financial, human and social capital to the table. The conservation community has become more aware of the importance of working forests and the use of conservation easements and investments for sustainable forestry are increasing.

## 2. Forest Health

**The Challenge:** The number and extent of damaging and large stand-replacing fires are likely to continue to increase in the future. In turn, the roughly ten-fold increase in the forest area impacted by drought may foreshadow increases in other disturbances such as fire and disease, to which drought-stressed trees are more susceptible. The growing influence of insects and fire in the pine forests of the Western and Rocky Mountain region are of special concern, threatening human life and local economies. Unless held in check, invasive species such as Emerald Ash Borer and Asian Long Horn Beetle will continue their expansion with devastating impacts to urban forests and adjacent natural forests.

**The Opportunity:** Public perception has changed as increasing numbers of citizens have experienced, directly or indirectly, the negative impacts of unhealthy forests. Climate change and the potential for renewable fuels have brought new forest opportunities and markets to the table. Many communities are actively pursuing forest restoration projects, realizing that their prosperity is linked to the health of their forests. Barriers can be removed to allow managers of Federal Lands to manage forests to improve forest health and reduce fire risks. Advances in modeling and science have provided new tools to allow more transparent and adaptive management regimes.

### 3. Forest Infrastructure

**The Challenge:** Forest industry is declining in the U.S. as a result of weakened markets for both building materials and paper products. Shifts in the world economy have made U.S.-based forest products companies less competitive in global and domestic commodities markets. The forest industry, which once owned and managed nearly 15 percent of U.S. forests, has sold nearly all of its lands during the past decade. While these lands continue to be managed by timber investment management organizations (TIMO) or real estate investment trusts (REIT), some lands have gone out of production or been sold for development. Another result of this ownership shift has been a substantial reduction in forest research and product development. The decline or disappearance of wood harvesting operators and infrastructure is impacting forest management capability to carry out hazardous fuels reduction and forest restoration. New markets, especially for smaller dimension wood, are needed as well as relative reliability in supply from public lands to support investment.

**The Opportunity:** There is an opportunity for new organizational structures that would allow communities to create and take advantage of efficiencies of scale and avail themselves of opportunities to use global markets for their benefit. Reciprocal partnerships, multi-use of facilities, and reduced energy use can increase the efficiency of the system. If developed at the appropriate scale, there are renewable energy possibilities such as promoting community-scale bioenergy production that uses local wood. There is an opportunity to strengthen markets for ecological services while reducing transaction costs, including establishing a carbon registry for forest landowners.

## III. An Action Strategy for Sustainable Forests

While the U.S. can be proud of past achievements in the stewardship of its forests, important challenges remain. Given the enormous diversity of interests surrounding forests and the variety of values and services they provide, there will be many different perspectives to consider. Yet the RSF believes that there are many widely shared goals and values. Now is the time to build upon these shared goals and values with the new national administration and a shared recognition of the strategic role that forests can contribute to climate change mitigation and energy self sufficiency.

Similar to the forest landscape, the forest community has become fragmented. For too long, forest battle lines have been drawn and debated on issues that are not helping our forests achieve their strategic potential. When the right issues have been identified, proactive and practical steps have not been taken. For many it would be presumptuous for any one entity to believe that they could create an action strategy to sustain a nation's forests, especially in a country as complex as the U.S. Yet, this *Action Strategy* deserves attention as it has come from a diverse group of stakeholder focused on developing realistic and practical actions that can

garner public support for sustainable forest management. Sensitivity and respect for the rights of private forest landowners will be critical in all aspects of implementing the *Action Strategy*.

The journey to achieving sustainable forests is not a linear and sequential process – the advancement in one realm cannot await completion of another. The *Action Strategy* can expedite that journey, building upon the work of others, focusing our collective energies, while building trust and support in the process. None of the recommended actions are applicable to all forests and there is no intention to discount the fine work currently being done by many entities.

The criteria used to filter the recommended actions include: 1) achievable in the next two years, 2) relatively inexpensive, and 3) capacity to leverage existing programs and efforts. The two year time frame was chosen to provide focus and the initial impetus for the public process. Future planning time frames should be longer (e.g. 5 years) with more explicit discussion on means of implementation up front.

Together, the recommendations provide a foundation to:

- Maintain or improve information and public knowledge on natural, planted and urban forests;
- Assess the economic value of forests and the benefits they provide;
- Ensure federal investments for forest management in the face of fire borrowing;
- Demonstrate the effects of good forest management;
- Provide local units of government with tools to help dampen the loss of forests; and
- Remove disincentives for private forest landowners to retain forest lands in forests by enhancing markets and developing favorable tax policies.

## **IV. Recommended Actions**

### **1. Protect and Manage the Nation’s Most Valuable Forested Watersheds.**

The nation’s forested watersheds are enormous assets to our economy and society, and the need for dependable supplies of fresh water is expected to increase in the future. Forest areas supply over 50 percent of the Nation’s freshwater in the United States, currently providing drinking water for 180 million people. Climate change and a growing population are expected to strain these vital water supplies. The following actions are intended to optimize our watershed management efforts and galvanize public support for them.

*Recommendation 1a. Identify the nation’s priority forested watersheds and link with existing forest health conditions.*

Several major urban centers, like the Denver metropolitan area, depend heavily on National Forests for their water. Other cities, like New York City, rely on privately owned forests to

provide clean water. A national consensus on what constitutes our nation's priority forested watershed that can be linked to specific landscape areas on the ground is needed. Once these watersheds are identified, they should be linked to forest health threats (e.g. fragmentation, insects and disease). This analysis should build upon existing efforts (e.g. EPA's Source Water Assessment and Protection Programs, State & Private Forestry's State-wide Assessments).

Successful applications of this approach can be found throughout the country (e.g. Hawaii, New York, Maryland). The USFS State and Private Forest Northeast Area's project: *From the Forest to the Faucet: Drinking Water Supplies and Forests in the US* is using a series of biophysical and demographic data in conjunction with water quality models to create national maps that identify priority drinking water quality protection areas. They are also analyzing how well these areas are protected by forested landscapes, and their vulnerability to threats such as development. This important project should be supported and expanded to cover all regions of the country.

***Recommendation 1b. Sponsor a national symposium on "valuing the benefits of forests within large scale watersheds" with an emphasis on water quality and quantity.***

New techniques in natural resource valuation can provide reliable economic estimates for the full range of direct and indirect forest watershed benefits, increasing forest values and incentives for forest retention. Currently, little or no benefit, expressed in dollar value, is currently assigned to water resources in their natural state and insufficient data are available to quantify the costs and benefits associated with ensuring sustainable forested watersheds. As a result, markets are not taking into account the full value of forests to society, and thus forest landowners are not receiving value for providing this service.

It is important to develop a consistent methodology for connecting economic data with the multiple values and benefits of forested watershed. A national conference that brings together professionals to develop a consensus for that methodology is needed. A synthesis of existing research with appropriate case studies (e.g. Hawaii, Colorado, Maryland) would be helpful.

***Recommendation 1c. Ensure that forest watershed and water issues are integrated within the USFS National Forest Planning rule.***

The USDA Forest Service is beginning an open, collaborative process to create and implement a modern planning rule to address current and future needs of the National Forest System, including restoring forests, protecting watersheds, addressing climate change, sustaining local economies, improving collaboration, and working across landscapes. The Roundtables of Sustainable Forests and Water should be consulted to ensure that forest watershed and water issues are integrated within the USFS National Forest Planning rule.

## **2. Support National Data Gathering and Reporting Activities.**

National-level forest data gathering undertaken through the Forest Inventory and Analysis (FIA) and Forest Health Monitoring (FHM) programs comprise the backbone of the *2010 National Report* and are critical tools that allow us to assess the sustainability and health of our forests. FIA and FHM data are essential to guide the development of forest assessment and management plans and to support our growing data needs in areas such as land use change, water resources, bioenergy, and climate mitigation. Yet funding for these programs remains insufficient to meet current needs. The U.S. Forest Service and forest stakeholders should support and vigorously seek funding to fully implement the base FIA program nationwide. The *2010 National Report* provides a roadmap to help identify data gaps that could be filled by enhanced FIA and FHM activities and should be utilized to help identify future program focus.

Many other national-level forest inventories exist, managed by federal agencies and non-federal organizations. Our national-level data gathering would be enhanced by a catalog of inventories and greater coordination between federal and non-federal data gathering. In the near term, the *2010 National Report* (if possible) and future national reports should include a listing of key existing national-level forest inventories, with particular focus on those inventories that supplied data for the report. To increase coordination and inclusion of data from other national-level inventories in future reports, the RSF should consider hosting a forum of leaders of these national inventories to share information about their relevance to assessing the sustainability and health of America's forests.

Reporting forest data in a consistent and accessible manner is also critical. At the national level, the *2010 National Report* provides the most comprehensive and data-rich picture of forest conditions in the United States today. However, the Report's format does not necessarily provide information in the forms that many users need. To address this problem, the *2010 National Report* should be housed on a website where criteria and indicator data can be displayed and delivered in interactive formats and spatial scales defined by users. Where possible, these data should be updated on an annual basis.

## **3. Enact Dedicated Funding Sources for Wildland Fire Suppression and Management.**

The cost of fire suppression has risen in recent years and will continue to increase in the future. This past fiscal year alone, the USDA Forest Service spent over \$1.5 billion, more than 50 percent of the agency's regular operating budget, for fire suppression costs due to the impact of funding emergency wildfires within a constrained budget. Every year, the President's budget proposal for the USDA Forest Service non-fire programs is significantly reduced in order to direct more funds towards emergency fire activities. All other forest management efforts, including those programs that help to reduce suppression costs in the long run, have been redirected to pay for the rising expense of these wildfires.

A three-part legislative solution is needed as follows:

- Set up a 'fund' for emergency wildfire suppression costs that is partitioned from the rest of the of USDA Forest Service budget;
- Provide monies to the 'fund' that will not count against the agency's constrained budget; and
- Reformulate the Forest Service budget to reinvest in the non-fire programs that have been decimated by the rising fire suppression costs. Congress is currently considering legislation to address this situation, but the issue remains unresolved.

*Note: On October 29, 2009, the House and the Senate passed the FLAME Act of 2009 and President Obama signed this bill into law on October 30, 2009. The FLAME Act of 2009 establishes two FLAME Funds in the Department of Interior, Environment, and Related Agencies Appropriations Act of 2010; one for the Department of the Interior funded at \$61 million and one for the Forest Service funded at \$413 million in FY2010. These two funds will reduce the need for agencies to transfer funds to wildfire suppression from other agency programs. The conference report language encourages well thought-out suppression planning from year to year through a new approach to budgeting for both the FLAME funds and the WFM appropriation. Additionally, Congress expects the Administration to move away from using a 10-year rolling average in estimating future fire costs and to use a more predictive formula that will eliminate the need for transfers.*

#### **4. Heighten Awareness of Forest Benefits with a Focused Communication Campaign.**

The public needs to understand their relationship to sustaining forested landscapes and the benefits they provide. A clear presentation of the favorable economic and ecologic tradeoffs associated with supporting sustainable forests needs to be made, especially to local and regional policy makers. User friendly products derived from actions # 1 and #2 can add value to this effort. The communications and outreach challenge is to reach beyond the traditional forest audiences to the great diversity of forest stakeholders. The communications campaign should make effective use of regular internet and web-based systems, then amplify its messages through the new web-based social networks, referred to as Web 2.0.

Sustainable forest messages must be made relevant at the local community level, where people live, care and come together, building sustainable forest ideas into local plans. An important first step would be to commission a professionally conducted survey or poll on the perceptions of the public (and perhaps key policymakers) regarding their views on the state of the nation's forests, as well as the organizations and programs that address their conservation and sustainable management. This survey should make full use of the information included in the 2010 National Report, Indicator #44, The Importance of Forest to People, which reflects a diversity of people across the United States and their perspective on forest management activities focused on sustainability. In addition, the communications campaign should take

advantage of the upcoming 2011 International Year of the Forest to communicate key forest related domestic messages.

## **5. Develop and Support a Portfolio of Pilot Landscape Level Sustainable Forests Projects in All Regions of the Country.**

Landscape level forest management partnerships and coalitions have proven to be successful in many areas of the country. They usually involve highly motivated citizens, local, state, and Federal government agencies and commissions, non-governmental organizations, private sector firms, and educational institutions working together on a shared vision. The political and economic advantages in this approach include the following:

- Entire regional watershed areas need conservation and management, which requires the involvement of all major landowners;
- Limited resources are leveraged to take advantage of economies of scale for large infrastructure projects and sharing of technical expertise;
- Threats such as invasive weeds and diseases as well as insect outbreaks do not respect parcel boundaries;
- Funders become more confident that expenditures will be spent in a cost effective manner; and
- Diverse political constituencies begin to build mutual appreciation and support for values and benefits.

There is not a lack of areas to consider, especially rural areas where communities are struggling to develop new economic drivers (e.g. Appalachia region) or combat impacts of declining forest health (Western Rockies). The portfolio should consider investing in projects that facilitate an assessment of different management approaches, such as conservation easements, watershed-based forest planning and zoning, purchase of development rights, current use tax assessment programs, and woodland owner cooperatives. An additional deliverable should be guidelines and lessons learned for formulation and implementation of the next generation of projects/programs. Other portfolio criteria to consider include: projects that stimulate additional investment, job creation and building community capacity through technical assistance, training, and shared learning. It is important to stress that forest landowner involvement in these projects must be voluntary and without financial penalty or regulatory actions for those that elect not to participate.

**Note:** *In March 2009, the Forest Landscape Restoration Act, which calls for landscape-scale “ecosystem restoration of priority forest landscapes” was passed by Congress and signed by the President. In December 2009, funding of \$10 million was approved by the House and Senate conference committee as part of the Interior and Environment Appropriations Act for 2010, H.R. 2996. Qualifying project must be: (1) at least 50,000 acres; and (2) comprised primarily of forested National Forest System land, but may also include land under the jurisdiction of the Bureau of Land Management, land under the jurisdiction of the Bureau of Indian Affairs, or other Federal, State, tribal, or private land.*

## **6. Encourage Local Governments to Consider Forest Resource Protection in Land Use Decisions.**

Local governments, counties in particular, are on the front line of the forest conversion and fragmentation issues. Many do not realize (1) the significant degree to which they impact forest resources (conversion, fragmentation, and parcelization) through their land use decisions resulting from planning and zoning decisions and (2) that forests are actually their most important Best Management Practice for complying with clean water mandates. They should be encouraged and assisted to use current and accessible forest data, economic valuation analysis, and planning tools with the latest geographical information system technology assessment tools to evaluate the impact/vulnerabilities to forests resulting from local planning and zoning decisions.

A Forest Sustainability for Local Governments workshop with related outreach materials should be held, focusing on reaching those organizations (e.g. American Planning Association (APA), National Association of Local Government Environmental Professionals (NALGEP), National Association of Counties (NACO)) that have the most direct ties to counties and municipalities in order to promote the two-part message above. The workshop and the outreach should highlight the forest/sustainability frameworks, available data sources, analysis techniques, and examples of infusing SFM into land use planning and policy. Baltimore County, MD stands out as an excellent example to demonstrate the benefits of this type of effort.

## **7. Carry Out a Focused Analysis of the Impact of Tax Policies, Incentives, and Barriers to Sustainable Management of Private Forests in the United States.**

In the United States, about 35% of the forestland is owned by 10 million family forest owners. Tax policy changes have had a profound, and often unintended, effect on investment and the very structure of the forest sector. For example, the change in the forest industry from one type of company (integrated) to another type of company (TIMOs, REITs) was driven in large part by changes in federal tax policy. Now, even if the land stays in forest uses, this class of investors tends to periodically sell their land in units smaller than were purchased, which will lead over time to a decline in the economic attractiveness of managing the land for the production of forest products.

There is no single public or private institution in the U.S. which has a charge of systematically evaluating Federal and State tax laws, or proposed changes to them, as to their implications to sustainable forest management or the viability of the U.S. forest sector. Researchers have recently received a grant from the American Forest Foundation to review and analyze taxes relevant to family forest landowners. The project is examining why people do or do not take advantage of favorable tax treatment. While the project's focus is on state and local taxes, federal income and estate taxes are also included in the analysis. The report will also identify

tax policies that would best encourage keeping family forests as forests and increasing sustainable forest management.

Concurrently, data should be compiled on non-tax incentives (e.g. government cost-sharing programs, wetland and endangered species mitigation) that entice landowners to manage their lands in desired ways. The findings of National Commission on Science for Sustainable Forestry's "*Existing and Potential Incentives for the Practice of Forestry on NIPF Lands*" is an excellent starting point that offers recommendations on how incentive programs can be made more effective in promoting SFM. This should be augmented with an additional focus on barriers, such as regulations. To achieve this, a panel of experts and/or focus groups with key experts should be convened to develop information not provided in the report. Finally, the impacts of other subsidies (e.g. agriculture and energy) that discourage longer-term forest uses need to be identified with an analysis of environmental costs and benefits.

## **8. Maintain and Diversify Markets that Facilitate Forest Conservation and Sustainable Management.**

Reliable, accessible, and efficiently functioning markets for a diversity of forest products and services provide economic value that is essential to the continued conservation and sustainable management of the nation's forests, both public and private. Forest landowners and managers need markets for both low- and high-value products and services and forest uses in order to keep forests as forests; the lack of those markets can lead to forest degradation by making sustainable management cost, rather than reward, landowners. These markets also generate economic activity and can help support sustainable income and employment in rural communities near forests.

*Recommendation 8a. Foster the economic viability of the forest sector as part of a comprehensive national policy on forests.*

At present, the U.S. has no public policy focused on maintaining the economic viability of the forest sector. This is in sharp contrast to other economic sectors, such as agriculture, in which maintaining economic viability is an explicit policy goal, carried out through the work of one or more federal agencies. The "forest sector" today is much larger than the forest products industry, and includes a diversity of other interests tied to the essential roles that forests play in water supply, wildlife habitat, outdoor recreation, climate mitigation, and renewable energy. These interests are united in a shared concern over the loss of forest to development and other land uses. The National Commission on Science for Sustainable Forests recently called for the enactment of a national policy on forests, similar to a national energy policy or national industrial policy, to establish a public policy goal of conserving the nation's remaining forests, and sustaining their health and productivity for the full array of goods and services they provide to the nation as a whole.

***Recommendation 8b. Ensure that climate policy reflects the potential positive contributions that forest conservation and sustainable management can make to achieving substantial net reductions in greenhouse gas emissions.***

Various federal and state legislative proposals for a cap-and-trade, carbon tax, or similar mechanism aimed at reducing net emissions of carbon dioxide and other greenhouse gases give only minor consideration the role that forests can play in achieving this goal. Climate policies aimed at reducing net carbon emissions should allow forest managers to earn tradable carbon credits for actions demonstrated to result in increases in the rate of carbon sequestration through higher rates of net forest growth and/or increases in the capacity of forest soils to store carbon over long periods. This should include actions demonstrated to reduce susceptibility to insect or disease infestations, or to reduce the risk of large-scale wildfire, subject to independent verification and periodic re-measurement of carbon stores. Climate policies should also include an allowance for binding commitments that retire or transfer development rights that will maintain existing forests (e.g., conservation easements), or that guarantee that an existing forest will not be converted to an alternative land-use in which the level of carbon storage or rates of sequestration would be significantly reduced (e.g., conversion to agriculture or short-rotation energy crops). Existing federal/state programs such as the Conservation Reserve Program and the Forest Legacy program could be adapted to achieve these goals.

***Recommendation 8c. Secure adequate funding to implement the forest energy provisions in the 2008 Farm Bill.***

The 2008 Farm Bill contained several provisions that recognize the important role that wood biomass can play as a renewable, secure, domestic, low-carbon energy source. Several important programs were created and funding levels were authorized. However, little if any of this funding has actually been appropriated to date, so the programs are not fulfilling their intent. The 2008 Farm Bill authorized a Community Wood to Energy Program at \$5 million a year to encourage the use of woody biomass as the primary fuel for heat or energy at publicly owned or operated facilities such as schools, town halls or libraries. The program was authorized to provide grants for planning community wood energy projects as well as for installing or upgrading community wood energy systems. The Forest Biomass for Energy Program was authorized at \$60 million a year to address the use of forest biomass in energy production through research on the use of low-value forest biomass for energy.

State and regional strategies are needed to direct federal wood bioenergy initiatives for maximum effectiveness in addressing the high-priority challenges and opportunities that are unique to each major forest region of the US. For example, a key priority in the West is to improve the utilization of small-diameter trees and other low-value material in order to reduce wildfire risk in wildland urban interface areas. A commitment from the U.S. Forest Service to convert its western field offices to woody biomass energy could provide a key market to stimulate this effort. In the Northeast, the dependence on increasingly costly, high-carbon heating oil for electricity generation as well as space heating issues could include enhancing the use of the region's woody biomass to replace home heating oil. Although the payback period

can be relatively short, grant funding is critical to the ability of local communities to make up-front investments in plant and equipment. State and regional strategies that demonstrate careful planning and efficient use of federal grant funds will be essential to the initiation and long-term success of these federal programs.

## **9. Integrate Urban Forestry Concepts and Techniques in Federal Initiatives Aimed at Sustainable Communities and Green Infrastructure.**

Urban Forests stand at the heart of healthy, livable communities. Aside from the obvious aesthetic benefits, trees within urban forests save energy, improve the city's air, protect its water, and underpin economic sustainability. Their presence helps bolster property values, stabilize and add beauty to neighborhoods, and increase income for businesses. Trees also remove numerous poisonous gasses and absorb particulates, dusts, and pollens. Overcoming forest fragmentation begins with a renewed emphasis on the nation's urban forests. The health of urban watersheds and their waterways depends heavily on the presence of forested corridors lining their banks. Forests within cities enable citizens to experience a deeper appreciation and understanding of the ways of nature, and they enhance an ethic of stewardship.

*Recommendation 9a. Form a RSF Workgroup to ensure that urban forestry concepts are fully incorporated in federal community development initiatives.*

Several major federal initiatives are currently being developed to enhance community livability and development opportunities through the use of green infrastructure and similar concepts, many of which are closely related to forests and forestry. The RSF is particularly well-suited to this task owing to its focus on sustainability in a multi-stakeholder setting spanning spatial scales ranging from the national to local and sectors ranging from private individuals to federal agencies, industry associations and NGOs. A key federal initiative here is the interagency (EPA, DOT and HUD) Partnership for Sustainable Communities, which is focused on providing for the nation's housing and transportation needs while protecting the environment and addressing climate change in rural, suburban and urban communities nationwide. Forestry has an obvious and major role to play here.

*Recommendation 9b. Develop an Urban Forest Force, within the AmeriCorps program to work with state and local urban forestry programs.*

This program would generate immediate benefits in the form of jobs alongside the long-term benefits that accrue to forested communities. The work could piggy-back on existing programs, such as the Job Corps Civilian Conservation Centers. The Forest Service operates 22 Job Corps centers nationwide. Job Corps is the Nation's premier residential training program for disadvantaged youth, ages 16 through 24. Students are provided with educational opportunities and vocational training. The program provides advance training in key natural resource

programs leading to potential careers in wildfire suppression and other natural resource technical fields. Recruitment for the Urban Forest Force could be carried out in the latter part of 2010 for its first year of operation in 2011.

*Recommendation 9c. Promote the creation of forested corridors (continuous tree ribbons, greenways) that connect adjacent forests to the city.*

These corridors are ideal for the waterways that flow in and out of the city, as they already provide natural corridors adjacent to which trees can be planted. This landscape scale emphasis provides a valuable educational resource, wildlife habitat, and enhances the quality of life for urban residents. At the outset, this work will entail several key aspects, including identifying successful examples and potential pilot projects, assessing the costs and benefits of corridor creation, and outreach to urban planners and their municipalities.

## Annex 1. Significant Recent Changes in Forest Conditions and Trends

Important changes are taking place in our nation's forests, and these trends are described in detail in the draft 2010 National Report on Sustainable Forests. These specific trends were derived from data within the 2003 and draft 2010 National Reports.

### Forest Area and Growth

- **Forestlands.** In terms of the national average, the area of forests in the U.S. has remained stable at 751 million acres over the past 30 years. Gains in broadleaved forests in the South and interior North have been largely offset by declines in forest area in the more developed coastal regions, particularly in coniferous forests. However, this average masks significant losses of forest in some regions of the country, mostly to urban development. Over the past decade, these losses of forest and open space have been estimated at an average of 3,000 acres per day. Increased forest area in other regions of the country has been the result of marginal crop and pasture land reverting to forest and grasslands converting to forest due to the exclusion of fire.
- **Timberlands.** The area of timberland (i.e., forests available for timber production) in the U.S. has also been very stable over the past 50 years, currently standing at 514 million acres (i.e., 69 percent of all forest land). The highest concentration of timberland is in the South, where 95 percent of the forest is classified as timberland. Two-thirds of the timberland (i.e., 356 million) in the U.S. is privately owned.
- **Forest harvests.** Private lands produce 91 percent of the timber harvested in the United States each year. The South supplied 62 percent of all timber removals in 2006, up from 49% in 1953. On public lands in the West, where timber management has been sharply curtailed in recent years, removals have declined from 4.4 billion cubic feet in 1976 to 2.8 billion cubic feet in 2006, a decrease of 35 percent.
- **Forest Plantations.** The area of planted forests has increased 11 percent since 2003 to 63 million acres, consisting mainly of pine plantations in the South. Growing stock volume on planted forests rose 32 percent since 2003. Since 1982, more than 2 million acres have been planted annually, virtually all with native species.
- **Development.** In 2000, the nation's development footprint accounted for over 13.3 percent of total land area, up from 10.1 percent in 1980. This expansion significantly exceeds population growth and it has continued since 2000.

## Forest Health

- **Insects and Disease.** There have been substantial increases in the area of forests killed or seriously damaged by insect infestations and disease outbreaks since the 1997-2002 baseline period. In the lower 48 states, the area of forests suffering significant mortality has risen to 37 million acres, compared to 12 million acres during the baseline period. When the area of forest damaged by defoliation is added to this, the number of acres affected since 2003 rises to 50 million, or 8 percent of forest area in the lower 48 states.
- **Wildfires.** In 2003-2007, 40 million acres burned, compared to 25 million acres during 1997-2002. Currently, 90 million acres are at risk for wildfire that would result in loss of life, property and natural resources, and entail massive firefighting costs and threats to water supply. Fire suppression costs for the USDA Forest Service and the Department of the Interior have exceeded \$1 billion every year since 2000. In two of those years, costs exceeded \$2 billion.
- **Drought.** Weather related damage to forests also has increased significantly relative to the reference period, rising from approximately 800 thousand acres to nearly 1.8 million acres over the last decade. Most of this damage is related to a roughly ten-fold increase in the forest area impacted by drought.

## Forest Benefits

- **Carbon Storage.** Forested ecosystems in the U.S. currently contain an amount of carbon equivalent to over 165 billion metric tons of CO<sub>2</sub>, a figure close to 27 times the 5.9 billion tons of CO<sub>2</sub> emitted nationally every year through the burning of fossil fuels and similar sources.
- **Carbon Sequestration.** Each year, U.S. forests sequester 650 million metric tons of carbon dioxide, offsetting approximately 11 percent of the total U.S. annual carbon emissions. This rate of sequestration has been relatively stable for several decades, reflecting the long-term increases in forest volume.
- **Wood Energy.** Annual production of wood energy is around 2,100 trillion BTUs which is approximately 2 percent of the nation's annual energy output.
- **Wood Product Consumption and Production.**
  - Total consumption of wood and paper products per person per year remained steady at 63 cubic feet. Total national consumption is increasing at the population growth rate (i.e., 0.88 percent per year).
  - Both timber harvest and wood products production are down slightly relative to 2003. The difference between production and consumption has been filled increasingly by imports, which now total 5.4 billion cubic feet, or 26 percent of total consumption.

- At a little over 20 billion cubic feet, total U.S. consumption has remained relatively stable, though levels dropped off in 2006 due to a decrease in the housing construction market.
  - The total volume of recovered fiber now equals about half of total domestic paper consumption. However, a growing proportion of recycled paper is exported, so domestic use of recycled fiber in paper products has remained stable at about 38 percent for the last decade.
- **Non-timber Forest Products.** Trends for production and trade figures for non-timber forest products are incomplete, but the values reported for these indicators in 2007 are substantial, with a total estimated retail value of production of \$1.4 billion and exports exceeding \$450 million. Non-timber forest products data included fruits and berries, mushrooms and other fungi, decorative foliage and forage.
  - **Forest Employment.** Employment in the forest sector has fallen 15% since 1997 to 1.29 million employees. Public sector employment is about one tenth of that in the forest products sector and has been relatively stable. However, the one notable exception within the public sector was employment in the USDA Forest Service, which has declined to around 23,000 employees from a recent peak of 31,000 in 1991. The 2003 Report estimated that forest-based recreation directly generated 1.1 million jobs.
  - **Forest Payments.** An estimated \$553 million was paid to landowners in 2007 for the ecosystem services their forests provide, an increase of 38 percent in the past three years. While Federal payments have been relatively stable, payments from private entities in the form of carbon offset purchases, conservation easements and outright land purchases for conservation objectives are growing rapidly and now account for over a third of the total payments identified in draft 2010 National Report.

## APPENDIX 2

### Stakeholder Drafting and Outreach Process

#### I. Background

In spring 2009, Roundtable on Sustainable Forests (Roundtable) leadership agreed to support an emphasis on stakeholder efforts to develop a stakeholder *Sustainable Forests Action Strategy* (SFAS). This effort served as the primary focus of the October 14 – 15, 2009 National Roundtable Meeting held in Washington, DC.

#### II. Drafting Team

The SFAS was drafted by participants from the Core Group of the Roundtable. The Drafting Team accomplished its task in July 2009 on a series of coordination calls and by e-mail. Drafting Team participants were: Nadine Block, American Forest and Paper Association; Michael Buck, National Association of State Foresters; Graham Cox, Audubon New York; Katie Fernholtz, Dovetail Partners; Ruth McWilliams, Catamount Lodge & Forest LLC; Donald Outen, Baltimore County, Department of Environmental Protection and Resource Management; Guy Robertson, USDA Forest Service; and Al Sample, Pinchot Institute for Conservation.

#### III. Stakeholder Outreach Process

The desired outcomes of the outreach process were to:

- To obtain extensive, substantive, and diverse verbal and written input on and support of the stakeholder SFAS; and
- To produce a final working draft of the stakeholder SFAS, that would be the foundation for discussion at the National RSF stakeholder meeting on October 14 & 15, 2009.

The SFAS Outreach Team was comprised of participants from the Roundtable's Core Group and the Communications and Outreach Work Group (COWG). Participants included: Ruth McWilliams, Catamount Lodge & Forest LLC; Eric Norland, U.S. Department of Agriculture, National Institute of Food and Agriculture; Laurie Schoonhoven, Pennsylvania State University, Sustainable Forests Partnership; and Holly YoungBear Tibbetts, College of Menominee Nation, Center for First American Forest Lands. The outreach process consisted of:

- Creating an unique e-mail address for electronic submission of comments on the draft,,
- Posting the draft SFAS to the RSF website for stakeholder review and comment
- Invited comments by telephone or conference calls, and
- Conducting three Webinars.

Twenty sets of comments were received via e-mail. Participation in the Webinars ranged from 7 to 40. Key communicators were sent personalized e-mails or phone calls were made to representatives within their interest areas which included: industry; environmental non-governmental organizations; federal state and local government agencies; extension forest educators; academia; and professional societies and organizations.

The Drafting Team integrated the input into a final working draft document that served as the foundation for discussion at a national RSF stakeholder meeting at the October 2009 National Roundtable meeting. Input from and following that meeting was used by the Drafting Team to refine the SFAS for review and finalization by the Core Group in early 2010.