

Good morning Mr. Chairman and members of the Committee. My name is Mike Carroll, and on behalf of the National Association of State Foresters, I am pleased to testify on H.R. 1904, the Healthy Forests Restoration Act.

I am representing NASF in my role as a member of their Forest Health, Fire and Research Committees. As Minnesota's State Forester, I am here to talk about some examples from my state where forest land ownership is a patchwork quilt of public lands administered by Tribes, the US Forest Service, the State and County Land Departments intermingled with privately held woodlots. In Minnesota, private and public foresters ply their trade across the forest spectrum: from urban yard tree, to shelterbelt, to working forest, to old growth and wilderness stands. We believe the titles in this bill are important, intertwined and will help us protect and improve the sustainability of multiple values in ecosystems dominated by trees.

NEED TO REDUCE HAZARDOUS FOREST FUELS

NASF is committed to the implementation of the 10-year Comprehensive Strategy for the National Fire Plan. The priorities of wildland-urban interface, municipal watersheds, pest outbreaks and weather-impacted areas are solid. We believe the Healthy Forest Restoration Act will support these efforts. The recognition of the need for ongoing maintenance of management actions is crucial.

This is not, however, just a western fuels issue. This Act helps to address the national need for active forest management across mixed ownerships. To protect the economic, social and ecological values coming from our forests, we need to improve in four areas: the upfront coordination of our planning and public outreach efforts; the timeliness of our response actions; improved restoration efforts; and commitment to the maintenance of mitigation efforts put in place. Our goal is to ensure the long term safety and health of communities and ecosystems in our care. Our need is to speed up our response process and hold it accountable.

The July 4, 1999 blowdown in Minnesota is a case study that demonstrates these needs, which I will cover after my general presentation.

BIOMASS

NASF supports forest biomass utilization. Making use of otherwise non-commercial wood products provides environmental benefits by locally producing renewable energy, lessening wildfire intensity and reducing the amount of carbon released to the atmosphere by wildfires. Research and development on the utilization of wood biomass is critical. In Minnesota, energy from wood could help bolster our mining industry and provide an outlet for the products produced by stand improvement techniques. Such selective thinning to reduce stand densities can also promote species and age class diversity while resulting in a more vigorous and resilient stand.

WATERSHED FORESTRY ASSISTANCE PROGRAM

The Watershed Forestry Assistance Program proposes technical and financial assistance for

forestry activities across all ownerships - public as well as private land - resulting in a huge public benefit. In the Northeast United States, almost 90% of the forests are privately owned. Protecting these watersheds is critical to maintaining the water supply of millions of Americans. NASF recommends its inclusion in any Healthy Forest legislation.

Currently, there is no program within the USDA Forest Service's authorities that directly supports watershed protection and restoration work on local community or private forest lands. While some programs have provided latitude to address watershed issues as an ancillary benefit, the limited authorizations make it difficult to focus work on a watershed scale, and often desired activities must be foregone because they are not covered by the authority.

The program will build and strengthen the ability of states, communities, and private landowners to mitigate water quality problems, restore watershed conditions, improve municipal drinking water and address threats to forest health.

? For example, the Chesapeake Bay Restoration project is an ongoing effort to restore the Bay watershed that could significantly benefit from the WFAP. Ten years in the making, multiple states and federal agencies have managed to work within existing authorities to provide limited assistance to rural landowners, but much more needs to be done. Current authorities only allow funds to be spent for projects on segments of the landscape, depending on land ownership and the specific purpose (such as tree planting or habitat improvement) of the program being used. Under the Watershed Forestry Assistance Program, much more could be done to improve the Bay watershed by providing assistance to communities and non-profit organizations, as well as non-industrial private landowners, to accomplish critical watershed protection and restoration needs.

? In the Midwest, the Upper Mississippi River Forestry Partnership provides another example. The WFAP would offer incentives to improve the forested watershed of the Upper Mississippi across all ownerships, a critical step to sustaining the Mississippi River for habitat, agriculture, recreation, transportation and economic endeavors. Clean water starts in the forest, be it our cherished Lake Superior or the headwaters of the mighty Mississippi in our Itasca State Park! Limited authorities are available to help us get this project started - we are currently in the planning stage - but the WFAP would provide the authority and funding needed to begin work on the ground.

? In the Lower Mississippi River Delta, another cooperative effort is underway with few resources to make it work. The states of Mississippi, Arkansas and Louisiana are working with the USDA Forest Service, Ducks Unlimited, and others to promote watershed restoration in the river delta. While programs are available through USDA to help with tree planting and wildlife habitat restoration, the partners cannot make a significant difference in the watershed of the delta using existing authorities. The goal is to restore the delta's natural hydrology. The WFAP could help make the idea become a reality.

? In the West, forest landowners in many states are attempting to improve habitat for threatened and endangered salmon listed under the federal Endangered Species Act. There are numerous examples of successful projects, however, inadequate technical and financial assistance severely limits the number of landowners that can be assisted and hampers efforts to address

issues on a watershed-wide basis.

As an example of the magnitude of need, in the State of Washington alone an estimated 8,000 forest road culverts need to be upgraded and replaced, at a cost of nearly \$400 million, to ensure adequate passage for threatened and endangered fish. Replacement of a single culvert may cost a landowner tens of thousands of dollars. Family forest landowners typically do not have the engineering expertise or fiscal resources to undertake these practices without some form of technical and financial assistance.

"In Minnesota, It All Comes Down to Water": that is the title of our Governor's Vision for Minnesota's Water Resources. This bipartisan effort, when supported nationally by the Healthy Forests Restoration Act, will protect and restore water resources in the state and region while preserving citizens' abilities to use and enjoy them in a sustainable manner.

IMPACTS OF FOREST PESTS ON HEALTHY FORESTS

My own academic and professional background is in Forest Health. Simply put, healthy forests are more resistant to insect and disease impacts. This title establishes an accelerated basic and applied research program, including the dissemination of results, to address key forest pest concerns in cooperation with scientists from universities, state agencies, and the private sector.

? Insects, diseases and fire do not recognize property boundaries. This is especially true in the east where federal landholdings are relatively small with large amounts of private landholdings interspersed with public lands. A clear example is Minnesota's Superior National Forest of 3.2 million acres with 1 million acres of intermixed state, county and private land. Forest management practices that allow fuel build-ups or insect and disease outbreaks on federal lands are more likely to impact adjacent state, county or private landholdings. St. Louis County alone manages 1 million acres of forest land.

? Management of pest outbreaks is time sensitive - many pests have short life cycles so populations can rapidly build to outbreak levels. Lengthy analysis procedures can delay treatment resulting in tree mortality that could have been prevented.

- o Minnesota has lost over one third of its balsam forest to spruce budworm.
- o Accelerated basic and applied research programs are critical to mitigating the devastating effects of forest pests such as the red oak borer. Drought and a combination of insects and disease have decimated over 400,000 acres of forests within the Ozark region of Arkansas and Missouri affecting tourism as well as local economies.

? Accelerating efforts to address invasive pests and providing additional assistance to manage pests across all ownerships is critical.

? Quick response to eradicate new, invasive pests is even more critical. Many times these pests have no natural enemies and can build quickly to outbreak levels making eradication impossible.

- o In Michigan and Ohio, emerald ash borer, an invasive insect, has killed over 12 million ash trees. This forest pest is of grave concern as it has already caused significant economic impacts to the nursery industry as well as municipal forestry programs.

- o Sudden oak death is affecting western states.
- o In Minnesota we are monitoring and treating gypsy moth in urban areas as needed. We have western bark beetles infesting our native tamarack. Our Twin Cities area is one of the largest handlers of crate and pallet material coming from the Pacific Rim; so we are greatly concerned about Asian Long Horned Beetle and the Emerald Ash Borer.

NASF strongly supports accelerating the work on these and other forest pests by the authorization and funding of this legislation.

CONCLUSION

The need to restore our forests and range lands to long term health has never been greater and needs to be addressed as a long term ongoing commitment by multiple partners. Minnesota has a unique delivery mechanism, our Minnesota Forest Resources Council, to carry out this challenge. This legislation promotes that view and enhances a process by which public and private land managers can respond in timely and coordinated efforts to improve forest health and benefit the public and the environment.

On behalf of the National Association of State Foresters, I urge the Committee to include all of the above programs in legislation to carry out the President's Healthy Forests Initiative. These measures are designed to address and improve forest health on public and private lands, consistent with the National Fire Plan 10-Year Strategy and Implementation Plan and targeted to meet critical forest health needs across the country.

Our abundant and magnificent forests helped to build our nation. Wise and sustainable forest policy will help to assure its continued strength. I thank the Committee for the opportunity to testify today, and I would be happy to answer any questions.

Attachment: Minnesota Case Study MINNESOTA CASE STUDY

On the afternoon of July 4, 1999, a rare "derecho" (straight line wind) event left significant blowdown damage in the Boundary Waters Canoe Area Wilderness (BWCA) and adjacent lands in Northeast Minnesota. This windstorm resulted in widespread blowdown and heavy fuel loading across 478,000 acres of the forest. Most was in the BWCA, but over 40,000 acres of managed state, county and NIPF forest were also impacted. It is important to stress that the affected area was the interface of designated wilderness, managed forests of mixed ownership and private recreational holdings.

Interagency cooperation produced an immediate "triage" response to the needs for search and rescue, opening roads, trails and portages and establishing defensible space and escape routes. Firewise, now a nationally accepted and honored program had real and immediate meaning to the emergency response professionals and cabin and resort owners in the affected area. To this day, the relationships built through the blowdown response remain strong and functional.

The blowdown situation created the potential for extreme fire danger conditions throughout the affected area with the potential to threaten lives and property inside and outside the BWCA. Adjacent urban interface areas along the Gunflint Trail corridor and other areas of development and high visitor use were impacted.

Blowdown events are not unusual in this area. The regional downburst storm of July 15, 1988, caused vast blowdown in the Boundary Waters. The down timber from such storms is often suspended above the ground for several years, where it significantly adds to existing local fuels. Windstorms of this type do not generally flatten whole forests. Instead they tend to blow down erratic swaths a few hundred feet wide of the oldest, tallest, or most exposed trees (Heinselman 1996). The Independence Day storm of 1999, however, did flatten whole forests over significant acreage. (See map.)

While this event predated the National Fire Plan, it is a continuing case study and working laboratory for the actions presented by the Fire Plan and it supports efforts mandated by the Healthy Forest Restoration Act.

Once the initial health and safety concerns were dealt with, an assessment of the extent of damage was produced and response plans developed. Key recommendations from the February 4, 2000 Fuels Risk Assessment document include:

? Opportunities for fuels treatment inside and outside the BWCAW, including harvest and Wildland Fire Use, should be pursued to help break up the continuity of the blowdown fuels.

? Opportunities for fuels treatment inside the BWCAW, including Wildland Fire Use and management ignited prescribed fire, should be pursued to help break up the continuity of the blowdown fuels.

? Opportunities for fuels treatment outside the BWCAW, should include the same options, and also include harvest.

? Each landowner needs to take whatever actions they are capable of to remove the hazardous fuels conditions around their structures to offer some protection from fast moving, high intensity fires.

? The U.S. Forest Service needs to continue to develop and implement fuel removal activities on their lands, with special attention to the areas west and south of the Gunflint Trail road. This should include management ignited prescribed fire and mechanical removal.

So how did the different agencies respond?

The Minnesota DNR, Division of Forestry, responded immediately with aerial and ground surveys that resulted in salvage timber sale auctions from July 13th to October 28th of 1999. Within the first year, 4,461 acres of blowdown were sold at a value of \$620,000. Sale operation began immediately and was completed within one year. The Division moved staff into the area to also assist non-industrial private forest landowners affected by the storm so that as much of the timber as possible was salvaged, the land reforested and fire hazards reduced. A tour for state legislators was held September 21-22, 1999.

The Cook, Lake and St. Louis county land management agencies also responded. As an example, Assistant Land Commissioner Mark Reed wrote:

"In all, St. Louis County Land Department addressed about 3,000 acres of blowdown in 1999 into 2000. To address the influx of damaged timber, the department added two additional timber auctions in 1999, with salvage operations occurring as quickly as possible.

"We looked for cooperative opportunities with Federal State, other County Departments and private entities to address this storm event. Salvage sales generated approximately \$400,000.

"The salvage operations addressed three equally important points. They not only returned those lands back into production sooner, but also reduced the threat of fuels build-up, insect infestation and the threat of catastrophic fires on the lands we manage."

The Superior National Forest staff used every method available in law to address their issues. They remained dedicated to the intent of the National Environmental Protection Act: public involvement and addressing the environmental impacts of their actions. The detail on their response is documented in the publication, AFTER THE STORM; A Progress Report from the Superior National Forest, July 2002.

There were obvious differences, however, in the process they had to follow and the timeliness of their response. Comments from Lake County Land Commissioner Tom Martinson are important to our support of the Healthy Forest Restoration Act:

"County and State land management agencies are able to act almost immediately to natural catastrophes because these agencies are allowed to acknowledge the fact that the condition of the forest that they manage has been completely changed. Guidelines normally utilized to mitigate any possible negative impacts of land management activities are often not realistic when the resource that you are committed to protect has already been drastically altered. The Forest Service has been kept from doing its job by restrictions that should not apply in the aftermath of a natural catastrophic event.

"Following a large blowdown event, foresters work tenaciously to set up reduced price stumps, loggers salvage timber at much reduced harvest rates under dangerous conditions, and mills accept damaged timber for as long after the blowdown as possible. Why don't foresters, loggers and industry just let the blowdown lay and harvest areas that are easier to access and easier to log? The foresters wouldn't have to work as hard, the logger would make more money and work in a safer environment and the mills would receive wood that is of higher quality. These people all make sacrifices after these events because they know what the alternatives might be. The downed wood can act as a breeding ground for insect infestations and disease. After a few years, the blowdown will greatly increase the fuel load which will be a fire hazard. Left as is, the blowdown vegetation will hinder regeneration for many years. Access through these areas is impossible without clearing. Clearing the land after the wood is non-merchantable is very costly.

"In non-federal areas of the forest, blowdown is salvaged as soon as possible. Agencies are paid a reduced rate for their stumps, loggers are paid for the timber they salvage and area mills have fiber or timber to produce needed products. The local economy benefits from the forest's resources. In a federal area of the forest, when the salvage is delayed, the Forest Service must pay a contractor to push the downed trees into a pile, at a high cost to the

taxpayer, where they can be burned. Area mills receive no fiber or timber. The local economy benefits little.

"Biodiversity, Sensitive, Rare and Endangered species, and archaeological sites should not be overlooked or ignored when salvaging blowdown or insect affected or diseased forests. On most public lands and on federal lands especially, most of this resource information of special areas is already available. Outside of these designated areas, immediate salvage should be the top priority.

"Federal foresters can get the job done if they are allowed to realistically assess the condition of the forest after a natural catastrophic event, protect known special resources and salvage affected merchantable timber as soon as possible. The ability to expedite Forest Service response time would benefit local communities and economies, improve access for recreational users and most importantly, greatly improve forest health which benefits everyone."

Problems also arose with small, scattered ownerships, not contiguous with allowed Federal cleanup, as documented by Cook County:

"Cook County had 300 acres of forest land that was directly hit by the blowdown in 1999. This land was not accessible without going through Federal land. I spent almost two years trying to get access through this land to harvest the county lands. Unfortunately, the system does not allow immediate response to such issues and there was timber that was lost. Any lands that the county had that had access and were affected by the blowdown (72 acres) were immediately addressed. The Forest Service process has too many steps and is not efficient when confronting a disaster such as the 1999 blowdown in the Superior National Forest. Thank you for carrying this information to Washington. Respectfully, Ted Mershon, Cook County Land Commissioner."

Once again, getting access through the Federal process was allowed for human health and safety response in a small portion of the blowdown, but access delays prevented timely forest restoration of county lands in other parts of the blowdown.

The Federal staff of the Superior National Forest are not to be criticized. They involved the public up front with meetings and tours. Their membership on the Minnesota Forest Resources Council gave them credibility with a wide variety of constituent groups across the spectrum of environmental to industrial concerns. They utilized Minnesota's Voluntary Best Management Practices Guidelines in providing timber salvage sales where operable. They invoked every emergency clause and Council of Environmental Quality decision they could. They produced an EIS for a portion of the blowdown in record time. They were able to treat 3,500 acres in a timely fashion, but it was only a small part of the 100,000 acres they wanted to treat in the same timeframe as the state and county.

In the end, however, mandated timelines and process steps did not modify the required analyses, valuable fiber resources were lost and the cost of fuels reduction and forest restoration went up. The very organizational capacity of the U.S. Forest Service to properly manage the blowdown and cooperate with its neighbors was greatly reduced by its own

paperwork and process requirements.

So what are the lessons learned from the Minnesota BWCA blowdown that support the passage of the Healthy Forest Restoration Act?

? Interagency relationships and functional cooperation are critical to responding to catastrophic events, protecting human health and safety, and restoring healthy forest ecosystems.

? Federal process needs to be streamlined to improve the U.S. Forest Service's ability to respond in concert with its neighbors, in a timely and cost effective manner.

? The restoration of healthy forests must include a continuing commitment to actively manage our forest ecosystems. Mother Nature bats first and last!!