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THE FOREST HEALTH CRISIS IN THE SAN BERNARDINO NATIONAL FOREST

OVERSIGHT FIELD HEARING

BEFORE THE

COMMITTEE ON RESOURCES
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

Monday, September 22, 2003, in Lake Arrowhead, California

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OVERSIGHT FIELD HEARING ON THE FOREST HEALTH CRISIS IN SAN BERNARDINO NATIONAL FOREST

Monday, September 22, 2003
U.S. House of Representatives
Committee on Resources
Lake Arrowhead, California

The Committee met, pursuant to call, at 1:02 p.m., in the Ballroom of Lake Arrowhead Resort, Lake Arrowhead, California, Hon. Richard W. Pombo [Chairman of the Committee] presiding.

Present: Representatives Pombo, Gibbons, Walden and Cardoza.

Also Present: Representative Lewis.

The CHAIRMAN. The Committee on Resources will come to order. The Committee is meeting today to hear testimony on the forest health crisis in San Bernardino National Forest.

STATEMENT OF THE HON. RICHARD W. POMBO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

The CHAIRMAN. Today, the Committee on Resources will take a closer look at one of the most prominent and ominous case studies in this nation's growing forest health crisis. As we will hear from an impression slate of witnesses today, Lake Arrowhead and her sister communities are teetering on the edge of catastrophe, ransacked by Bark Beetles, ravaged by drought and deprived of meaningful management for too long, this region's dangerously overgrown forests are an ill-placed lightning strike or an errant campfire away from the kind of catastrophic wild fire that has become all too common out West.

By now the consequences of large-scale catastrophic wild fire are known to everyone. Communities are displaced or worse. This summer, the mountain community of Summer Haven, Arizona tragically lost several hundred homes to a fast moving fire, a hotly destructive wildfire. Old growth forest ecosystems are annihilated.

In a field hearing earlier this summer, this Committee heard testimony from a Government witness who testified that Colorado's Hayman fire caused almost 100 percent mortality in several thousand acre stand of centuries old Ponderosa Pine. Many of the cathedral-like old growth that were destroyed were between 300 and 600 years old, among the oldest trees in the American Southwest.

Wildlife habitat is decimated on an enormous scale. Last summer's Biskit fire in Oregon scorched over 80,000 acres of old growth habitat to the endangered Northern Spotted Owl.

Arizona's Rodeo and Chedeski fire sterilized several hundred thousand acres of prime habitat for the federally protected Mexican Spotted Owl. These horror stories about the impact of wildfire on wildlife are far from unique or isolated.

Watersheds that provide clean drinking water to millions in the West are plundered by the mud, soot and ash that flow in the blackened wake of large wildfires. The Hayman fire dumped more mud and other contaminants into Denver's primary source of drinking water than had been deposited in the critical water source over the previous decade. In addition to jeopardizing the water source of millions, post-fire erosion and sedimentation also does irreversible damage to federally protected fish and other riparian life forms.

As we will hear today, Southern California' most important watershed and the fish and wildlife that rely on it for their habitat, face similar risks if bold and immediate action isn't taken.

Finally, each summer many wildland fire fighters lose their life. In the days just prior to a hearing in Congressman Walden's posted in Oregon last month, several battle weary fire fighters lost their life while returning home late one evening from fighting a wildfire. These are the tragic human and environmental consequences of the West's forest health crisis. Clearly, this disaster status quo is no longer acceptable.

That is why the House of Representatives passed the bipartisan Healthy Forests Restoration Act earlier this summer. This bipartisan bill would streamline the cumbersome bureaucratic procedures that currently force many projects like those desperately needed here in San Bernardino to endure a decisionmaking process that usually takes between three and 5 years. The slow-moving process is the primary reason that Federal foresters treat only about 2 million of the 190 million acres of forest lands at unnatural risk of wildfire each year.

When catastrophe is imminent, such a glacial decisionmaking process is wholly unacceptable. Our bipartisan legislation takes a balance and thoughtful approach to fixing this obviously broken process.

As a final point, I would note that one of the largely unheralded benefits of our broadly supported healthy forests legislation is that it will make the project planning process significantly more cost effective, thus freeing up tens of millions of dollars for forest health projects in the San Bernardino National Forest and elsewhere. The Chief of the Forest Service has said that his Agency's line officers spend over 50 percent of their time, energy and resources on planning, paper shuffling and other bureaucratic functions, a particularly shocking number in the current fiscal environment.

A report published by the Forest Service last year concluded that streamlining the Forest Service's administrative procedures in ways like these outlined in Healthy Forests legislation could free up $100 million for more worthy on-the-ground pursuits, like protecting our forests and communities from catastrophic wildfire.

While substantial, these cost savings won't be enough in and of themselves. That is why the President and supporters of the Healthy Forest legislation of Congress have vowed to fund this program in a significant way, when enacted. That is a commitment I share and a commitment I look forward to acting on after the President signs this important environmental legislation into law.

It is with that I thank our witnesses and those in the audience for joining us today and I look forward to this important hearing. I'd like to ask unanimous consent that our colleague, Mr. Jerry Lewis, be allowed to sit on the dais and participation in the hearing, without objection.

With that, I'd like to recognize our colleague and our host for the event, Mr. Lewis.

[The prepared statement of Chairman Pombo follows:]

Statement of The Honorable Richard Pombo, Chairman, Committee on Resources

Today the Committee on Resources will take a closer look at one of the most prominent and ominous case studies in this nation's growing forest health crisis. As we will here from an impressive slate of witnesses today, Lake Arrowhead and her sister communities are teetering on the edge of catastrophe. Ran-sacked by bark-beetles, ravished by drought, and deprived of meaningful management for too long, this region's dangerously overgrown forests are an ill-placed lightening strike or an errant campfire away from the kind of catastrophic wildfire that has become all-too-common out West.

By now, the consequences of large-scale catastrophic wildfire are known to everyone.

Communities are displaced—or worse. This summer, the mountain community of Summerhaven, Arizona, tragically lost several hundred homes to a fast moving and hotly destructive wildfire.

Old growth forest ecosystems are annihilated. At a field hearing earlier this summer, this Committee heard testimony from a government witness who testified that Colorado's Hayman fire caused almost 100 percent mortality in a several thousand acre stand of centuries-old ponderosa pine. Many of the cathedral-like old growth that were destroyed were between 300 and 600 years old, among the oldest trees in the American Southwest.

Wildlife habitat is decimated on an enormous scale. Last summer's Biscuit Fire in Oregon scorched over 80,000 acres of old growth habitat for the endangered Northern Spotted Owl. Arizona's Rodeo-Chediski fire sterilized several hundred thousand acres of prime habitat for the federally protected Mexican Spotted Owl. These horror stories about the impact of wildfire on wildlife are far from unique or isolated.

Watersheds that provide clean drinking water to millions in the West are plundered by the mud, soot and ash that flow in the blackened wake of large wildfires. The Hayman fire dumped more mud and other contaminants into Denver's primary source of drinking water than had been deposited in that critical water source over the previous decade. In addition to jeopardizing the water sources of millions, post-fire erosion and sedimentation also does irreversible damage to federally protected fish and other riparian life forms. As we will here today, southern California's most important watershed, and the fish and wildlife that rely on it for habitat, face similar risks if bold and immediate action isn't taken.

Finally, each summer, many wildland firefighters lose their life. In the days just prior to a hearing Congressman Walden hosted in Oregon last month, several battle-weary firefighters lost their life while returning home late one evening from fighting a wildfire.

These are the tragic human and environmental consequences of the West's forest health crisis. Clearly, this disastrous status quo is no longer acceptable.

That is why the House of Representatives passed the bipartisan Healthy Forests Restoration Act earlier this summer. This bipartisan bill would streamline the cumbersome bureaucratic procedures that currently force thinning projects, like those desperately needed here on the San Bernardino, to endure a decision making process that usually takes between 3 and 5 years. This slow moving process is the primary reason that federal foresters treat only about 2 million of the 190 million acres of forestlands at unnatural risk to wildfire each year. When catastrophe is

imminent, such a glacial decision making process is wholly unacceptable. Our bipartisan legislation takes a balanced and thoughtful approach to fixing this obviously broken process.

As a final point, I would note that one of the largely unheralded benefits of our broadly supported Healthy Forests legislation is that it will make the project planning process significantly more cost effective, thus freeing up tens of millions of dollars for forest health projects on the San Bernardino National Forest and elsewhere. The Chief of the Forest Service has said that his agency's line officers spend over 50 percent of their time, energy and resources on planning, paper-shuffling and other bureaucratic functions—a particularly shocking number in the current fiscal environment. A report published by the Forest Service last year concluded that streamlining the Forest Service's administrative procedures, in ways like those outlined in the Healthy Forests legislation, could free-up $100 million for more worthy on-the-ground pursuits, like protecting our forests and communities from catastrophic wildfire.

While substantial, these cost savings won't be enough in-and-of themselves. That is why the President and supporters of the bipartisan Healthy Forests legislation in Congress have vowed to fund this program in a significant way, if enacted. That is a commitment I share, and a commitment I look forward to acting on after the President signs this important environmental legislation into law.

It is with that that I thank our witnesses and those in the audience for joining us today. I look forward to this important discussion.

STATEMENT OF THE HON. JERRY LEWIS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. LEWIS. Thank you very much, Mr. Chairman and Members of the Committee.

We'd all like to begin by expressing our deep appreciation to the Committee and the Members for coming to beautiful downtown Lake Arrowhead and the San Bernardino National Forest. This is truly one of the most magnificent recreation areas in the entire country and the forest itself has been noted for its beauty for decade after decade. And as a result of that, we have visitors who come from all over the country particularly in these large numbers from Southern California.

In recent years, however, the Lord has not exactly been with us, for drought has been present for about 5 years. With that, the Bark Beetle which is ever present in the forest has had its own way and as you can see from these pictures and I know that you have seen it from the air, your staff flew over by way of helicopter yesterday, literally millions of trees standing beautiful, beautiful pine trees standing dead.

As you know, over a number of years and it takes many years to remove these trees, there's bound to be fire. A lightning strike just at any moment could lead to a devastating fire, but I must mention to you that a rather amazing cooperative effort has gone together in our region and our station in connection with this crisis.

About three or 4 weeks ago we had a relatively minor fire. It covered about 1500 acres. If everybody had not been ready, willing and capable of responding the way they did that fire could have reached the forest and we might not be having this hearing today.

I might mention in connection with that, a lot of people were evacuated from their home and I want to mention that Wayne Austin manages this wonderful facility and Mr. Austin opened the doors of the facility, charging those who needed to stay like Motel 6 rates, and literally accommodated many, many of those who were

otherwise without a home. Phenomenal response across the community to this crisis.

So far your Committee, as well as the Congress, has stepped up its level of interest and concern. The support from your staff, I just cannot express enough appreciation for. The Secretary of Agriculture came to the region and gave it a high priority in terms of the Administration's beginning to understand how severe it is.

With that, Mr. Chairman, I very much appreciate your allowing me to be with you. The witnesses are the most important, but I wanted to mention just one more thing, my friends from Lake Arrowhead and the mountains who are the audience. The Chairman told me that he sent me a notice, somehow much staff didn't let me know it, that is, on few hearings where we're doing real work, the Chairman does not wear a tie and he warned me of that according to his statement earlier, so in deference to my Chairman, thank you very much.

[Applause.]

The CHAIRMAN. I don't wear it unless I have to. Well, thank you very much. Obviously, this is an issue that Jerry has brought to the Committee's attention many times in the past and we've talked quite a bit about the condition in the forest that he represents and it's our pleasure to have the opportunity to be here and to learn more from the people out here on the ground.

I'd like to recognize Congressman Cardoza for an opening statement.

Mr CARDOZA. Thank you, Mr. Chairman. I'm going to not read my prepared opening statement because I think what you've said previously really does cover this for the most part. I'd just like to thank you for the work you've done in trying to save important national forests like this one and the work that this Committee has done. And also thanking Mr. Lewis for bringing this to our attention.

I think what you've talked about, about the healthy forest building, a bipartisan bill, it should be a bipartisan bill. You can't drive up here and see the devastation in this forest and see the pictures that are on the wall without thinking that something serious needs to be done and that we need to take some correction action. So thank you for the work you've done and I look forward to the testimony here today.

The CHAIRMAN. Thank you. Congressman Gibbons.

Mr. GIBBONS. Again, Mr. Chairman, I will also submit my written testimony for the record, only to reiterate what every one of us in this room knows by being here today is that the demands are no longer casual with what we have before us in this forest health problem and crisis. They are no longer casually to be looked upon and put off for a time. They demand action. They demand action now, not later and you can see that if we don't do something the rapidity of which this disease and the dead trees will expand throughout not only this forest, but all forests, will certainly take what we know and what we love as our national forest system and put it into the charcoal bin because any fire will rapidly through this, taking lives, taking homes, taking property, taking recreational opportunity, taking the ecosystem which supports many of us along with it.

So Mr. Chairman, I think the urgency by which we must address the health, not only Southern California's forests, but all the forests in this country, demand rapid action and I want to thank you for your leadership on this. I want to thank you for having this hearing and I look forward of our witnesses today and I would like to welcome them when they appear.

Thank you.

The CHAIRMAN. Congressman Walden?

Mr. WALDEN. Thank you very much, Mr. Chairman. I want to thank Congressman Lewis for inviting us to come to his District to see this great part of the world. I also want to point out I got the memo, I read the memo, I didn't wear the tie so your memos are always noted.

Mr. Chairman, as one of the co-sponsors of the Healthy Forest Restoration Act, I'm pleased that we are here today to see first hand what other forests around the country are facing.

I represent a District in Oregon, as you know, Mr. Chairman, that suffered from severe fires last year. Mine and part of a colleague's of mine saw over 500,000 acres burn in one fire alone, the Bisket fire you referenced in your testimony, consuming 80,000 acres of Spotted Owl habitat, but burning more than 500,000 acres of Federal forest lands, costing taxpayers $150 million to extinguish.

This summer, we had another fire in the heart of my District that we all smelled the smoke of when we had a hearing in Redmond. That fire, the B&B Complex, has now consumed 91,000 acres and worse, it has destroyed areas that go up into the watersheds.

There was an AP story this weekend pointing out that a hydrologist, Kerry McCallum, says that B&B was higher in the watershed than the other fires in the area and therefore, this area is going to suffer from extraordinary erosion and obviously the mudflows like we heard about in Colorado.

This has to stop. We all know that if this was our backyard, we'd go out and prune and thin and clean up the dead and dying timber. And the problem we face from the Federal Government standpoint is that so many of these projects, when proposed by the Forest Service are appealed by a limited number, a handful of interest groups. And in fact, General Accounting Office found that 59 percent of the appealable thinning projects in America's forests were appealed, 59 percent.

The Chief of the Forest Service has told us before that his people have to do five or six alternatives knowing full well, for every project they want to do, knowing full well that most of those alternatives will never be seriously considered.

So we're wasting a lot of time and money while our forests burn and as a native Oregonian I prefer my forests green and healthy, not black and dead. These are our American forests. If this was public housing, I think we'd be accused, as stewards, of being slumlords because these forests are disease-ridden, bug-infested and subject to catastrophic fire.

And so we have to do better. We have to change the law so that our professional foresters can do the work they need to do, so we have healthy, green sustainable forests for generations to come.

Thank you, Mr. Chairman.

[Applause.]

The CHAIRMAN. Thank you. As I introduce our first Panel of witnesses, I would state that this is an official hearing of Congress and one of the things that this Committee has tried to do over the past several months is to be much more active in getting Congress outside of Washington and going out and learning for ourselves, looking at what's happening and hearing from people who may normally not have an opportunity to testify before a congressional hearing.

We've had a number of field hearings all over the country and this is part of that effort, but it is an official hearing of Congress. As a result of that, I would request that the audience maintain the decorum that is necessary and required by House rules during the hearing. As part of that, you will hear a number of witnesses today. Some you will agree, some you won't agree with. But I would ask that the audience not show any favoritism or negative to any of the witnesses that are here today in order to maintain the decorum here. So I would request that you not show responses from the audience.

I'd like to introduce our first Panel of witnesses. We have Mr. Jack Blackwell, Regional Forester, Pacific Southwest Region, U.S. Forest Service; accompanied by Mr. Gene Zimmerman, Forest Supervisor, San Bernardino National Forest, U.S. Forest Service.

Mr. Blackwell, welcome.

STATEMENT OF JACK BLACKWELL, REGIONAL FORESTER, PACIFIC SOUTHWEST REGION, U.S. FOREST SERVICE; ACCOMPANIED BY GENE ZIMMERMAN, FOREST SUPERVISOR, SAN BERNARDINO NATIONAL FOREST, U.S. FOREST SERVICE

Mr. BLACKWELL. Thank you, Chairman Pombo, Members of the Committee, Congressman Lewis, I'll submit my formal testimony for the record and try to summarize it as quickly as I can.

We thank you for the opportunity to talk about our forest health crisis and the urgent need to treat our national forests. The Lake Arrowhead is at the heart of the most serious forest health situation in California. In my 35 years of Federal service, I have never seen a more serious situation where human lives are so threatened by wildfire. The Department supports the Healthy Forest Initiative and H.R. 1904, the Healthy Forests Restoration Act of 2003.

Historically, the mixed conifer forest here was quite open with mostly larger trees. A lack of natural fire or active management has changed those conditions for the worse. The forest is now choked with mostly smaller trees, often hundreds per acre. The result is a tremendous buildup of hazardous fuels. An unprecedented 4-year drought has weakened the trees and brush allowing the Bark Beetles and disease to reach epidemic proportions. Four hundred seventy-four thousand acres, this is a little figure that's just been arrived at through inventory this past week, 474,000 acres of public and private lands are experiencing severe tree loss that poses an extreme threat to life and property.

The mountain communities have nearly 100,000 structures worth approximately $8 billion and 100,000 people live within this forest boundary and 24 million live within a 2-hour drive.

Two weeks ago, not far from here, the 14,000-acre Bridge fire forced the evacuation of 1,500 people and closed one of three mountain community evacuation routes for over a week. The combined response to this fire was a very successful dress rehearsal for the fire we hope we never see. The pre-planning work was exceptional and the fire suppression work was outstanding. Every single person evacuated returned to their homes safe and sound.

I believe the Healthy Forest Initiative will play a key role in helping us avoid potential disasters such as the one threatening San Bernardino today. It's a common sense approach that restores forests and range land health and reduces the threat of catastrophic fire to communities and natural resources.

Forest health problems do not recognize ownership boundaries. That means the public and private partnership is essential in tackling the threat. The forest has forged such a partnership with state and local governments and the private sector. Two inter-agency organizations have evolved from this partnership, one in Riverside and one in San Bernardino County. They are called Mountain Area Safety Task forces or MAST and have a wide range of committed partners that I have outlined in my written testimony.

Working with local stakeholders, the MASTs have developed a comprehensive, three-part strategy to address the public safety and forest health issues. The strategy focuses on emergency preparedness, protecting communities and evacuation routes and on longer term needs. Implementing this strategy will significantly reduce the threat to communities and natural resources and restore healthy forest conditions. I believe this strategy is an excellent model for other areas of the nation.

I'd like to especially acknowledge the work done by Fire Safe Councils in relaying information to communities and in developing community-based solutions and the contribution of MAST partners, ESRI and Southern California Edison.

In terms of emergency preparedness, the San Bernardino National Forest has nearly 40 percent more fire fighting capability than it did just 3 years ago, thanks to the National Fire Plan. Our region is also providing additional engine and crews on an as-needed basis down here.

The California Department of Forestry has also significantly increased their fire fighting resources and has provided other vital support as I'm sure my colleague, Andrea Tuttle, Director of CDF, will discuss.

The Forest Service has increased its fire prevention resources and has redirected $3.2 million in state and private forestry assistance that help local communities. The Forest here has a $9 million budget this year for treating hazardous fields. In cooperation with its partners, the priority is to improve safety along the evacuation routes and protect communities by reducing fields around them.

The Forest Service has projects completed or underway that improve safety along 111 miles of evacuation routes, reduce fuels on 12,800 acres and protect critical communication sites. Critical work is also being expedited through special emergency exemptions for contracting and use of categorical exclusions to speed the planning process and the use of emergency consultation process for ESA consultations.

The Forest Service will be taking advantage of the new categorical exclusions the Healthy Forest Initiative has made available. We are making good progress, but there's much more to do. In the long run, to be successful, we must actively manage the forest if we are to restore the forest to health, reduce the threat of large catastrophic fires and provide long-term protection to communities and watersheds.

That means stemming of dense stands of trees not only near communities and along roads, but in the rest of the forest. It will require a long-term effort, one for which the Forest is already planning. It took years for the forest to get into the condition that it is in and it cannot be fixed overnight.

I am very concerned that our experience on the San Bernardino will happen again in many other areas of California. We have millions of acres of national forest in California that are dense and overgrown. Given the rapid growth of communities in California's wildlands, those conditions create the potential for some truly disastrous wildfires. This is especially true in the Sierra Nevada.

We have seen glimpses of that future in the 2001 McNalley fire which burned 150,000 acres in the total perimeter. It threatened three giant Sequoia groves, several communities and forced the evacuation of 2,000 people.

We must find other ways to actively manage the forest, stem overcrowded stands and return the forest to health. And when wildfires will occur, we must continue to respond quickly and effectively.

We are making good progress in California. Thanks to National Fire Plan funding, we have reduced fuels in almost a quarter of million acres of California's national forests and expect to complete another 75,000 acres this fiscal year.

Nearly two-thirds of those treatments are in the wild land urban interface. We have made significant increases in our fire fighting resources and over the past 2 years the Forest Service has provided 191 grants, totaling over $11 million to local communities and organizations to help reduce wildfire hazards.

We are proposing changes to the 2001 Sierra Nevada Forest Plan amendment that will improve our ability to reduce fuels and protect old forests. We have already reviewed the Northwest Forest Plan in California and are looking at changes to help reach the goal of healthier forests more quickly there.

We look forward to using the tools provided by the Health Forest Initiative. These will improve our ability to actively manage forests. We continue to work closely with our Federal, state and local partners at the forest level and throughout the California Fire Alliance at the state level.

A number of Fire Safe Councils is growing across the state. These community-based organizations are doing excellent work. They're increasing the awareness of the problem and they're helping local residents take action to reduce the risk of wildfire to themselves and others.

As our Chief, Dale Bosworth, observed in his August testimony to you, it will take decades of work to restore these forests to healthy conditions, providing our society is willing to focus on this issue over time and commit the needed resources.

We must take a comprehensive, strategic approach and have all the necessary tools available to actively manage the land. We also must work cooperatively to draw on the strengths of all involved.

I am committed to doing everything I can to avert disaster in Southern California and to restore California's national forests to healthy conditions. The San Bernardino National Forest is a wake up call we all must heed.

This concludes my testimony. I'd like to thank you for the opportunity to be here today before Supervisor Zimmerman and I'd be happy to answer any questions.

[The prepared statement of Mr. Blackwell follows:]

Statement of Jack Blackwell, Regional Forester, Pacific Southwest Region, Forest Service, U.S. Department of Agriculture

Chairman Pombo and members of the Committee, thank you for the opportunity to talk with you about the forest health crisis we face on the San Bernardino National Forest and the urgent need to treat our national forests to reduce the severe threat of catastrophic wildfire. I am also pleased that you chose Lake Arrowhead as the location for this hearing since this community and its residents are located at the heart of an environmental crisis. I have with me today Gene Zimmerman, Forest Supervisor for the San Bernardino National Forest.

As the Forest Service has testified before the House of Representatives and the Senate, the Department of Agriculture strongly supports the President's Healthy Forests Initiative and H.R. 1904, the Healthy Forests Restoration Act of 2003.

Background

At 672,000 acres, the San Bernardino National Forest is not one of the nation's largest national forests, but with 24 million people living within a two hour drive, it is certainly one of the nation's most heavily used forests. It provides some of southern California's most valuable recreational open space in an ever-expanding sea of urban development, and it also contains otherwise dwindling habitat for wildlife and plants, 40 of which are considered threatened or endangered species.

The San Bernardino National Forest is going through a significant cycle of drought-related, vegetation mortality. As of July 2003, approximately 474,000 acres in the San Bernardino and San Jacinto Mountains on both private and public lands were experiencing severe tree loss, ranging from ten percent of all the trees in a given area to 100 percent. The four-year drought has weakened trees and brush allowing bark beetles, root disease and dwarf mistletoe to reach epidemic proportions.

Historically, this forest was fairly open, with mostly larger trees. Today, a very different forest, one choked with mostly smaller trees—often hundreds per acre—all competing for limited moisture and nutrients. Much of the area is in the mixed conifer forest type in which frequent wild fire is a natural event. However, much of this forest has not burned in 90 to 120 years, an average of three to four skipped fire cycles. The result is a tremendous build-up of hazardous fuels. Using prescribed fire to reduce the fuels has been difficult because of the risk to communities within the national forest boundaries.

Mechanical removal of the fuels has not kept up with the fuel build-up for several reasons. Some community covenants have restricted landowners since the 1920's from tree removal activities on private land within the National Forest. The Forest has not had an active timber harvest program for nearly 10 years. There are no lumber mills in southern California and now the current removal of dead and dying trees is difficult and expensive.

Approximately 100,000 people live within the Forest boundary. If a large fire occurs, it is likely to threaten the lives of many residents and forest visitors. The mountain communities have nearly 100,000 structures, assessed by the San Bernardino County Assessors Office at approximately $8 billion. The dead trees and vegetation mortality lead to an increased risk of catastrophic wildfires that likely would threaten life and property and could damage public utilities and other infrastructure.

Two weeks ago, the 1,400 acre Bridge Fire at the foot of the mountain forced the evacuation of 1,500 people and closed one of three key mountain community evacuation routes for over a week. I am very proud of the hard work of the Forest Service staff and our partners during this fire and in the months before. Every single person evacuated from Running Springs during the Bridge Fire was able to return safely

to their home. The pre-planning that went into fighting this fire was exceptional and was the deciding factor in bringing that fire to a safe end.

The President's Healthy Forest Initiative would play a key role in helping us avoid situations such as we see on the San Bernardino National Forest today. The initiative is based on a common-sense approach to reducing the threat of catastrophic wildfires by restoring forest and rangeland health and ensuring the long-term safety and health of communities and natural resources in our care.

Cooperation is Key

The forest health situation in the San Bernardino and San Jacinto mountains does not recognize ownership boundaries or agency responsibilities. That means a public and private partnership is critical in providing an integrated and coordinated approach to address the crisis Forest-wide.

The San Bernardino National Forest has forged such a partnership with State and local government agencies and private sector. There are two interagency organizations that evolved from that partnership, the Riverside County and the San Bernardino County Mountain Area Safety Task Forces or MASTs. Each MAST includes representatives from individual agencies and organizations such as the USDA Forest Service, California Department of Forestry (CDFFP) county fire, sheriff and solid waste management, CalTrans, air quality management districts, municipal fire and water districts, state and county offices of emergency services, Environmental Systems Research (ESRI) and Southern California Edison.

Working with stakeholders in local communities, the MASTs have developed a comprehensive strategy to address the public safety and forest health issues on both public and private land. The foundation of the strategy is to collaboratively develop one plan, and then implement the plan based on each agency's jurisdiction and resources. Implementing this strategy will significantly reduce the threat to people and communities as well as to the environment, and will restore the forest to more healthy conditions. This is one of the most extensive, pre-event planning efforts to ever take place for a national forest and its surrounding communities. I believe it is an excellent model of collaboration for other areas in the nation.

The MASTs strategy has three parts:

- Emergency Preparedness Response—Develop and implement a coordinated plan with other emergency response agencies which provides for public and employee safety by identifying evacuation routes, staging areas, and safety zones;
- Fuel Reduction Around Communities and Key Evacuation Routes—Remove extreme levels of fuel around community's public infrastructure and key evacuation routes; and
- Long-Term Planning and Treatments—Actively manage national forest lands to improve stand vigor and restore forest health. Encourage and assist homeowners in clearing vegetation and removing excess trees on their property.

The contribution and dedication to the cause of all of the involved partners is noteworthy. The generosity of ESRI and Southern California Edison are notable examples. ESRI has provided essential technical assistance and Geographical Information Systems software. The company has assigned its best people to assist the MASTs efforts and has provided computer mapping software and assistance so valuable its worth would be difficult to calculate.

In April 2003, the California Public Utilities Commission (CPUC) directed Southern California Edison and other utilities in the affected counties to take action to remove trees that could fall on power lines, recognizing the danger they pose. Southern California Edison's contribution to removing dead and dying trees in both public and private lands in the San Bernardino and San Jacinto mountains alone will be over $300 million and includes reimbursing homeowners for doing this work.

The forest health partnerships on the San Bernardino National Forest go beyond financial commitments. Firesafe Councils are playing an essential role in relaying information to communities and thousands of interested citizens, and in developing community-based solutions and priorities. The MASTs rely heavily on their help. The San Bernardino National Forest Association's Fire Education Volunteers and Volunteer Fire Lookouts, and CDF"s Volunteers in Prevention provide countless hours and effort dedicated to educating the public about fire prevention. All of these groups are vital to the public understanding and support necessary for the overall long-term success of the strategy.

Emergency Preparedness Response

Southern California wildland firefighting capability is already considered to be one of the highest in the country on a "normal" fire year. Since 2001, fire suppression resources on the San Bernardino have increased by nearly 50 percent as a result of the National Fire Plan, providing additional aircraft, engines and

crews. Moreover, fire suppression resources from other national forests are rotated through San Bernardino National Forest as they are needed. The CDFFP has increased their fire fighting resources by 25 percent in southern California. CDFFP has also supplied a crew to assist making evacuation routes safer, and is providing direct assistance to private landowners.

This year the Forest Service to date has redirected $3.2 million in State Fire Assistance and Community Protection/Community Assistance funding for wildfire prevention and hazardous fuels reduction for communities in the San Bernardino National Forest areas. In an attempt to reduce human-caused fire ignitions, the Forest has also increased the fire prevention workforce and supplemented that workforce with additional resources such as volunteers and grassroots organizations.

Fuel Reduction Around Communities and Key Evacuation Routes

The San Bernardino National Forest has also been approved for $9 million in hazardous fuels treatment for the current fiscal year. The San Bernardino National Forest, in cooperation with its state and local partners, is moving forward with work to remove dead trees along evacuation routes and reduce fuel hazards. The San Bernardino National Forest has five projects underway or completed that will help make 111 miles of roads safer to use as evacuation routes. It has 13 fuel reduction projects underway or completed that treat 11,600 acres, and is in the planning stages for two more projects covering 1, 200 acres. These projects will enhance protection of local communities and homes. Four projects are underway that provide added protection for critical communication sites.

The San Bernardino National Forest is expediting this critical work in several ways, requesting and receiving a special exemption to shorten the contracting process. The San Bernardino National Forest has worked with the U.S. Fish and Wildlife Service to develop a Memorandum of Understanding to expedite the consultation process and has been using the emergency consultation process and timelines whenever possible.

The San Bernardino National Forest has used categorical exclusions contained in its National Environmental Policy Act (NEPA) procedures for timber stand and wildlife habitat improvement to expedite environmental review on seven projects and decisions issued before March 10, 2003, that have avoided sensitive species, threatened and endangered species, and archaeological resources. In the future, the newly finalized categorical exclusions for fuels treatments provided by President's Healthy Forest Initiative will further increase the San Bernardino National Forest's capability to do urgently needed fuels treatments.

The San Bernardino National Forest has made good headway, but there is much more to do. In 2004 the Forest will continue these types of projects, treating additional acreage and maintaining work completed earlier to reduce the fuel load in the Wildland Urban Interface (WUI). The San Bernardino National Forest is working with the communities to design and implement demonstration projects to show what a healthy forest really looks like.

Long-Term Planning and Treatments

During the last year, the focus of work by the MASTs has been on meeting essential, immediate public safety needs. The San Bernardino National Forest is now beginning to plan for the long-term work that must be done. Active forest management is critical to improving stand vigor, minimizing vegetation mortality, and reducing the threat of large stand-replacement fires. That means thinning dense stands of trees. It took a long time for the San Bernardino National Forest to get into this unhealthy forest condition and it cannot be fixed overnight. It will take a lot of time and effort by the Forest Service and its partners to return the Forest to a healthier condition.

Looking Beyond the San Bernardino NF

I am very concerned that what we are seeing on the San Bernardino National Forest will happen again in many other forested areas in California. Forest conditions—dense and overgrown—on other national forests in California are similar to those on the San Bernardino. Those ecological conditions, combined with the massive influx of people into California's wildlands and the rapid growth of communities in and around those wildlands, particularly in the Sierra Nevada, have created the potential for truly disastrous wildfires.

Many of California's national forest ecosystems have evolved with fire. However, as we have seen on the San Bernardino National Forest, in many areas we cannot rely on fire to restore them to healthy conditions. The risk is too great, the forests are too dense, there is too much fuel, and too many people living too close to the forests. Under these conditions we must find other ways to actively manage the

forests, thin the over-crowded stands and return the forests to health. When wildfires do occur, we need to continue to respond quickly and effectively.

We are making good progress throughout California:

- Over the past two years, we have reduced fuels on almost a quarter of a million acres of California's national forests and expect to treat another 75,000 acres in 2003. Nearly 75 percent of those treatments are in the WUI;
- We have significantly increased our wildland firefighting resources and provided 191 grants totaling over $11 million to local communities and organizations, helping them reduce wildfire risk. For example, this year the San Bernardino National Forest awarded $800,000 in grants to local counties and Fire Safe Councils;
- We are proposing changes to the 2001 Sierra Nevada Forest Plan Amendment. I feel strongly that these proposed changes will improve our ability to reduce fuels and protect old forests, wildlife habitats, watersheds, and communities. We will continue to place priority on treatments in the WUI and treat sufficient area in the wildlands to ensure success in the urban interface;
- The Pacific Southwest Region recently completed a review of the Northwest Forest Plan Forests in northern California. We found problems similar to those we found in the Sierra Nevada, and we are now working with local Tribes, counties, and interest groups to make changes that will help us reach our goal of healthy forests more quickly and efficiently;
- We are looking forward to applying the tools provided by the Healthy Forest Initiative. These will improve our ability to actively manage forests and reduce dangerous accumulations of hazardous fuels with greater speed and efficiency and better protect watersheds and habitat; and
- We are working closely with our federal, state and local partners at the Forest level and, through the California Fire Alliance, at the state level to better coordinate our efforts. The number of Fire Safe Councils is growing across the state. These community-based organizations are doing excellent work in increasing awareness of the problem and helping local residents take action to reduce the wildfire risk to themselves and others.

Summary

The forest health situation on the San Bernardino and throughout the Pacific Southwest Region is very dynamic. The key to avoiding potential catastrophic wildfire is by taking a comprehensive, strategic approach with all involved organizations, and having all the necessary management tools available to use. Long-term success will also require building and maintaining relationships and cooperative planning that draws on the strengths of everyone involved.

I am committed to doing everything I can to avert disaster in Southern California and restore the rest of California's national forests to healthy conditions. The San Bernardino National Forest is a wake-up call we must heed. This concludes my testimony. Both Forest Supervisor Zimmerman and I would be happy to answer any questions the Committee might have.

The CHAIRMAN. Thank you and Mr. Zimmerman, I understand you're here to help answer questions, specifically with San Bernardino Forest.

Mr. ZIMMERMAN. That's correct.

The CHAIRMAN. Mr. Blackwell, in your testimony you talk about the density on the forest and that there were hundreds of trees per acre. What would be a more natural stand in this forest here?

Mr. BLACKWELL. One size doesn't fit all, but I know we'll have some other experts today who may wish to query on that, but 40 to maybe a high of a 100 trees per acre with most of them at the lower end, perhaps 40 trees per acre.

The CHAIRMAN. Talking about taking aggressive action on our forests, if we don't—if Congress and the Federal Government doesn't step forward at this point, what do you predict and I know that's a difficult thing to do, but what do you predict would happen with this forest here if we're not taking action and doing the kind of things and giving you the ability to do the things you need to do?

Mr. BLACKWELL. Well, the worse case is serious loss of life and property and if we don't take action, sooner or later that's going to happen. We know these fires today have more resistance to control, they burn hotter with more intensity, they're more difficult to put out. We see that across the West and this national forest is no different. The situation here though is far more serious with these 100,000 people living within the boundary.

The CHAIRMAN. In terms of the investigation and the insect infestation, if we don't take some kind of action, Forest Service doesn't take some kind of action, and that continues to spread, does it not just kill off the forests?

Mr. ZIMMERMAN. Conceivably, the worse case scenario we could be left with a forest with no conifer trees or at least very few.

The CHAIRMAN. What would replace it?

Mr. ZIMMERMAN. Brush, shrubs, perhaps a few small trees, hopefully a large reforestation program, a lot of slash on the ground, incredible hazard for fire in the meantime.

The CHAIRMAN. What impact would that have on watershed?

Mr. ZIMMERMAN. I think you'll hear later today from a person involved in the Santa Ana Watershed and some of the reading that I've done is catastrophic effects on some of the watersheds, particularly if there's a large fire, in terms of the downstream effects on water quality as well as the cost to treat that water, so it's usable downstream.

The CHAIRMAN. Just refresh my memory, approximately how many acres is the San Bernardino forest?

Mr. ZIMMERMAN. Slightly over 800,000 acres gross, about 200,000 of that is private land, so there's about a 640,000 acres net national forest land inside the boundary.

The CHAIRMAN. So a lot of the private land that is held within the forest are the areas that are inhabited?

Mr. ZIMMERMAN. Yes.

The CHAIRMAN. And one of the things that has been proposed and people have talked about is just limiting the treatment of the forest and the public lands to within a half a mile of the urban wild land interfaces, as they call it.

In a forest like the San Bernardino forest, what impact would that have if we limited the ability to treat within a half mile of the urban areas and what impact would that have if we did have a catastrophic fire?

Mr. ZIMMERMAN. First of all, I don't believe that narrow a protection zone around the forest will provide adequate protection. Many of these fires start down in what we call the front country, down in the chaparral, down below, and by the time they move up the hillside under or across the hillside coming up the slope, they have a pretty wide front and when they hit the top or hit the private land with that real wide front it spreads the fire fighting resources very thin. It also puts a lot of community buffer boundary at risk and the probability of us being able to contain a fire of that narrow boundary would be very, very low.

The CHAIRMAN. Thank you. Mr. Cardoza?

Mr CARDOZA. Thank you, Mr. Chairman. Sir, if we were to engage in different kinds of forestry practices, basically clearing out

dead trees and such, would in fact we have the situation we have now with the devastation and the beetles?

Mr. ZIMMERMAN. I don't believe so. I think we get forest practices that we can employ that are pretty light on the land, there's equipment that's light on the land. There's a lot of work that can be done by hand with manpower crews, youth employment programs and that sort of thing.

We do know that there will be impacts as we treat the land, but we know that those impacts are much less than the impacts of a catastrophic wildfire and that's the balancing act that we have to take here.

Mr CARDOZA. How does the interface between state lands, private lands and Federal lands work? Obviously, beetles don't know where geographic boundaries are, so if the state isn't managing its land adequately, that can adversely affect private land and Federal land, even if they're doing a good job on those other two areas?

Mr. ZIMMERMAN. At this point, the population of beetles is so high that it doesn't make any difference what people have done in the past to manage the lands. The beetles are going everywhere and when they attack trees, you can write them off.

Mr CARDOZA. It's my observation that these problems have been exacerbated as new regulations have come on line, for example, Timber Harvest Plans have been a bit more difficult. Recently, in the State of California, they just passed a new proposal for additional regulations on Timber Harvest Plans.

Can you speak to how that may adversely or beneficially, if I'm wrong, affect the situation?

Mr. ZIMMERMAN. I think perhaps Andrea Tuttle could better answer that. Jack, do you want to answer that?

Mr. BLACKWELL. I have no first hand experience either. I hear concern about that.

The CHAIRMAN. Mr. Lewis?

Mr. LEWIS. Thank you very much, Mr. Chairman.

Mr. Zimmerman, you and I have worked personally closely together over all these months as this crisis has begun to explode upon us. It's apparent that it's going to take years, not just weeks or months to get a handle on the number of dead and dying trees and it seems as Mr. Blackwell indicated, every week the number is exploding upon us. So there's a huge cost that is involved in progressively taking out those dead trees over a long period of time. As a practical matter, it is important that we move forward on public land, private land, state, Federal land regardless.

I would ask both of you what is happening in terms of the Forest Service as it relates to priority of budgets. Are you confident that there is a level of understanding as well as a shifting of priority that will cause the budget year ahead of us to see a significant adjustment upward in the palm of the Forest Service?

Mr. BLACKWELL. I'm confident there's a great awareness and understanding and speaking from my level at the region, I will move dollars, funds and people around to the highest priorities in the region. It would be irresponsible for me to do anything else and that's what I've done in the past year, shifting funds down here. I will continue to do that, again, as needed.

There's, as I said, good awareness in the Administration and I believe increased budget requests from us and I'm hopeful that we'll see some of that increased funding.

Mr. LEWIS. As you know, when the Secretary of Agriculture was here, she made a public commitment of $5 million of additional money to meet the challenges here, to begin to mitigate against this problem. Just recently, we've learned of $30 million in the 2003 supplemental that is going to be applied to the forests in this region and I would hope that a significant piece of it will be flowing for mitigation purposes.

Is the local forest organization prepared and ready and able to handle a significant increase, a rapid increase in those dollar quotes.

Mr. BLACKWELL. Maybe I'll let Gene answer that.

Mr. ZIMMERMAN. Yes, I'll comment on what we've done this past year. We've spent $9 million on this effort in the past several months with a very small organization. I think we spent that money quite efficiently. A lot of the work that we're talking about doing is very expensive in the range of up to $4000 per acre using contractors to do that work.

So moving from $9 million to $12 million or $10 million is not a real big jump. Of the $30 million that you mentioned, $10 million will be coming to the Forest Service is my understanding and $20 million to local governments, so with the $10 million that's earmarked, less about $2 to $3 million through normal appropriations coming to the Forest, about a $12 million program next year, again, they'll say isn't that a big jump from this past year's program. In terms of our capability, I think we've got all the capability in the world to spend that money and do it wisely.

Mr. LEWIS. Mr. Chairman, your being here is a reflection of the priority the Committee gives to our Healthy Forest Initiative, should we find ourselves in a circumstance where a major fire takes place, we've already heard about the beginnings of the potential devastation that that would mean to the region.

In the meantime, this forest, the effort to save this forest could very well become a model for the country and in connection with that, one of my friends recently, who was more expertise than I, suggested that we ought to be considering a major nursery program, that is presently collecting seeds with the same DNA as the forest that's here, attempting to put together a package that would perhaps fund major nursery efforts, to grow sizable volumes of trees and begin a plan for planting trees now to replace that which could be before us.

Could you comment about that prospect?

Mr. ZIMMERMAN. You're exactly right. We've already awarded a contract for seed collection this fall, that's part of our priority work in restoration of the forest. We can have those seedlings planted in a variety of nurseries up and down the state and other places in the West actually have them grown there from local seed and then bring them back here and plant them after they've grown for a couple of years.

Mr. LEWIS. Is there specific funding required to increase that effort? Among the dollars that are flowing should the Committee be

considering a special authorization that would ratch it up, what is pretty much a standard effort on the part of the Forest Service?

Mr. ZIMMERMAN. We are going to need considerably millions of dollars in the restoration efforts, so you're exactly right.

Mr. LEWIS. Mr. Chairman, thank you.

The CHAIRMAN. Thank you. Mr. Gibbons?

Mr. GIBBONS. Thank you very much. Gentlemen, thank you for your presence here today. Your testimony is indeed enlightening to all of us and I'm sure to the people in the audience as well.

Mr. Blackwell or Mr. Zimmerman, if you did nothing, could this forest recover without intervention?

Mr. BLACKWELL. I don't believe so. I'll let Gene elaborate.

Mr. ZIMMERMAN. Perhaps it would, but it would take hundreds, if not a thousand years. I'm not an ecologist. I call it a sawdust forester, but it would go through a long evolution, particularly—this is fire prone country, so if we were to have one fire and kill a lot of what's left and leave a lot of materials still behind because it won't all be consumed in the first fire, perhaps cones will open up in that first fire and some new trees will start, but typically a second fire will follow or a third fire. And pretty soon, you have a barren landscape with no viable seed to start a new forest and then you'll start all over.

Mr. GIBBONS. I've seen some of the moonscapes in the Sierra Nevada range that have followed after a very hot fire. There is nothing there, barren sand, simply eroding away.

Let me ask a question also, with the $9 million which you say is treating 12,800 acres or the $12 million which Mr. Lewis has alluded to, and you have said in your testimony as well, can you stay ahead of the advancement of the disease and dying trees in this forest at that rate?

Mr. ZIMMERMAN. At some point in time there will be more trees left to die. At that point maybe we'll gain on this. Whatever we have, I guess—we've lost another 100,000 acres, have been affected. I shouldn't say lost, had been affected by mortality in the last 6 months. On the Forest Service side, we've only treated 12,800 acres.

Mr. GIBBONS. So you're losing 100,000 acres in 6 months. The $12 million is only going to cover say 15,000 of those acres. You're vastly behind the power curve on this issue.

Mr. ZIMMERMAN. I suggest you're right.

Mr. GIBBONS. Let me ask another question. The cost of fighting a fire, reforestation, compare that to the cost of treatment of a forest?

Mr. BLACKWELL. Well, the cost of fighting a fire is far greater than the cost of treatment. There's just no question about it. And that's where the dollars can be saved. The Healthy Forest Initiative makes so much sense. Rather than spending $1 billion or $1.2 billion a year ago in suppression, if we could be putting funds like that into treatment, we wouldn't have the need for suppression costs like that.

Mr. GIBBONS. So it's my grandmother saying an ounce of prevention versus a pound of cure.

Mr. BLACKWELL. Exactly.

Mr. GIBBONS. Is what we need. Let me follow up by the economics of treating, the thinning program. What do you do with the large trees that you cut down? What is the process through which they go? California, in this area, doesn't have saw mills to take advantage of the lumber. What happens to these trees?

Mr. ZIMMERMAN. This is an incredibly tough problem here. Some of the material is going to a generation plant near Palm Springs. Some of it goes up north to saw mills, a very small percentage is going to a saw mill up north. Some is going to land fills, using it as daily cover on the land fills. A lot of on the Forest Service side we're going to pile and burn in place. Using crews, by hand they'll pile the slash and we'll burn it in wet season or using tractors, we'll pile it.

We're chipping with large commercial chippers. And we're also using air curtain destructors and I think Supervisor Hansberger might address that issue, but there are a large amount of bins that have fans that help dump the material in and burn. That's an expensive process, just like the land fill process is.

Mr. GIBBONS. Could the economics of thinning be advanced by having a commercialized capability for dealing with this? In other words, the cost of thinning be mitigated in some fashion by having commercially available individuals who can treat forests?

Mr. ZIMMERMAN. Yes. A large part of the money for treatment, particularly on the private lands is going to the disposal site or the waste stream side, as we're calling it and if we could alleviate part of that cost, it would make more money available for actual treatment and make the whole operation more efficient economically.

Mr. GIBBONS. Gentlemen, thank you very much for your testimony today. I'm always reminded that the arguments of emotion trump science. It's too bad we can't use science as the basis by which we treat our forests. Thank you for your presence here today.

The CHAIRMAN. Mr. Walden?

Mr. WALDEN. Thank you, Mr. Chairman. Later, in Chairman Hansberger's testimony before the Committee, he's going to say, among other things, that the dead trees are rotting at 3 to 5 times faster than normal. Can you explain to me why that's occurring?

Mr. ZIMMERMAN. I can't explain that. I think we all have that intuitive reaction to what's going on out there. I've seen no science to support that, but I believe all of us feel like that deterioration is rapid and more rapid than we would expect.

Mr. WALDEN. That then presents costly alternatives and problems for trying to get these trees dealt with by people doing the falling?

Mr. ZIMMERMAN. And it would also present significant safety hazards down the road in a year or two for the people who are working on this material.

Mr. WALDEN. Now I want to go back to a comment about the wild land urban interface because I recognize that there's an extraordinary need to deal with these treatments around wild land urban interface, and I know that some of the fires up in my part of the world, they were spotting two to six miles out, embers were flying still hot and starting grass fires. Can you telling me if there's any sound, scientific basis to not treat these forests back up

in the watersheds away from the wild land urban interface? And second, is there any way that a fire reaches 2600 feet from a community and says OK, I'm going to stop here? At least here, the Senate is trying to water down this bill and say put virtually all the effort within a half mile of a community and I don't think that's going to solve the problem.

Mr. BLACKWELL. There's no way that a fortress like approach just around the community will work. These fires, as you said, have been observed in Oregon, spot great distances and not only must we treat the wild land urban interface, but we must treat some of the forests out there. We just must.

Mr. WALDEN. It seems to me the other issue that some in the Senate seem to be hung up on is this issue of not treating old growth, somehow protecting that and I'm all for preserving the best of our forests, but it strikes me that if you've got a big old tree that's disease-ridden, why would you leave it because it's big and old when it needs to be removed versus protecting the smaller diameter trees that are healthy? Is that how you manage today in thinning?

Mr. BLACKWELL. No. My answer would be that we need a diversity of age classes in forests. There are species, habitats that are very dependent on each and we need early soil conditions, we need mid-soil conditions and we need some percentage of old forest. The problem is it can't all be old forest, it just doesn't work that way.

Mr. WALDEN. And is there a way that we can set a breadth-height diameter and call it old growth and have that work for your management strategies?

Mr. BLACKWELL. There is no science basis for an arbitrary diameter limit cutoff. There's some social reasons, sometimes, that we've tried to do this, but there is no science basis.

Mr. WALDEN. No science-based reason to do that. OK. And I guess the other question, I was stunned, frankly, driving up here to come around the corner and see a high school. I mean I'm not used to that in a forest, quite like that.

And then it amazed me that 100,000 people are up through here. I just noticed one road in and out. Has anybody done any studies to say what mortality may occur if you get a runaway fire coming up thee canyons?

Mr. ZIMMERMAN. I don't think there's been a study per se. All of us in the emergency service side of this equation are very, very concerned about the possibility of a large rapidly moving fire, put against the issue of evacuation. And at the same time trying to get equipment up the hill while we're trying to get people down the hill.

There are three evacuation routes off the San Bernardino Mountains that are public highways.

Mr. WALDEN. Are they all as windy and twisty as the one we came up?

Mr. ZIMMERMAN. None of them are straight.

Mr. WALDEN. When Congressman Lewis is done with the appropriations process, you're going to have a——

[Laughter.]

Right there. In all seriousness, you could get yourself twisted pretty tight thinking about the ramifications. I mean I look at some

of the exit problems we had in some of our forests getting small communities evacuated. My God, if a fire comes blazing up these hills at 120 mile an hour Santa Ana blowing it, what do you do?

Mr. ZIMMERMAN. We're very concerned about that. I will say this, we are concerned about—the first we had a large fire this summer, about hysteria, if you will on the public side. We had the Bridge fire a couple of weeks ago. People who lived directly above that fire in Running Springs, in the Running Springs area were equally professional as the fire fighting services, they were very orderly, they knew what they to do and they did it when they were told to do it. So if we experience that with 1500 people, I hope we can have a similar situation when we have perhaps several thousand people at risk.

Mr. WALDEN. How many thinning projects do you have in the planning stages right now in this forest?

Mr. ZIMMERMAN. We have probably 15 projects that are in one state or another of planning, relative to dealing with the problem that we have at hand that we're talking about here today.

Mr. WALDEN. And given the progress of those, how many have been appealed or do you anticipate being appealed?

Mr. ZIMMERMAN. None have been appealed. We're working right in the urban interface right now and I think almost everybody and all the mainstream environmental folks seem to be well aligned with this notion that we have to do something right in the urban interface. It's when we get deeper into the national forest, that distance that you were talking about earlier, that perhaps the arm wrestling is going to begin.

Mr. WALDEN. And when you say the wild land urban interface, how are you defining that?

Mr. ZIMMERMAN. We're working right now on what we call kind of a triage fashion. We're going around the community just in treating a very narrow area 200, 500, 600 feet wide.

We anticipate coming back and then moving deeper into the forest because we know that's not adequate.

Mr. WALDEN. As you've already alluded to.

Mr. ZIMMERMAN. I know I've gone over time. Thank you, Mr. Chair.

The CHAIRMAN. Thank you. I want to thank our first panel for their testimony and for answering the questions. I'm going to excuse you two gentlemen and call up our next panel. Thank you.

I'd like to call up the second panel. On Panel Two, we have the Honorable Dennis Hansberger, Chairman, San Bernardino County Board of Supervisors, accompanied by Dr. Thomas Bonnicksen, Professor, Department of Forest Science, Texas A&M University; Ms. Andrea Tuttle, State Forester, California Department of Forestry and Fire Protection; Mr. Alan J. West, member of the National Association of Forest Service Retirees; and Mr. Jay Jensen, Legislative Director for the Western Forestry Leadership Council.

Thank you all for being here. I'd like to remind the witnesses that under Committee rules, you must limit your oral statements to 5 minutes, but your entire written testimony will appear in the record.

I'd like to now recognize Chairman Hansberger for his statement.

STATEMENT OF HONORABLE DENNIS HANSBERGER, CHAIRMAN, SAN BERNARDINO COUNTY BOARD OF SUPERVISORS

Mr. HANSBERGER. Honorable Members of the Committee, Chairman Pombo, thank you very much for your presence here today. As Chairman of the Board of Supervisors on behalf of the citizens of our county, we thank the Committee for its work to protect our forests and for its special interest in this extreme situation.

The drought has left our forests vulnerable to the Bark Beetle infestation. While the County has done much to address this threat, the problems dwarfs the resources at our disposal.

Other forest regions may have as many dead and dying trees, but this forest is the most widely visited in the Nation and the most populated, containing $8 billion worth of homes and businesses. Our County has aggressively attacked this crisis and has already spent or committed over $6 million of general fund monies. We've taken steps to remove dead standing fuel. We've created lumber staging areas to store equipment, deck logs and managed wood products at a lower costs. We've sited an incinerated on Forest Service property to reduce the burden of managing wood products at our land fills.

Nine months ago our solid waste system managed 5 tons of wood waste per day. We have now exceeded 500 tons per day which has an expense of several hundred thousand dollars a month to our cost.

The residents of this county are at the heart of this issue and deserve to be recognized today. They have removed far more dead and dying trees than all other agencies combined. They have risen to the occasion and done what is necessary for themselves, their neighbors and our mountain communities.

The economic hardships are enormous and beyond the means of many mountain home owners, one third of whom are considered low or moderate income by Federal standards. These are working families, the elderly, the disabled who risk foreclosure, draining their savings, using up their equity and going into debt. We appreciate the Southern California Edison working partnership with us to reduce the fire hazard and the cost of tree removal. However, this collaboration does not relieve citizens from that economic burden.

The Board of Supervisors authorized the Mountain Area Safety Task force known as MAST to be the mechanism to manage this multi-jurisdictional agency. MAST works to coordinate fire prevention, emergency responsive evacuation and is looking years ahead at reforestation. Equally vital to our success, Fire Safe Councils have effectively involved the community through their volunteer efforts, community projects, public and town hall meetings. There were just a few weeks ago over 700 people in this room and the halls adjacent to it meeting on those very subjects.

The efforts of MAST and the Fire Safe Councils were put to the test just 2 weeks ago during the Bridge fire. Many men and women who fought that fire are here today. Their hours of multi-agency planing and preparation paid off. No lives or homes were lost and the fire was stopped before it reached the community of Running Springs.

Today, I'm asking that Congress reexamine national policies that require up to 4 years of study before fuels can be treated. The fuels we are studying are dying, dying in our neighborhoods, not in our years, not in 4 months, but in less than 4 weeks. The process simply does not fit the problem and by the time we study it, it will be and is, too late. I implore this Committee and Congress to reconsider the policies that guarantee hundreds of millions of dollars for relief after the ravage of catastrophic fire, but nothing to prevent it.

This disaster is predictable and with the solutions provided by the President's Healthy Forest Initiative, responsible and professional land managers will have the ability to effectively reduce hazardous fuels.

I also am asking Congress to consider the environmental permitting and review processes that will allow us to more rapidly develop projects and facilities that would reuse renewable resources. Facing this ecological disaster, we want to take advantage of new technologies that do not rely on fossil fuels to create energy.

We have created a bureaucratic process that hamstrings common sense procedures and keeps qualified professionals from being able to do their jobs. Our County has urged the President to declare a Federal emergency in our forests and open the door to additional support needed to address this crisis. Your help is needed to establish this declaration.

In closing, had the vision embodied in the Healthy Forest Initiative been realized many years ago, our forest communities would not be facing this crisis today. We have the makings of the worse fire in American history.

Mr. Chairman and Members, we ask you to give us the assistance, tools and regulatory relief needed to prevent such a historic tragedy.

Finally, I would like to thank Congressman Lewis for his commitment to the safety of our citizens, also his efforts to work with Congress to find funding where none had previously existed. We wish we had brought you here today to enjoy our forests, however, we do sincerely appreciate your efforts in making them healthy and safe and beautiful again. Thank you, Mr. Chairman and Members of the Committee.

[The prepared statement of Mr. Hansberger follows:]

Statement of The Honorable Dennis Hansberger, Chairman, San Bernardino County Board of Supervisors

The County of San Bernardino would first of all like to express its appreciation to the Committee for the work it has done to protect our forests and for taking such a special interest in the extreme and unprecedented crisis we face.

Had the vision embodied in the Healthy Forests Initiative been realized many years ago, San Bernardino County's forest communities would not be facing the crisis we have today. Our forest is clearly overgrown, and this density created a perfect environment for drought and pestilence. Had we managed the forest as nature intended and in a manner consistent with the way we found it centuries ago, we would be living in harmony with our environment rather than taking expensive and exhaustive steps to protect ourselves from it.

Years of drought have left the millions of evergreens in our forest communities vulnerable to bark beetles, and these insects have turned entire tracts of once-emerald forests brown with death. The County has done much to address the threats posed by this situation, but the problem dwarfs any and all resources at our disposal.

The County of San Bernardino alone has so far invested more than $6 million in the effort to address this crisis. This funding comes from a very limited source. Because of state and federal mandates and other inflexible needs, the County has true discretion over only a small fraction of its annual budget, and these dollars are under constant threat of being commandeered by the state to help solve California's fiscal crisis.

Tree Mortality Emergency

All of San Bernardino County's mountain communities—from Wrightwood to Oak Glen, including the densely populated communities of Lake Arrowhead, Crest Forest, City of Big Bear Lake and the rest of the Big Bear Valley—are heavily impacted by this emergency. In some neighborhoods in these communities, 100 percent of the trees are dead.

As of January 2003, the U.S. Forest Service had mapped more than 99,500 acres of dead trees in the San Bernardino County portion of the San Bernardino National Forest. Of that, approximately 72,500 acres are on public lands and approximately 27,000 exist on privately held residential and commercial land. Of these 27,000 acres, more than 21,000 acres have greater than 20 percent mortality, with properties within most of the Crestline/Lake Arrowhead communities experiencing 80 percent to 100 percent mortality on each lot. This is more than a 300 percent increase from the mapping performed in October 2002.

After a brief spring respite from February through May 2003, the mortality returned in full force in June and some say worse than before with trees dying in weeks, not months. The numerous amounts of dead trees within private, public, and developed lands pose serious threats to life and property from fire, falling and damage to public utilities and other infrastructure. In addition to the devastating impact on private/residential property, the majority of the communities are host to high-volume tourist and vacation activities. On certain weekends, some communities host more than 150,000 visitors on top of a base population of 97,000 people.

It is important to note that, if luck prevails and no catastrophic fire occurs, the trees that are dead are rotting 3 to 5 times faster than normal. This creates a serious falling hazard. There have been several incidents involving trees falling with damage to structures and utilities. Also the longer the trees stand dead, the more reluctant tree fellers are to climb them and will call for a crane to remove them rather than climb them. This often doubles the cost of tree removal.

The potential for fire hazard is unprecedented. If a fire starts within or near the mountain communities, homes, lives, and the forest could be destroyed. According to the County Tax Assessor, the mountain communities that make up approximately 45,817 improved parcels have approximately $7.6 billion in assessed property valuation including residential and commercial property. This does not include the value of non-taxable infrastructure, such as roads, schools, and utilities.

Fire officials usually declare the fire season for the area beginning in June, and ending in late October. Strong warm winds are prevalent throughout this time, and gusts have been measured at up to 120 miles per hour. Given the current state of the forest, this is a recipe for an unprecedented wildfire disaster.

Barriers to Success:

Unfortunately, the efforts to date are dwarfed by the magnitude of the problem. There are several barriers to rapid and complete response of this problem:

- Financial: Removing the trees and diminishing the risk in a particular area relies primarily on the efforts of the private landowners, who bear the total cost of removal. Most property owners have hazardous dead trees and fuel located adjacent to their homes and/or on nearby slopes. Typically, tree removal in these cases requires a crane and highly-skilled individuals. Local contractors currently charge from $1,000 to more than $10,000 for each tree that is within 20 feet of a structure. Trees further away from a structure are generally $200 to $500 to remove. It is common, however, to find 80 percent to 100 percent mortality on a single property, which can equate to as many as 20 to 30 dead trees on one lot. Therefore, tree removal bills average $5,000 to $10,000. This is a significant expense to property owners, and the majority cannot afford removal. Some property owners are taking out second and third mortgages on their homes to pay for tree removal. However, others cannot afford to take out these mortgages. The County is researching the creation of a Special Assessment District in which a municipal bond could be issued and the removal work performed under contract, thus providing a more rapid response. However, under California law this would require a two-thirds vote of the property owners and is not an immediate viable option.

- Lack of Resources: Last year, there were only half-a-dozen tree removal companies scattered across the mountain, so the lack of adequate competition originally created an expensive and unstable market. The County, working with community Fire Safe Councils, has been actively trying to attract tree removal companies and loggers from Northern California and other parts of the United States to come into the area to foster competition and create more of a balance in supply and demand. That would lower the cost to the private resident. A significant degree of success has been obtained in that there are now two dozen companies that provide services to our mountain communities.
- Uncertain Funding Sources: Some of these companies have expressed reluctance to come to Southern California and enter our market. Companies outside the area mainly ask, "What assurance do I have to get paid if I set up an operation in Southern California?" Prior to the implementation of the Block Concept and the participation of Southern California Edison, contractors were competing against each other on a door-to-door basis against two dozen other contractors. The competition has had a significant positive effect in the reduction of costs that each homeowner must pay. Prices for tree removal over the last year have dropped by two-thirds. This highly competitive market did not allow tree companies to grow and increase their tree removal capacity because of the lack of consistent predictable income. In some cases, companies refused to enter the market because of the hit and miss, door-to-door revenue generation process.
- Lack of Landfill Capacity and Options: Trees produce a significant amount of solid waste. For every truckload of logs there are two to three truckloads of branches—"slash"—that join the County's solid waste stream. When lumber prices fall, as is the case now, those logs join the slash and other waste the County has to handle. The County's current solid waste management system is not designed for and cannot manage the amounts of wood waste being created today. The system is funded primarily by a flat rate charged to residents based on the average amount of waste produced by their communities. This rate cannot begin to cover the tonnage the County must now handle.
  Prior to this emergency, the County's Solid Waste Management Division (SWMD) processed 5 tons of wood waste per day. As soon as the County Fire Department began issuing tree removal notices, the amount of wood waste skyrocketed to more than 200 tons per day. Now that the lumber market has been saturated and prices have declined, the stream is approaching 500 tons per day.
- Environmental Permitting: Other areas of the country that routinely produce vast amounts of wood waste are home to a number of viable solutions ranging from traditional lumber mills to the use of wood chips to create electricity, methane, and even ethanol. These businesses are reluctant to set up shop in our forest because of the length and complexity of the environmental review process. Our emergency is predicted to last five to seven years, but environmental review and the land use approval process takes two to three years. This limits the ability of an investor to obtain a return on their capital and equipment. Time frames need to be shortened. This inability to remove dead standing wildfire fuels poses a much greater threat to the environment than reasonably streamlining the environmental approval process.

Crossing Barriers

The County is crossing these "barriers" and has established a systematic program to utilize our existing resources and establish an infrastructure sufficient to establish a long-term solution to the problem. The effort that will be assisted by the Hazard Mitigation Grant Program grant that will result in the removal and disposal of more than 4,560 trees on developed private and non-federal public properties.

The program includes a series of tasks ranging from citizen participation, mapping the mountain areas to determine priority tree removal areas, coordinating efforts with Southern California Edison, using logging engineers and market specialists to provide technical assistance with removal and disposal/reuse techniques, minimizing impacts on solid waste systems, organizing tree removal by blocks, assisting low income home owners in the cost of tree removal, and reducing the per tree cost by aiding in the collection and disposal of slash and debris created by the block by block removal of trees. Additionally, the County will coordinate with all other allied agencies through the Mountain Area Safety Taskforce (MAST).

Citizen Participation

First and foremost we must commend the actions of our citizens. They have risen to meet this challenge head on. County citizens have removed more trees, either voluntarily or under order of the County Fire Department, than all other government agencies combined.

Tree Removal Fund

The Board of Supervisors has created a $1 million revolving fund to assist in removing dead trees. This fund was created using several sources of County and Federal funds. This fund will be used to provide working capital to assist households particularly those with low income in the removal of their trees. It is also to be used to conduct tree removal enforcement actions on properties that refuse to cooperate with tree removal notices. In addition, the Board of Supervisors has also created a $2 million contingency within the County's General Fund. In other efforts to assist the low-income households last year, the Board has allocated $85,000 of Community Development Block Grant funds.

Business Assistance

County Economic and Community Development Department has been providing low interest loans to assist tree removal contractors and licensed timber operators. These loans can be from the thousands to the hundreds of thousands of dollars. They have provided financial stability and have allowed businesses to increase tree removal capacity by acquiring more equipment, chainsaws, vehicles and acquiring additional employees. Recently ECD received support from the U.S. Forest Service in the form of $124,000 Grant to support wood milling and wood product development.

County Financial Contribution

The County has already dedicated thousands of staff hours to manage this ongoing emergency without reimbursement or compensation. The County's Solid Waste Management Division (SWMD) in just the past nine months has spent approximately $2 million, including amortized capital costs, to process approximately 60,000 tons of bark beetle waste. We anticipate our costs in FY 03/04 to exceed $4 million. The Fire Department has spent $405,000 in salaries alone. Public Works Transportation has spent $138,600 for additional roads activities and slash crew activities. There has been no assessment on the damage done to roads by heavy equipment in the tree removal operations. The Flood Control District allocates $132,000 to support the State CDF tree removal crews. The Sheriff's Office has spent more than $100,000 in responding to this emergency.

Other Funding Sources

USFS

The County recently received two grant approvals from the U.S. Forest Service for $200,000 each. One to operate a slash crew made up of County prisoners. A second was to support the operation of the staging area that is being used by the tree removal contractors.

National Resource Conservation Service

The County was also exploring a grant from the National Resource Conservation Service Emergency Watershed Protection Program (NRCS). The County in cooperation with the NRCS endeavored to develop a damage assessment that would then be forwarded to Congress with an appeal for an allocation of supplemental Federal funding. The County was prepared to provide a hard match of 25 percent within in the last week the County was notified that the NRCS would not be forwarding our proposal for consideration.

Other Attempts At Funding

The County explored the feasibility of creating a Special Tax Assessment or Tax District. This District would have charged property owners an annual assessment or tax. For that fee, a Forest Management Plan could have been prepared, property owners would have received free tree removal, and more importantly, the Assessment District would have had the ability to bond to fund future disasters, or meet matching requirements of any future grant. Before an Assessment District could be implemented, all property owners in the proposed district boundaries must vote on the assessment. California law requires two-thirds voter approval for such an assessment, and it became clear to the County that this level of support does not exist at this time for this option.

Federal Support

In February 2003, Congressman Jerry Lewis secured approximately $3.3 million from the Federal Emergency Management Agency (FEMA)'s Hazard Mitigation Grant Program, under Public Law 108-7, for Riverside and San Bernardino counties to utilize toward tree removal programs on private properties in the San Bernardino and Angeles National Forests.

On March 7, 2003, Governor Davis signed a Declaration of a State Emergency for the San Bernardino Mountains. The Governor at that time forwarded the local proclamation of emergency to the President. The Boards of Supervisors for Riverside and San Bernardino counties have continued to adopt Local Emergency proclamations for the individual counties since March and April of 2002 respectively.

The County of San Bernardino has strongly urged the President to declare a federal emergency for our mountain communities, which would open the doors to the additional support that is needed to address this crisis.

Finance/Administration

The County Office of Emergency Services is responsible for gathering and reporting expenditures of the Bark Beetle Emergency Hazard Mitigation Grant Program the County was awarded on June 26, 2003. Total grant expenditures are $3,564,134.66 with $2,673,101 federal share and $891,033 county share.

The Office of Emergency Services has developed a system that records all expenditures related to the Bark Beetle Emergency HMGP Tree Remediation Grant. System reports are used to request grant reimbursement from the State Office of Emergency Services as well as in efforts to obtain additional funding and grants for the Bark Beetle Emergency.

Public Education

Providing information to the public about this emergency and how they can deal with it and possibly mitigate its effects is critical to mission success. The County has been involved in creating and printing informational items regarding the Bark Beetle, reforestation, erosion control, and evacuation planning. A public outreach program coordinated by the Mountain Area Task Force (MAST) has been implemented to inform and educate the mountain communities. The County provides leadership in the Public Information Section of MAST. In cooperation with the Fire Safe Councils, the County and allied agencies have held numerous community meetings, on various topics related to the emergency with overwhelming attendance. Each of these meetings has been attended by 100 to 700 people.

Partnership with ESRI

The Environmental Systems Research Institute (ESRI) of Redlands, California, is the largest provider of geographic information systems software and expertise in the world. The County and other MAST agencies have worked with ESRI to develop maps that show the growing tracts of dead and dying trees and merge them into a database that allows users to track the crisis and develop strategies. This information is being developed into a web-based platform, which will be available to agencies and the public.

Data Gathering and Access to Public Information

A key component of providing information to the public is collecting and centralizing a location that it can be accessed. This is a job for the Internet. Data mapping and statistics gathering has been an integral part of the Bark Beetle Emergency. The San Bernardino County Fire Department, Office of Emergency Services is in the process of collecting critical statistics related to tree mortality in the San Bernardino and Angeles Forests.

This data will be used for Natural Resource Conservation Services (NRCS) funding, Hazard Mitigation Grant Program (HMPG) funding, Pre-Disaster Mitigation funding, and other programs that might be available. The statistics relate to the number of dead trees, community population, total number of structure, and parcel values.

Tree Removal Efforts

To address the problem the County has worked collaboratively with the general public, Southern California Edison, the U.S. Forest Service, the California Department of Forestry, the California Department of Transportation, and other agencies. The following efforts are underway:

- Hazard Tree Abatement Program: The County Fire Department operates a Hazard Tree Abatement Program that inspects trees on private property, issues tree removal notices, and conducts follow-up in all unincorporated areas of the mountains. This program has the legal authority to cite private property owners to remove hazard trees and fuel when the private property owner fails to do so. To date, County Fire has issued more than 5,000 tree removal notices. Typically, if the private property owner who received the tree removal notice fails to remove the dead trees within a stated time frame, such as 30 or 60 days, the County will pay a contractor to remove all of the hazardous fuel on the property, and lien the property for reimbursement. This program was very suc-

cessful until mid-2002 when the impacts of the four-year drought and bark beetle infestation began to accelerate significantly. County Fire does not have the funding to remove all of the dead, hazardous fuel for property owners who fail to comply.

The high cost of tree removal lead one mountain neighborhood to develop a cooperative agreement involving everyone in the neighborhood. This neighborhood concept did indeed reduce costs for property owners and, once implemented, the "Block" concept was born. County Fire is implementing the block concept in cooperation with Southern California Edison. County Fire is working more diligently with property owners to contract directly with tree removal companies, and working to assist property owners in ensuring cost-effective removal.

- Southern California Edison: Southern California Edison (SCE) has been directed by the state Public Utilities Commission to completely remove all trees that could possibly fall into SCE electrical transmission lines. County Fire, Running Springs Fire, Crest Forest Fire and all involved fire agencies are collaborating with SCE in the removal of dead trees adjacent to electrical transmission lines that are threatening evacuation routes and causing high fire hazard areas. Again, the block concept is being implemented. SCE pays the licensed contractors directly for the tree removal. However, the County's role is to implement a programmatic approach for all tree removal, including non-SCE trees, that ensures cost-controls to the homeowner, which ensures that the homeowner will receive the most cost-effective and affordable service.
- County Slash Crews: The County Fire Department in cooperation with the Sheriff's Department has created a crew of County inmates to assist in the removal of slash, which consists of branches from the removed trees. Slash removal can account for 30 percent to 50 percent of the cost for a tree removal, so these crews provide a valuable service to homeowners.
- CDF State Inmate Crews: California Department of Forestry and Fire Protection (CDF) has a program that trains minimum-security inmates to climb actively infested trees on private property and cut them down. It is important to note that the County of San Bernardino provides one half of the funding for this program. By State regulations, CDF crews can only cut and spray actively infested trees not located adjacent to structures on private property. In January of 2003 these crews were reassigned by MAST to work on evacuation routes. These same inmate crews also provide hand crew support during fires.
- Activities on Adjacent Federal Land: More than 60 percent of the dead and dying trees are on federal land. The San Bernardino National Forest will soon be advertising for timber harvest sales and service contracts with product removal. It is crucial to the safety of residents who live adjacent to these federal lands that immediate action is taken.

Financial Assistance for Tree Removal

Of the approximately 97,000 full-time residents affected by the mortality, approximately 30 percent are classified as low or low-moderate income per the federal Housing and Urban Development (HUD) Department or some other similar low-income standard. While not all of the persons are property owners, there are those who do own their homes, and their properties do have dead or dying trees. Low and low-moderate income property owners are typically senior citizens or disabled persons. The FEMA grant includes an allocation of $500,000 for financial assistance to individuals who meet the HUD guidelines for low and moderate income. In addition to assisting low-income individuals, in an effort to facilitate block tree bidding a sliding scale may be developed for those property owners within a block bid area who otherwise could not participate financially. As identified above, those that are targeted as eligible to receive financial assistance will be targeted during the block tree removal notification process. A voucher will be issued to the successful contractor to be redeemed from the County for the work performed on these specific properties.

Solid Waste Management

In response to the Bark Beetle Emergency, the County's Solid Waste Management Division has been handling an unanticipated increase from 5 tons per day of green waste to a current 400 tons per day. This amounts to additional County expenditures of more than $12,000 per day, or more than $320,000 per month.

The Solid Waste Management Division is responsible for the disposal and diversion of the waste trees and material generated from the Bark Beetle Emergency.

Homeowners currently pay private tree companies to haul the tree waste to one of two locations: the Heaps Peak Transfer Station, located in Running Springs, or the Burnt Flats Wood Waste Processing Facility in Lake Arrowhead. Both sites are

currently running at maximum capacity, with the Burner site operating 24 hours per day. The amount of wood waste is expected to more than double when Southern California Edison ramps up its mandated tree removal program. Solid Waste Management's next phase is to begin log storage and processing at the closed Cajon landfill, which is next to a rail line. This will facilitate less expensive long-range transportation.

The operation at Heaps Peak consists of chipping and grinding for use for erosion control or alternative cover on our landfills, and approximately 500 tons per week for Colmac Energy, a biomass facility in Mecca, located in Riverside County.

In cooperation with the USDA Forest Service and Caltrans, the County was able to site, permit and operate the first incinerator in more than 20 years in Southern California. This is the first time in known history that Caltrans allowed a county to pave an unpaved State Highway.

The Burnt Flats facility consists of two wood waste incinerators, which each burn approximately 7 tons per hour. These are operated 24 hours per day, six days per week. The County is in the process of purchasing a third, larger burner, which is anticipated to burn between 11 and 14 tons per hour.

An industrial work area was developed by the County in less than 3 months to accommodate equipment storage, log decking and other tree removal related operations for six tree removal contractors and licensed timber operators. They have so far been able to remove thousands of trees off of privately held lands.

Between December and June, much of the wood was diverted to Sierra Forest Products, a sawmill near Bakersfield. The mill paid loggers for their loads brought to the mill. However, a drop in lumber prices in late June forced Sierra Forest Products to lower the price they paid loggers for the wood. Since that time, we have seen a sharp increase in the amount of wood brought to our disposal facilities. As an example, during the week ending July 20, 2003, our disposal facilities received 1,303 tons. The following week, ending July 27, 2003, our disposal facilities received an additional 1,188 tons.

In the last nine months, Solid Waste Management has spent approximately $2 million, including amortized capital costs, to process approximately 60,000 tons of bark beetle related waste. We anticipate our costs in FY 03/04 to exceed $4 million. Our portion of the FEMA grant assistance recently secured by Congressman Jerry Lewis is approximately $850,000.

Our County is constantly researching and attempting to foster markets for the wood in order to divert it for better and higher uses. The biggest challenge in most of the markets appears to be the high cost of transportation.

Our County is currently working to foster the location of two sawmills, one in Lake Arrowhead and one in San Bernardino, in addition to working with paper companies and other outlets throughout the western United States, Mexico and even China.

Beetle Control Study

County staff has obtained mixed messages from experts as to the effectiveness of pheromone traps to trap Bark Beetles so they avoid destroying trees. Therefore, County staff will work with the U.S. Forest Service and other scientists on a study to determine if there is a feasible infestation control mechanism for future implementation. Field surveys may be a part of this task, and a report is expected to be generated at the end of the study period.

Participation in the Mountain Area Safety Taskforce

Due to the magnitude of this problem, the Mountain Area Safety Task Force (MAST), a multijurisdictional task force, was formed in 2002 to develop a mitigation and emergency plan to address this problem. Agencies in MAST include representatives of the San Bernardino County Fire Department, San Bernardino County Department of Public Works (Divisions of Transportation and Solid Waste Management), San Bernardino National Forest (USFS), California Department of Forestry (CDF), San Bernardino County Sheriff's Department, California Department of Transportation (CalTrans), South Coast Air Quality Management District, (SCAQMD), Southern California Edison (SCE), California Highway Patrol (CHP), California State Office of Emergency Services (OES), San Bernardino County OES, and community representatives of the Fire Safe Councils.

MAST has been working on a strategic-type plan to coordinate efforts to ensure that all aspects of the issue are being addressed. The MAST has developed a plan to address the tree mortality issue. The plan is arranged into the following three (3) phases: immediate, mid-term, and long-term. The plan was designed with the understanding that work could be performed in any one of the phases simultaneously:

- Immediate phase: Identifying critical community infrastructure and removing impediments and/or potential impediments to ensure safe evacuation routes, distribution of utilities and communication service;
- Mid-term phase: Addressing forest management practices; and
- Long-term phase: Improving forest health and community safety.

The main workload in completing the current tasks is removing affected (dead and/or dying) trees. The removal of affected trees will help reduce the direct threat to lives and homes. Additionally, in conjunction with local Fire Safe Council's awareness efforts, the removal of the affected trees will reduce the fuel loads, create defensible space, and lessen the impacts from wildfires.

A four-point action plan has been developed to implement the above phases which includes:

- Assure public safety (develop evacuation plans and clear potential hazard trees from transportation routes);
- Obtain assistance to secure funding through local, state, and federal legislators;
- Reduce fuel and create fuel breaks in strategic locations. This means working to eliminate dead standing trees, reduce tightly packed ground vegetation, and create defensible space around developed areas; and
- Develop commercial use or disposal options for waste wood products.

The County's program is consistent with the MAST plan.

Long-Term Maintenance and Recovery

It has been determined that tree removal of the affected areas would exceed $200 million. Suppression and damage from a fire in these same areas, however, could exceed tens of billions of dollars.

The County of San Bernardino's approach provides a long-term programmatic solution in that it offers public services for effective, low-cost tree removal. This framework provides the basis to receive other grant funding to continue these services.

Conclusion

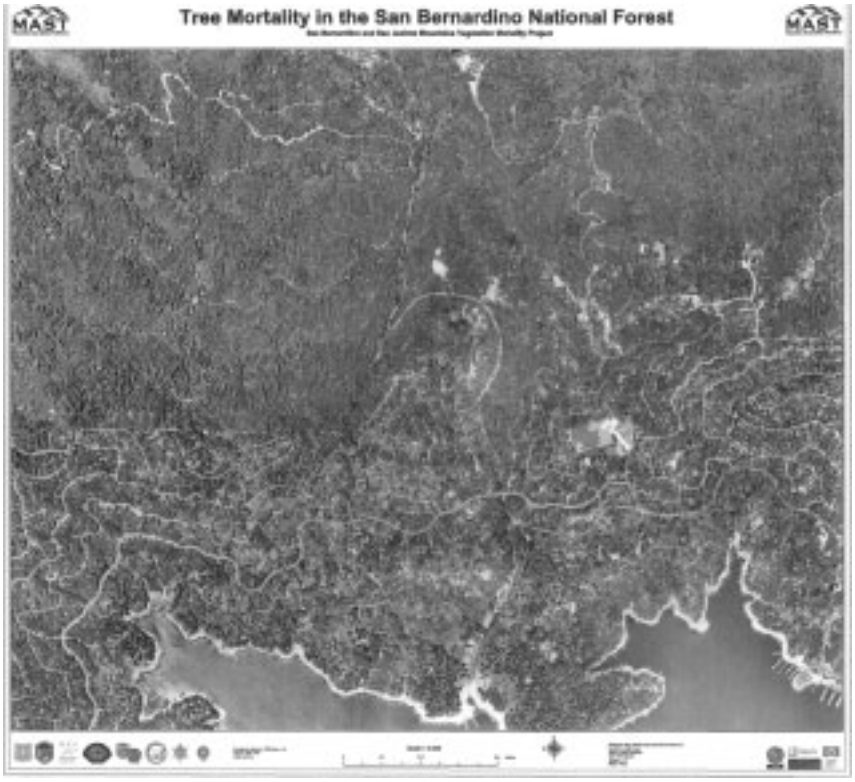
Once again the County expresses it's appreciation to the Committee for the interest it is showing in our emergency and the support you have provided.

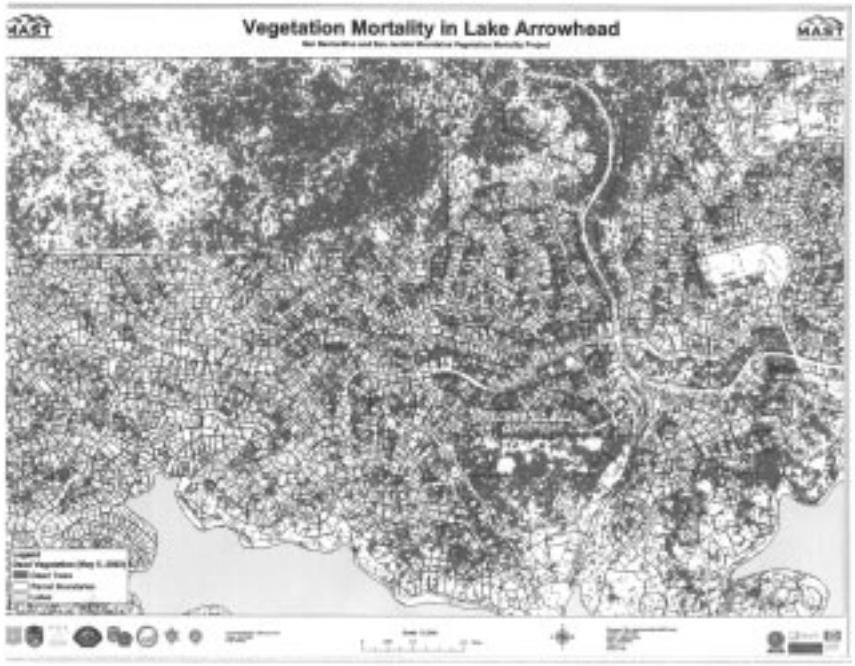
The County would be remiss if it did not acknowledge the efforts of our federal representatives, particularly Congressman Jerry Lewis and Senator Dianne Feinstein, and various federal and state agencies to secure funding and resources to address this emergency.

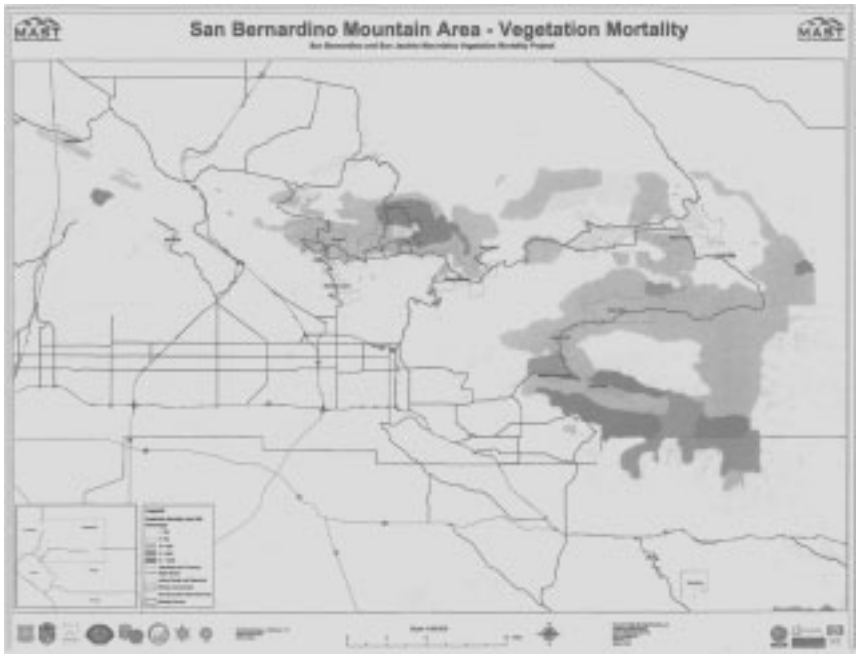
Every action the County has taken in response to this crisis and every dollar that has been spent has focused on the tens of thousands of human lives that could be lost if this challenge is not met and our mountains erupt in wildfire.

The County of San Bernardino is committed to dedicating every available resource to address this emergency, but with one million trees already dead and dying and many more to follow, this crisis is well beyond the capabilities of local government and private citizens. The County will continue to work with the federal government to secure the funding necessary to manage this threat, and the County urges Congress to untie the hands of the U.S. Forest Service so that it may quickly respond to a quickly dying forest.

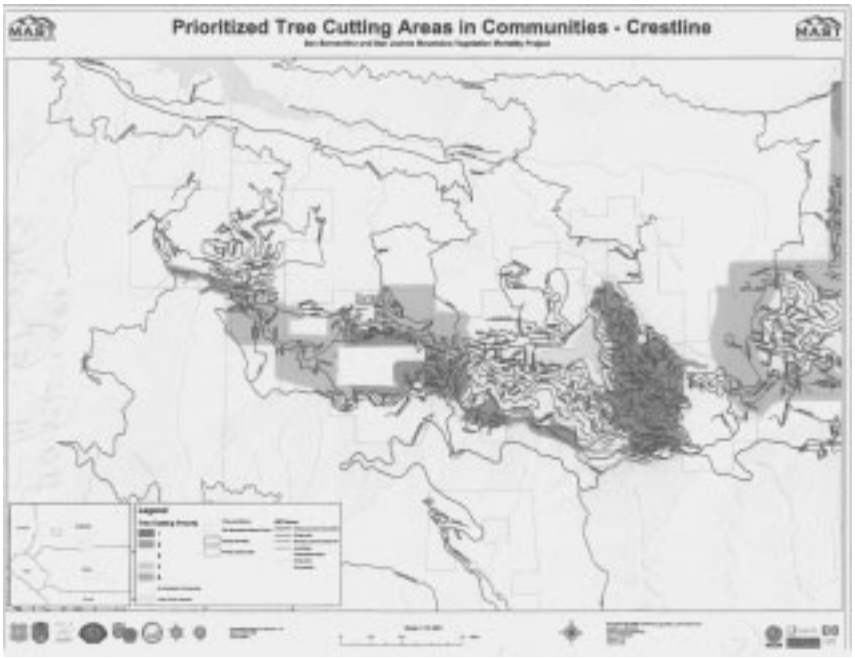
[Attachments to Mr. Hansberger's statement follow:]


Tree Mortality in the San Bernardino National Forest


Vegetation Mortality in Lake Arrowhead


San Bernardino Mountain Area - Vegetation Mortality





The CHAIRMAN. Thank you.
Dr. Bonnicksen?

STATEMENT OF DR. THOMAS BONNICKSEN, PROFESSOR, DEPARTMENT OF FOREST SCIENCE, TEXAS A&M UNIVERSITY

Dr. BONNICKSEN. Mr. Chairman, Members of the Committee, I appreciate the opportunity to be here today. I'm a Professor of Forest Science at Texas A&M University with over 30 years of experience working in California's forests and other forests in the nation. I'm also a Member of the Board of the Forest Foundation in California. I wrote the book America's Ancient Forests describing the history of America's native forests and I'm co-founded of the International Society of Ecological Restoration.

With that, I would comment that I, too, like Jack Blackwell have never seen a disaster of this magnitude and I say that not because we haven't lost a lot of forest insects because we have, but this is the first time we've lost an entire forest on one mountain range and a forest that is so heavily populated. Nothing like this has ever occurred in my experience or in my knowledge of history. And my grave concern is not just for this forest, but this forest represents what could happen next in the Sierra Nevada Mountains. It's poised and ready to be devastated as well.

The cause. Many people think the cause is drought. That's not the cause any more than that's what puts the forest in the Sierra at risk. It's overstocked dense forest unnaturally thick so that the trees are weak, unhealthy, and incapable of resisting massive attack. All the drought did was trigger the infestation. It didn't cause it.

We've known that this forest in the San Bernardino Mountains was subject to this kind of devastation long ago. I actually facilitated a workshop here in Lake Arrowhead in 1994. It's 10 years ago now in which all the people from the various agencies and community interest groups got together to address the fire hazard in Lake Arrowhead. And they came to the unanimous conclusion that management was needed in the forest and it parallels the national fire plan, actually anticipated it in many ways. But nothing happened.

Why did nothing happen? Well, in part, because people, in general, have not seen the hazard. It's not evident like it is now. Also, people have an image of forest as natural when they're thick and green and we have an aversion of cutting trees, even though they don't mind pruning their garden.

And there is also an environmental component. This became a recreational forest and for that and many other reasons nothing happened. So now we're facing the results of inaction. We have a disaster that will end up in the history books. Our great grand children and our great, great grandchildren will be reading the history of the loss of an entire forest. This again, is truly history.

But let me tell you there's another point of history that they'll be reading about and that's us, what did we do to respond to this disaster? That will also be in the history book. We can write that history now or we can tell them in that book we did nothing and that's why they're reading it in a forest without trees.

So what should we do, right here and now? Some people think what we ought to do is just remove the dead trees, pile, slash, burn and then we're safe. If you do that and only that, if you look at those pictures over there, I think you'll get an idea of what this

forest is going to look like. It's going to be a 474,000 acre parking lot because I've seen what happen when a large percent of the trees are dead and are removed. When I'm talking about 100 percent, I mean restored.

What we have to do is remove these dead trees quickly by doing that protects whatever trees remain because those trees that are left really represent the future forest. We have to do it in a way that protects the soil. We have to be sensitive to wildlife by leaving snags and logs in the ground and in essence, we have to do it right because we must not just reduce the fire hazard, we must use this opportunity to also rebuild the new forest that those kids are going to be reading about a century from now. We'll either be their heroes or their villains, it's up to us.

We have to also work quickly in the Sierra Nevadas to think those forests so that this doesn't happen there as well.

What will we get when we're done? If we use the historic forest as a model, we'll get a forest that's diverse, beautiful, full of large trees as well as all the other ages of trees that are need, full of wildlife and we will have saved or solved the endangered species problem. Why? Because the historic forest that's the model for the future for us we hope to rebuild is a forest in which there are no endangered species. Why not use it as a model for our forest?

And finally, who will paid for it? Unfortunately, in this case we're going to pay for it, but as part of that payment, I think we ought to invest in infrastructure. We have the ability to process wood now and in the future when the forest is being maintained so that this never happens again and the forest we leave to those kids reading the book is a forest that they'll not only be proud of, but they'll be able to keep. Thank you.

[The prepared statement of Dr. Bonnicksen follows:]

Statement of Dr. Thomas M. Bonnicksen, Professor, Department of Forest Science, Texas A&M University, Visiting Scholar and Board Member, The Forest Foundation, Auburn, California

Introduction

My name is Dr. Thomas M. Bonnicksen. I am a forest ecologist and professor in the Department of Forest Science at Texas A&M University. I am also a visiting scholar and board member of The Forest Foundation in Auburn, California. I have conducted research on the history and restoration of America's native forests for more than 30 years. I have written over 100 scientific and technical papers and I recently published a book titled America's Ancient Forests: from the Ice Age to the Age of Discovery (Copyright January 2000, John Wiley & Sons, Inc., 594 pages). The book documents the 18,000-year history of North America's native forests.

Forest Devastation and Restoration

With millions of dead trees covering approximately 350,000 acres of the San Bernardino Mountains, this forest is lost. Bark beetles feasting on over-crowded, moisture-stressed trees will have killed about 90 percent of the pine trees when they end their rampage. Then, Lake Arrowhead and other communities here will look like any treeless suburb of Los Angeles.

Among the saddest aspects of this forest being wiped out is that the devastation was predictable and preventable. In fact, specialists representing many interests and agencies came together in a 1994 workshop to do something about the unnaturally thick forests in the San Bernardino Mountains. They knew that communities like Idyllwild, Big Bear, and Lake Arrowhead were in imminent danger from wildfire. The workshop produced a report charting a course to improve the safety and health of the forest and surrounding communities. The recommendations were never acted on. Now, an entire forest is lost.

Instead of acting to restore the forest and protect human lives before the crisis reached critical mass, politicized debates and overbearing regulations created

inertia—a complete standstill during which the forest grew so dense, devastation became inevitable.

Throughout the 1990s, extremists here advocated "no cut" policies, wanting no active management for the forest. Their battle cry was "leave it to nature" despite indisputable evidence that the forest's imperiled health was entirely unnatural, brought about by a century of absolute fire suppression and completely stifled harvesting. Now we are stuck with a dangerous, unsustainable forest.

Unfortunately, it is too late to save the San Bernardino National Forest. It is not, however, too late to learn from this disaster, to restore the forest to its original grandeur, or to save the forests of the Sierra Nevada that will undoubtedly face a similar fate if we continue down our current path. Indeed, we can anticipate similar catastrophes throughout our Western forests if we do not change our ways. We have already seen the beginnings of forest devastation in Arizona and Colorado.

In the San Bernardino Mountains, there are simply too many trees. Drought has contributed to the crisis, but it is not the underlying cause. Forest density is ten times what is natural—300 or more trees stand on an acre where 30 would be natural and sustainable. Over-crowded trees must fight for limited nutrients and water, and, in doing so, become too weak to fight off insect attacks that healthy trees effectively repel.

Our national forests, growing older and thicker, look nothing like their historical predecessors, with some having reached astronomical densities of 2,000 trees per acre where 40-50 trees per acre would be natural. Consequently, plant and animal species that require open conditions are disappearing, streams are drying as thickets of trees use up water, insects and disease are reaching epidemic proportions, and unnaturally hot wildfires have destroyed vast areas of forest.

Since 1990, we have lost 50 million acres of forest to wildfire and suffered the destruction of over 4,800 homes. The fires of 2000 burned 8.4 million acres and destroyed 861 structures. The 2002 fire season resulted in a loss of 6.9 million acres and 2,381 structures, including 835 homes. These staggering losses from wildfire also resulted in taxpayers paying $2.9 billion in firefighting costs. This does not include vast sums spent to rehabilitate damaged forests and replace homes.

The monster fires that have been ravaging our Western forests are of a different breed from the fires that helped maintain forest health over the past several hundred years. Forests that just 150 years ago were described as being open enough to gallop a horse through without hitting a tree are now crowded with logs and trees of all size—you can barely walk through them, let alone ride a horse. The excessive fuel build-up means that today, every fire has the potential to wreak catastrophic damage.

Historically, our forests were more open because Native American and lightning fires burned regularly. These were mostly gentle fires that stayed on the ground as they wandered around and under trees. You could walk over the flames without burning your legs even though they occasionally flared up and killed small groups of trees. Such hot spots kept forests diverse by creating openings where young trees and shrubs could grow.

We need to return our forests to their natural state. We need to alleviate the threat to thousands who live in danger throughout Southern California, and ensure that residents of Northern California and throughout the West are spared the trauma and fear that people here live with daily.

Fortunately, we as modern foresters have the knowledge to restore our forests. We can minimize the fire threat, accelerate forest restoration, and protect human lives.

The Road to Recovery

The natural pine forest will soon be gone from these mountains. The most important question now is, what will replace it?

There are two choices for the future of this forest, and no middle ground for debate. First, leave the forest alone. This would placate those who advocate "letting nature take its course," though it would not result in the historically natural mixed-conifer forest that millions have enjoyed for centuries. Leave this forest alone, and we will perpetuate the unnatural thick forests of oak, fir, cedar, and brush—we will pass to future generations an unending cycle of destruction from fire and insects.

Our second option is to restore the natural fire- and insect-resistant forest through active management. And we must consider the entire forest, not just small strips of land around homes or near communities. Removing fuels around homes makes sense, but to think that a 100-foot wall of flames ravaging a forest will lie down at a small fuel break, or that swarms of chewing insects cannot penetrate these flimsy barriers, is to live with a false sense of security.

The recipe for restoring San Bernardino forests is simple. Cut the dead trees, remove or chip the slash to reduce fuels, and leave enough snags and logs for wildlife. Then thin what's left to ensure that surviving trees grow quickly and to protect them from fire because they will become old growth in the future forest.

Next, begin rebuilding the forest by planting native trees in gaps left by beetle-killed trees. Additional gaps will have to be opened and planted at different times and places to ensure that the restored forest has groups of trees of different ages. This will take five or more decades. By then seed from adjacent trees will fill new gaps and the forest will look relatively natural since some sites will grow trees 120 feet tall in 50 years. It will take centuries to replace the largest trees.

This would be natural forestry not plantation forestry. That means using nature as a guide for creating a healthy, diverse forest that is fire, insect, disease, and drought resistant.

Restoring the forest is easy. Paying for it is not. Reducing the fire hazard and restoring the forest could cost as much as $1,000 to $4,000 per acre. Prescribed burning can help, but it is too dangerous and expensive to rely on, and brings with it air quality and health risks that will prevent its widespread use.

Practical solutions for forest restoration must therefore include the private sector. Redirecting tax money to forest restoration would help, but there just isn't enough to do the job. Success requires government and the private sector to work together. That means private companies harvest the trees needed for restoration and in exchange they get to sell wood products. This is just common sense—why allow insects or fire to wipe out our forests when we can use them in a way that also restores them? Wood is a renewable resource we desperately need.

Complete Restoration

To fully restore our forests to health, we must fully understand the key issues in the forest health and management debate. Perpetuating myths in the name of advancing a particular cause does not serve the public interest. Our national forests belong to all people, and should serve all our needs. We need to dispel the popular misconceptions that mislead the public and hinder the implementation of sound forest policies. Only by understanding the facts can we make informed decisions about our forest heritage.

Myth 1: All fires are good and forest management is bad.

This argument confuses small, naturally occurring fires with large conflagrations, calls all of them good, and blames forest managers for wanting to thin our incredibly thick forests and remove the fuel for monster wildfires.

Today's catastrophic wildfires are bad for forests. When a devastating fire finally stops, it leaves a desolate moonscape appearance. The habitat for forest dwelling wildlife is destroyed, small streams are boiled dry, fish die and their habitat is smothered by silt and debris. The fire also bakes the soil so hard water cannot get through, so it washes away by the ton. All that is left are the blackened corpses of animals and fallen or standing dead trees. Often there are too few live trees left to even reseed the burn and the area soon becomes covered with a thick layer of brush that prevents a new forest from becoming established for many years.

Historically, natural fires burned a far different kind of forest than the uniformly thick, overpopulated forests we have today. Forests of the past were resistant to monster fires, with clearings and patches of open forest that acted as mini-fuelbreaks for fires that were far smaller and far less hot. These light fires naturally cleared away debris, dead trees and other potentially dangerous fuels.

Fires can't burn that way in the forest of today. They bite into a superabundance of fuel, burn super-hot, destroy wildlife and watersheds, and leave a desolate landscape scarred by erosion and pitted with craters. This is why forest management, which involves thinning in order to make our forests more like they used be—naturally resistant to fire—is so desperately needed.

Myth 2: Wildfires and massive insect infestations are a natural way for forests to thin and rejuvenate themselves.

On the contrary, "no-cut" policies and total fire suppression have created the overcrowded forest conditions that enable fires to spread over vast areas that never burned that way in their known history. The resulting devastation is not natural. It is human-caused. We must accept responsibility for the crisis we created and correct the problem.

Myth 3: If management is unavoidable, then deliberately set fires, or prescribed fires, are the best way to solve today's wildfire crisis.

It is naive to believe we can have gentle fires in today's thick forests. Prescribed fire is ineffective and unsafe in the forests of today. It is ineffective because any fire

that is hot enough to kill trees over three inches in diameter, which is too small to eliminate most fire hazards, has a high probability of becoming uncontrollable. Even carefully planned fires are unsafe, as the 2000 Los Alamos fire amply demonstrated.

Not only that, there are very limited opportunities to burn. All the factors, such as fuel moisture, temperature, wind, existence of defensible perimeters, and available personnel, must be at levels that make it relatively safe to conduct a prescribed burn. This happens so rarely that it would be impossible to burn enough acreage each year to significantly reduce the fire hazard. Plus, prescribed burns inherently introduce air quality and health risk concerns.

Myth 4: Thinning narrow strips of forest around communities, or fuelbreaks, is more than adequate as a defense against wildfire.

Anyone who thinks roaring wildfires can't penetrate these flimsy barriers could not be more mistaken. Fires often jump over railroad tracks and even divided highways.

Fuelbreaks are impractical because forest communities are spread out, with homes and businesses scattered over huge areas. It would be virtually impossible to create an effective thinned "zone" to encompass an area so large.

In addition, fuelbreaks only work if firefighters are on the scene to attack the fire when it enters the area. Otherwise, it drops to the ground, and moves along the forest floor even faster than in a thick forest. Furthermore, there is always the danger of firefighters being trapped in a fuelbreak during a monster fire.

Catastrophic fires roaring through hundreds of square miles of unthinned, overgrown forest simply do not respect a narrow fuelbreak. Frequently, firebrands—burning debris—are launched up to a mile in advance of the edge of a wildfire, and can destroy homes and communities no matter how much cleared space surrounds them. When catapulted embers land on roofs, destruction is usually unavoidable.

Fuelbreaks are a necessary part of a comprehensive community protection program, not a cure-all solution in and of themselves.

Myth 5: Removing dead trees killed by wind, insects, or fire will not reduce the fire hazard.

Experience and logic say this is false. Do logs burn in a fireplace? If dead trees are not removed, they fall into jack straw piles intermingled with heavy brush and small trees. These fuels become bone dry by late summer, earlier during a drought. Any fire that reaches these mammoth piles of dry fuel can unleash the full fury of nature's violence.

Acting quickly to rehabilitate a wind or insect-ravaged forest, or a burned forest, is one of the surest ways to prevent wildfires or dampen their tendency to spread.

Myth 6: We should use taxpayer money to solve the wildfire crisis rather than involve private enterprise.

The private sector must be involved.

A minimum of 73 million acres of forest needs immediate thinning and restoration. Another 120 million also need treatment. Subsequent maintenance treatments must be done on a 15-year cycle. The total cost for initial treatment would be $60 billion, or about $4 billion per year for 15 years. Then it would cost about $31 billion for each of the following 15-year maintenance cycles.

This is far more money than the taxpayers will bear. But if private companies could harvest and thin only the trees required to restore and sustain a healthy, fire-resistant forest, it could be done. In exchange, companies sell the wood, and public expenditures are minimized.

Unfortunately, there aren't any shortcuts. Human intervention has created forests that are dense, overgrown tinder boxes where unnatural monster fires are inevitable. This means we must manage the forest to prevent fires in the first place. We have to restore our forests to their natural, historical fire resistance. Thinning and restoring the entire forest is the only way to safeguard our natural heritage, make our communities safe, and protect our critical water sources.

The CHAIRMAN. Thank you.

Ms. Tuttle.

STATEMENT OF ANDREA TUTTLE, STATE FORESTER, CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

Ms. TUTTLE. Thank you, Chairman Pombo, and Members of the Committee. On behalf of Governor Davis and Secretary for Resources, Mary Nichols, I appreciate this opportunity to testify on the role of the State of California in this extraordinary tree mortality situation.

As you have heard, this situation is a combination of drought, of poor forest management and explosive beetle populations, but this outbreak is just one example of what is happening throughout the West and Alaska. We have over the years been watching this area become a visual sea of orange. Over the past several years I've been here in 1999 we had a severe immediately north. This was the Willows fire which consumed around 62,000 acres and it is not regenerating well. Just recently, Regional Forester Jack Blackwell and I toured the area on our preparedness review on the status of evacuation planning and I accompanied Governor Davis here in April as he took an inspection tour.

By necessity, the state and Federal first response has been to address the acute risk of wildfire, recognizing the severe threat posed by the dead fuels, Governor Davis proclaimed a state of emergency in March of this year, directing state agencies to clear evacuation routes in community shelter areas and to streamline state permit and contract procedures.

Governor Davis also signed an executive order in June of this year to augment state fire suppression capability in the three counties. As a result, we have added 212 fire fighters on 53 CDF engines. We've deployed 10 additional engines and 40 crew members to three counties. A fire fighting helicopter and crew is assigned to San Diego County and four additional conservation camp fire crews were added in Southern California.

The California National Guard has prepared its fixed wing aircraft in prepositioned ground support and the Office of Emergency Services is prepared as necessary.

All affected local governments have undertaken many specific activities. San Bernardino oversight and San Diego have activated their emergency operation centers and we are managing this as an emergency through the instant command base multi-agency organization which you've heard about, the Mountain Area Safety Task Force.

I cannot stress enough the importance and strength of the interagency cooperation in formulating our preparedness plans. Jack Blackwell and myself, Gene Zimmerman, my Unit Chief, Tom O'Keefe and Tom Tisdale and all of our staffs with the counties, I commend the County Boards of Supervisors, we have all been forced to work together in ways that we have never experienced before.

From the State of California, CDF has taken a lead role in clearing evacuation routes, temporary community shelter sites. We have reduced the paperwork for cutting trees on private lands and coordinated implementation of the Endangered Species Act with the Department of Fish and Game.

The Department of Transportation has provided trucks for hauling tree waste to disposal sites and has stockpiles signs, cones and heavy equipment for clearing routes in the event of evacuation.

The Waste Management Board and the local air pollution control district has streamlined air quality permits for air curtain burners in use at the transfer sites. The Highway Patrol has worked closely with local sheriffs and law enforcement in unprecedented cooperation between law enforcement and fire officials in the event we need to get responders in while getting evacuees out.

The California State License Board is conducting field inspections. We have participated in the table top exercise to prepare for wildfire in the area. Every strike team, every fire fighter coming into Southern California from other parts of the state is given a copy of the special Red Book and a mandatory briefing to inform them of the extraordinary fire behavior that they may encounter here which will exceed anything that they have ever experienced before.

With respect to the tremendous amount of dead wood and slash, the Energy Commission, the Governor's Office of Planning and Research and the California Power Authority are working with Southern California Edison on the feasibility of locating a biomass power plant.

As you've heard, our pre-fire preparedness was put to the test. I won't tell you about that fire again, but basically had conditions been windier or drier, the outcome could have been far different.

We thank Congressman Lewis, Senator Feinstein and Secretary Veneman for your efforts in working to bring additional funding to this area. Significant progress has been made. This has not been simple for these many agencies to come together. This is a complicated many agency program.

Fire season in Southern California is far from over and this condition will extend for many years before this acute threat has passed. With the emergency preparedness now fairly well developed, we're ready to transition into these longer term questions that you're talking about today. Again, I thank you for your Federal assistance and your attention to this matter and we look forward to working closely with you.

Thank you.

[The prepared statement of Ms. Tuttle follows:]

Statement of Andrea E. Tuttle, State Forester,
California Department of Forestry and Fire Protection

Chairman Pombo and Members of the Committee:

On behalf of Governor Davis and Secretary for Resources Mary Nichols I appreciate this opportunity to provide information regarding the role of the state of California in this extraordinary tree mortality situation in the three southern California counties of San Bernardino, Riverside and San Diego.

History of the Problem

As you have heard from other speakers, the nearly 400,000 acres of standing dead conifer, oaks and chaparral are the result of a combination of three primary factors: First, we have experienced four years of an unprecedented drought. The 01/02 winter was the driest year in recorded history. Last winter's precipitation was near normal but with significantly less snow fall than normal and, while not a drought, it did contribute to the drought effects. This has significantly weakened the trees. Second, many of these forest and chaparral stands are in an unnatural, overstocked condition due to a history of aggressive fire suppression coupled with a lack of forest management, i.e. lack of harvesting to reduce competition. Third, natural

background levels of beetle infestation have suddenly reached epidemic proportions, taking advantage of the weakened condition of the trees and their inability to produce sap. Trees use their sap to "pitch out" insect eggs. Drought stressed trees don't have enough moisture to create the sap, therefore the larvae hatch and devour the tree from the inside. This outbreak is just one example of millions of acres of national forests now affected by beetle kill throughout the western states and Alaska. What makes this example especially compelling is the presence of the mountain communities of homeowners and recreational, tourist-based economies completely lying within U.S. Forest Service Direct Protection Area.

The extraordinary nature of this die-off became especially clear last fall when vast areas of the conifer forest became a visual sea of orange. I have been on several reconnaissance tours of the area over the past several years: in 1999 I observed the Willows fire which consumed over 63,000 acres immediately adjacent to Lake Arrowhead to the north; early this summer USFS Regional Forester Jack Blackwell and I conducted a preparedness review on the status of evacuation planning; and more recently in April I accompanied Governor Davis on an inspection tour. With each trip we have witnessed ever expanding mortality.

California's Response

Recognizing the severe threat of catastrophic fire posed by the dead fuels, Governor Davis proclaimed a State of Emergency in March 2003 directing state agencies to clear evacuation routes and community shelter areas, and to streamline state permit and contract procedures. The California Department of Forestry and Fire Protection (CDF) initiated numerous tasks in cooperation with the Governor's Office of Emergency Services (OES), the United States Forest Service (USFS), local government agencies and Fire Safe Councils. Priorities for immediate action were originally set in four areas:

- Creating safe evacuation routes by clearing dead trees and removing vegetation;
- Creating safe shelter-in-place centers;
- Creating safe communications centers on USFS land; and
- Creating strategic community protection zones by clearing dead trees, thinning forests, and reducing flammable vegetation.

This list has subsequently grown as we work with all agencies and levels of jurisdiction to include all the key task areas of evacuation planning, tree removal and waste disposal, and suppression preparedness.

After the State of Emergency declaration in March, Governor Davis also signed Executive Order D-69-03 on June 20, 2003, to augment state fire suppression capability in the three counties. As a result, we were able to increase staffing on 53 CDF engines, which added 212 firefighters, and the deployment of ten refurbished fire engines and 40 crewmembers to the three counties. One firefighting helicopter and crew was leased, staffed and assigned to San Diego County, and four additional CDF Conservation Camp fire crews were added in Southern California. Additional funding allowed the California National Guard to prepare its fixed-wing aircraft and pre-position ground support equipment for immediate response in the event of a wildfire in the area. OES has developed and implemented a quick response plan to deploy OES engine strike teams into mountain communities as necessary. In support of these actions the expenditure of approximately $8.3 million was authorized.

Local Government Actions

All affected local governments have undertaken many specific activities. As you will hear in more detail, Riverside, San Bernardino, and San Diego Counties have activated their emergency operations centers and have worked cooperatively through their respective offices of emergency management. San Bernardino and Riverside Counties manage the emergency through an incident command-based, multi-agency organization known as a Mountain Area Safety Taskforce (MAST). San Diego County created a similar organization called the Forest Area Safety Taskforce (FAST). These groups include the county emergency and public works organizations, local Fire Safe Councils, the USFS, CDF, OES, California Highway Patrol, California Department of Transportation (CalTrans), California Department of Fish and Game and local utility operators. These organizations developed and operate from strategic plans that serve to guide planning, preparedness, evacuation response, and mitigation activities.

Interagency Cooperation

I cannot stress enough the importance and the strength of the inter-agency cooperation we have experienced with our partners in formulating these preparedness plans. Cooperation between Regional Forester Jack Blackwell and myself, between Forest Supervisor Gene Zimmerman and CDF Unit Chiefs Tom O'Keefe of San Bernardino County and Chief Tom Tisdale of Riverside, and between our staffs has

been tremendous. At every step along the way, the federal, state, county and special districts have worked together in ways they have never experienced before.

From the State of California many agencies have participated.

- CDF has taken a strong role clearing evacuation routes, temporary community shelter sites and fuel breaks utilizing inmate crews. We have reduced the paperwork for cutting trees on private lands, and coordinated implementation of the Endangered Species Act with the California Department of Fish and Game, especially with respect to protecting the Southern Rubber Boa snake.
- The California Department of Transportation has provided trucks for hauling tree waste to disposal sites, and stockpiled signs, cones and heavy equipment for clearing roads in the event of evacuation.
- The California Integrated Waste Management Board has permitted expanded use of the transfer sites for the tremendous volumes of wood waste, and the local Air Pollution Control District has streamlined air quality permits for the air curtain burners. Those burners can efficiently dispose of large quantities of forest waste at very high temperatures with very little air emission.
- The California Highway Patrol has worked closely with local sheriffs and law enforcement in designing and coordinating evacuation plans to help get responders in while getting evacuees out.
- The Contractors State License Board, in coordination with CDF, is conducting field inspections to insure that the public is protected from fraudulent business practice.
- We have participated with all the MAST agencies in San Bernardino County in a tabletop exercise to prepare for a wildfire in the Lake Arrowhead area.
- Every strike team, every firefighter coming into southern California is given a copy of this special Red Book, a Structure Protection Pre-Plan, and mandatory briefing to inform them of the extraordinary fire behavior they may encounter, which may exceed anything they have ever experienced before.

Biomass Options

As we move into longer term consideration of how to dispose of the tremendous volumes of dead wood and slash, the California Energy Commission, the Governor's Office of Planning and Research, and the California Power and Conservation Financing Authority are working with Southern California Edison to evaluate the feasibility of locating a biomass power plant. Inventories of available biomass are underway with the assistance of ESRI, a GIS and Mapping Software vendor which has voluntarily provided GIS mapping services and satellite imagery. CDF is working with CalTrans and Southern California Edison to survey tree mortality along the highways, evacuation routes and utility lines, and the USFS is working with CDF to co-fund a team of CDF foresters to assist.

Recent Fire Activity

All of our pre-fire preparedness was suddenly put to the test earlier this month with the ignition of the Bridge Fire below the communities of Running Springs and Smiley Park. In a short time period the fire extended to 1400 acres moving up through chaparral that had not burned for 50 years. Fortunately, aggressive initial attack and an increase in humidity slowed the fire shortly before it reached the dead conifer zone. Reports indicate that the multi-agency response was excellent, voluntary and mandatory evacuations were conducted efficiently, and residents were prepared and cooperative. However, had conditions been windier and drier, this outcome could have been far different. This served as a sudden, startling wake-up call. It was a clear indicator of the flammability of the fuels and the speed with which a catastrophic fire could suddenly occur.

Conclusion

We thank Congressman Lewis, Senator Feinstein and Secretary Veneman for their efforts in working to bring additional funding to this serious situation. Each entity brought resources to the table, but more is needed. The state continues to work closely with FEMA to determine what additional assistance may be available.

As you can see, significant progress has been made but the continuing threat is enormous, and there is still much remaining to be accomplished. Nature is taking its course and has presented us with an ecological change on a scale that we have not experienced before. Academic researchers are anxious to document and study this extreme change.

All the agencies are to be commended for coming as far as they have with as complicated a problem as they were faced with. We have made progress. The players are engaged. We have a good start on setting up the mechanisms for receiving funds and putting them onto the ground. Our first responders will do the very best they can if and when a wildfire occurs. The job of educating residents and visiting

tourists on fire safety, evacuation planning, and tree clearance will be a continual one. With the entry of Southern California Edison and the large scale utility line clearance program we can start to think more comprehensively of long term biomass disposal options.

It has not been a simple thing for the multiple agencies to face this. Everyone has had to work very hard, and I extend my sincere appreciation to them. Our fire-fighting season in Southern California is far from over, and this condition will extend for many years before the acute threat has passed.

Again, I would like to thank you for the federal financial assistance we have received and for the outstanding support provided by USFS and FEMA in dealing with this threat.

The CHAIRMAN. Thank you.

Mr. West?

STATEMENT OF ALLAN J. WEST, MEMBER, NATIONAL ASSOCIATION OF FOREST SERVICE RETIREES

Mr. WEST. Mr. Chairman, Mr. Lewis and Members of the Committee, thank you for the opportunity to testify before you today on issues relating to the management of our national forests. You have a copy of my statement. I would just like to cover the highlights for you.

I come before you today as someone who's devoted much of my professional career to fire management. As Director of Fire and Aviation Management, and as Deputy Chief, State and Private Forestry for the U.S. Forest Service, I have responsibility for fire protection over most of our nation's wildlands. In retirement, I chair the Watershed Fire Council of Southern California.

I would like to address a few issues and potential solutions as they relate to the situation we find here in Lake Arrowhead and most of our western wildlands. The local citizens and most of our fire professionals will tell you they are sitting on a powder keg waiting to explode. With the number of dead and dying trees, and the volume of vegetation on the ground, all intermingled between houses, it's just a matter of time before disaster strikes.

Devastation to important watersheds, wildlife habitat and personal property could set new records in terms of losses. The potential of entrapment of citizens is of grave concern.

Wildland firefighters are dedicated to protecting lives, property and natural resources. However, under the conditions we find our forests today, their safety is of critical concern.

These forests are under stress because of limited precipitation and increased annual growth that compete for the available moisture. When the trees are not vigorous, Bark Beetles attack, become established and then kill the trees.

Active sanitation salvage programs during the 1950s, 1960s and 1970s, served to keep these stands relatively thrifty, but logging was opposed and consequently, the big bag timber company at Redlands closed, so today there are no ready markets for thinnings, except for firewood.

Some suggest that the answer to destructive wildfire is to let them burn, just protect the little area around communities and residences and let nature take care of the rest. This fails the common sense test in many ways. Communities, fish, precious water supplies are equally at risk from the after fire floods and mudflows in unprotected and unstable watersheds, miles from the

communities. It ignores the fact that our national forests are intermingled with private lands and it ignores the impact of smoke from forest fires on air quality and human health.

As suggested by Northern Arizona University Professor, Dr. Wally Covington, treatment should be considered on the landscape of 100,000 to a million acres. Bark Beetles are not deterred by the thick bark of large trees. Evidence of this are the dead 400-year-old Ponderosa Pine throughout the San Bernardino National Forest.

While some may argue that big trees should not be removed because they are fire resistance, history has demonstrated that big trees, while relatively resistant to fire, also burn.

Many people do not want human intervention in the forest. Let the status quo might summarize as let's manage the forest as prior to European settlement. Common sense tells us we cannot ignore the presence of 280 million Americans in this country, nor the demands they make on our forests. There can be no more vivid example of the don't touch fallacy than right here on the San Bernardino National Forest.

Annual appropriations must become an integral part for forest health maintenance. The Forest Service must have a program to address all aspects of forest health including prioritization. Some funding must be available to each forest supervisor so they can minimum skills and monitor and treat unhealthy forest conditions.

Direct thinning projects have an important role. They are expensive, but effective. Fortunately, substantial portions of these stands need treatment and have added-on value: their potential markets for much of the material that needs to be removed as lumber, forest products and production of energy.

The story of fire suppression in forestry in the last century is a great success story. In the early 1900s we were burning as much as 50 million acres a year. Today, 3 to 5 million acres is a bad fire year.

In the early 1900s, removal from our forests exceeded growth. Today, in spite of the significant population increases, growth exceeds removals. But our forests face a growing threat of fire, insect and disease because of overstocking. Fire can and should be used as one of the tools for reducing excessive fuel loading, but pre-treatment by mechanical removal is required in many areas before fire can be used without excessive damage and liability risk.

Mr. Chairman, many of the views of the National Association of Forest Retirees is in this book, Forest Health and Fire, an Overview and Evaluation and we would like to submit this for the record.

Thank you.

[The prepared statement of Mr. West follows:]

Statement of Allan J. West, National Association of Forest Service Retirees, and Chairman, Watershed Fire Council of Southern California

Mr. Chairman and members of the Committee:

On behalf of the National Association of Forest Service Retirees thank you for the opportunity to testify before you today on issues relating to management of our National Forests. The association has members located throughout the nation who possess a unique body of knowledge, expertise and experience in the management of the National Forests, forestry research, and state and private assistance. I come before you today as someone who has devoted much of my professional career to fire

management. As Director of Fire and Aviation Management and as Deputy Chief, State and Private Forestry for the U.S. Forest Service, I had responsibility for fire protection on most of our Nation's wildlands, both public and private. In retirement I chair the Watershed Fire Council of Southern California.

The National Association of Forest Service Retirees believes that management of our National Forests must be based on sound science, technical feasibility, economic viability, and common sense. Unfortunately too much of today's debates about these valuable lands is based on myths and a "Let's pretend" approach.

In my brief time with you I would like to address just a few of the issues and potential solutions. They relate to the situation we find here in the Lake Arrowhead area and most of our western wildlands. The local citizens and fire professionals will tell you they are sitting on a powder keg waiting to explode. With the number of dead and dying trees and the volume of vegetation on the ground, all intermingled between houses, it is just a matter of time before disaster could strike. Any fire escaping initial attack and burning into this beetle-killed area could be catastrophic. Devastation to the important watersheds, critical wildlife habitats, homes, businesses and personal property could set new records in terms of losses. The potential entrapment of citizens is also of grave concern.

Since my retirement 10 years ago, each year I have become increasingly more concerned with fire fighter safety, especially as I view the continuing decline in the health of our forests. There are locations to which you simply cannot, in good conscience, dispatch personnel. Wildland fire fighters are dedicated to protect lives, property and natural resources. However, under the conditions we find our forests today, their safety must be of critical concern. Even with all our modern equipment, helicopters, aircraft, advanced planning and highly trained firefighters, there is high potential for conflagrations.

Moisture Stress

The forested areas of the San Bernardino, and other southern California forests are on the borderline of tree growth, because average annual precipitation is just over 12 inches. As a result the trees are in moisture stress any time precipitation is below normal. When stress is increased due to drought or overcrowding, the trees are especially vulnerable to insect attacks and to the problems of high ozone levels (once called "The X Disease"). Foresters, entomologists and plant physiologists have long recognized that maintaining low stand densities in all size classes is essential to maintaining forest health in this particular situation.

While there have been periodic outbreaks of insects, an active sanitation/salvage program during the 50's, 60's, and 70's served to keep the stands relatively thrifty. Unfortunately, the environmental movement that opposed logging disrupted the program on the San Bernardino and adjacent forests. Consequently the Big Bear Timber Company at Redland closed, so there is no ready market for thinnings except for firewood. There is adequate annual growth in the local forests, along with thinning and beetle and disease salvage, to support a modest-sized wood products industry. Effective forest management to reduce the hazardous fuel loadings in this area will be impossible without a viable forest products industry. An assured stable input of raw material would find markets for much of the wood that needs to be removed from the forest, with the larger material going to lumber and the smaller material to firewood and/or energy production.

Treatment of Large Landscapes

Some suggest that the answer to destructive wildfire is to let them burn—just protect a little area around communities and residences and let nature take care of the rest. This suggestion fails the common sense test in many ways.

- It ignores the damage that destructive fires do to watershed, wildlife and fish, recreation, and other forest values. We know that fire causes many soil types in the area to become impervious to water. Precipitation on these hydrophobic soils generates overland flows of water, soil and debris that can travel great distances. Communities, fish and precious water supplies are equally at risk from these after-fire floods and mud flows created in unprotected and unstable watersheds, miles from the communities.
- It ignores the fact that our National Forests are intermingled with private lands, and fires burning on these Forests represent a threat to the private land values. The homes and forested land are intermixed. They do not form a separate interface where homes can easily be separated from forest fuels.
- It ignores the impact of smoke from forest fires on air quality and human health. The towns in and around last year's fires can provide ample testimony on the impact of fires on the health of the inhabitants and their quality of life.

- It ignores the practical problem, while individual houses that have defensible space can often be protected, that when fires come at a community on a wide front there are simply not enough resources to take advantage of the defensible spaces around many homes at the same time.
- It ignores the complexity of hundred of miles of urban interface on the San Bernardino to be managed and protected, with little or no discrete stratification of fuel loading and types between the general forest and human habitations.

Northern Arizona University professor, Dr. Wally Covington, argues the "frequent fire forests," such as the San Bernardino, "are so degraded and fragile that they are no longer sustainable, and a liability rather than an asset to present and future generations." Treatments, he suggests, should consider landscapes of 100,000 to 1,000,000 acres. The entire fuel picture must be considered—the massive brush fields as well as the forested areas. Starting with highest risks, we should work back into the interior with fuel modification to where the costs of fire and values at risk reach some sort of equilibrium. The consequences of inaction will be to give residents a false sense of security that may put property and even their lives in danger.

Similar rationale applies to forest insect epidemics. Beetles fly wherever they find suitable trees, and they respect no boundaries. Allowing a beetle epidemic to build up in the interior of a public forest jeopardizes private property as well. Thinning a stand increases the availability of soil moisture. Bark beetle populations can be held in check by modifying stand density because beetles do not become established in vigorous trees. Thinning is the only reasonable means to provide some insurance against the inevitable drought and lessen the effects of bark beetle infestations.

Treatment of Large Trees

Bark beetles are not deterred by the thick bark of large trees. Evidence of this, in the form of dead 400-year-old ponderosa pine, pervades the San Bernardino. These dead trees, full of pitch and dried out by summer heat, will make a spectacular display of fire behavior when certain weather conditions and ignitions combine. The dead and down material will then generate an inferno, and the standing dead will act like Roman candles, scattering spot fires for miles ahead of the fire, making direct attack impractical and endangering life and property.

While some may argue that big trees should not be removed because they are fire-resistant, history has demonstrated that big trees, while relatively resistant to fire, also burn with high intensity under very dry conditions and where ground fuels have built up. The Tillamook Burn in Oregon, at 355,000 acres, and the Yacoult Burn in Washington, of 1,000,000 acres, were mostly old, large trees in much cooler moist coastal environments. The fires killed the large trees as well as the small ones.

Restrictions on harvesting a given size or age of trees interrupt the succession necessary to maintain the basic health of the forest. The only responsible treatment is to remove the dead material and ladder fuels to an acceptable fuel loading, harvest the beetle-infested trees to prevent further spread, and thin the remaining stand to a density that reduces moisture stress and provides some resistance to drought. Size of individual trees must not be a deterrent to doing the correct silvicultural job.

The "Don't Touch" Fallacy

Many people reject the idea of human intervention in the forest. The common view of the forest is one of stability and persistence, and we find a reluctance to intervene with this perceived static condition. But any knowledgeable observer of forest conditions recognizes that forests are not static, are never "in balance". They are constantly changing. The status quo view might be summarized as, "Let's pretend there are only a few Native Americans in the country and manage our forests as they were prior to European settlement." In their view, roads, timber harvesting, fire protection, recreation developments, and other human activities are the cause of our current problems. Forget about managing the forest, just leave it alone and everything will be just fine.

But Mr. Chairman, common sense tells us that we cannot ignore the presence of 280 million American in this country, nor ignore the demands that they make on our forests. There can be no more vivid example of the "don't touch" fallacy than right here on the San Bernardino National Forest and in much of the surrounding private lands where human impacts and moisture stress are at their highest.

Over 350,000 acres of both public and private land in the San Bernardino and San Jacinto Mountains face drought-related mortality ranging up to 80 percent of the trees. Insisting that we let nature take its course in this highly populated and developed area, with severe drought on top of massive bark beetle infestation, is a

certain disaster to life and property in the making. What will we be able to say to the American people if we do nothing, letting nature take its course, which results in substantial loss of human life?

Threatened, Endangered and Sensitive Species

The southern rubber boa, Charima bottae umbratica, (State Status—Threatened; Federal Status—Sensitive) resides in the San Bernardino, San Jacinto and San Gabriel Mountains above 1,500 meters. This creature will very likely become an issue when land management agencies propose forest health prescriptions. The Riverside County Multiple Species Habitat Conservation Plan lists a number of threats to the viability of the species; firewood harvesting, off-highway vehicle use, fern harvesting, commercial timber harvesting, fire management, skiing, and federal—private land exchanges. The fact that wildfire misses the list is a pathetic manifestation of a basic lack of understanding of the effects of fire on wildlife habitat. Reliable estimates of habitat loss of the northern-spotted owl due to the Biscuit Fire in Oregon last year amounted to over 80,000 acres. Owls are mobile, and an individual can escape a fire to take up residence elsewhere. But the lethargic, slow, earthbound boas have no escape from even a moderately hot ground fire, let alone a massive conflagration that appears possible in the San Bernardino and San Jacinto Mountains. Habitat-destroying fire could be disastrous to the species.

We don't propose to ignore the rubber boa's habitat needs, but one must consider the long-term effects of no action when assessing the short term. The Conservation plan describes the habitat destruction of the southern rubber boa as a consequence of moving logs around, logs that the extremely secretive boa uses for hiding. A schedule for forest management activities could be timed when the species are less active—in the middle of the summer and in the winter, for example. In addition, only a small portion of the forest will be affected by fuel treatments at any one time. In any event the imperative is to carry out the necessary treatments whenever habitat loss in the long-term will exceed the immediate effects.

Another commonly held argument against active management of habitat at risk harkens back to "The No Touch Fallacy". Wildfire (the claim goes) being "natural" is more acceptable than human intervention, even if "unnatural" human intervention is less damaging to the habitat than the alternative of no action. This amounts to sacrificing species health only for the sake of maintaining a misguided dogma.

Forest Health Funding

Assured annual appropriations must become an integral component of forest health maintenance. On-again, off-again funding for forest health means that the field loses the necessary professional skills and that research into forest health problems dries up. It also precludes the development and maintenance of markets for material that needs to be removed. The Forest Service must devise a comprehensive programming and budgeting system that addresses all the aspects of forest health, including a prioritization scheme that sends the money where it's most needed. Funding must also be available to all forest supervisors to maintain minimum skills necessary to monitor and treat unhealthy forest conditions. A forest health program plan, once developed, should be a budget line item for Congressional appropriations.

Direct thinning projects have an important role. They are expensive, but effective. Funding needs to be continued, but common sense tells me there is little likelihood that the Congress can provide appropriations at a level needed to make significant progress.

Fortunately, substantial portions of the stands that need treatment have economic value. There are potential markets for much of the material that needs to be removed, as lumber or other forest products, or in the production of energy.

Regarding the production of energy, two relatively new developments could be brought into play on the San Bernardino. One is the small power generating plant using small diameter forest residues, a demonstration of which is currently in the field testing stage by the Forest Products Lab; the other is the slash buncher now in use in the central Sierra, which binds small material in bunches for delivery to power plants. The San Bernardino area, with its developed infrastructure and copious supplies of raw material, provides a perfect location for additional field-testing of these activities. Additional funding for the Forest Products Lab for research and development would help refine these technologies to make them more lucrative as important adjuncts to forest health operations.

Much can be accomplished in terms of stand management, while also contributing to the economy of local forest communities and to our energy needs, if the Agency is provided the flexibility to market commercially valuable material.

Now I know the charge will be made that this is just another excuse for letting the timber industry back in the door, but using the economic value of this material is the only way the job is going to get done. It is also consistent with the statutory purposes for which the National Forests are established.

Recognizing the immense cost of restoring forest health, we must not shrink from having forest products help pay for the cost. Recent studies by the Forest Service demonstrate that removing some commercially valuable material along with small material of negative value, results in better forest conditions and lower costs. Selling commercially valuable material, where it makes silvicultural and economic sense, will give us more bang for the appropriated buck.

The Case for Active Forest Management

Mr. Chairman, clearly the forests of the country were not sustainable in the face of the level of forest fire activity that was occurring at the start of the 20th Century. The story of fire suppression and forestry in the last century is in fact a great success story.

In the early 1900's we were burning as much as 50 million acres per year. Today we consider 5-6 million acres as a bad fire year. And let us look at the results. In the early 1900's, removals from our forests exceeded growth. Today, in spite of significant population increases, growth exceeds removals by substantial margins. Private firms and individuals invest in long-term forest management because there is some certainty that the investment will not be lost to fire. Water quality from our forested lands remains high. Populations of deer, elk, and other game species have increased dramatically. Recreation use of our National Forests has increased. By any objective measures, the condition of our forests has improved dramatically over the last century.

But our forests today face a growing threat of loss to fire, insects and disease as the result of overstocking over wide areas. It is essential that efforts to deal with this problem be accelerated.

Foresters and fuels management specialists on the National Forests know how to create stand conditions that reduce their vulnerability to fire and insects. They cannot fire proof these forests, but they can reduce the likelihood of devastating fires and reduce the damage resulting when fires do occur.

Forests need to be thinned to reduce fuel loading and the likelihood of crown fires. We know quite a bit about the stand conditions that are required. The Agency needs to be provided with the full range of tools necessary to achieve these conditions. Stands must be treated not only adjacent to communities, but also throughout many of the vulnerable stands. Artificial limits on the size of trees to be cut must be avoided.

Fire can and should be used as one of the tools for reducing excess fuel loading, but it is expensive. Pretreatment by mechanical removal is required in many areas before fire can be used without excessive damage and liability risks. Smoke management is a major issue. As a practical matter, there will be relatively little increase in prescribed burning under current clean air regulations. I will let the members speculate on the likelihood of a significant relaxation in the regulatory arena.

Mr. Chairman, many of the views of the National Association of Forest Service Retirees on this issue are documented in the publication Forest Health and Fire an Overview and Evaluation. The publication is available in electronic form at www.fsx.org/NAFSRforesthealth.pdf. I ask that it be included in the record.

Thank you again for the opportunity to take part in this critically important hearing. I would be happy to answer any questions.

The CHAIRMAN. Without objection, it will be included in the record. Thank you.

Mr. Jensen.

STATEMENT OF JAY JENSEN, LEGISLATIVE DIRECTOR, WESTERN FORESTRY LEADERSHIP COALITION

Mr. JENSEN. Thank you, Chairman Pombo and Committee. I'll be making frequent reference to my written testimony, so you might want to pull it out as it contains a number of figures and graphs that relate this Bark Beetle problem in a larger context of the West.

My name is Jay Jensen. I'm the Legislative Director for the Western Forestry Leadership Coalition, a group of western states foresters, western USDA foresters, regional foresters and western USDA Forest Service research station directors. The coalition is a state and Federal partnership between these 34 western leaders who have organized to come together to talk and tackle these issues, these forest resource issues that affect the West such as the Bark Beetle.

What I'd like to talk today is to come before you and present some of our findings of our western Bark Beetle report and in the larger context talk to you about what is happening in the rest of the West in terms of the Bark Beetle.

I think we've heard pretty good—I'm going to recap a little bit of my written remarks in the sense we've heard from the Panel and from the questions already about what the beetle means in terms of its impacts on forest health and in terms of fire. I think it's important to note that the Bark Beetle is actually an endemic species to the environment. It does play a natural role in keeping forests healthy. When a forest is healthy, they create low level disturbances that actually help with wildlife habitat, actually help with increasing diversity in trees. However, when our forests are unhealthy, what the Bark Beetle does is it exacerbates the problem. We see it impacting instead of tens of thousands of acres, hundreds of thousands of acres and that's what we see here today. We're dealing with the problem where we have unhealthy forests where the trees are, as Dr. Bonnicksen has pointed out, the trees are too close together. We have too many trees on the landscape. Throw on top of that the drought that we have, the problem is exacerbated even more.

What this results in is we are prime and ripe for catastrophic wildfire to strike. Now the crux of the issue here is apparently is what the public expects out of their forests. Yes, these forests will grow back. Yes, the fires will happen and people will rebuild their homes in these areas, but is it acceptable for the people who live here now and what we value as a society to have that happen? I would submit to you that it is not. We must do something about that.

Now I'm going to return and go back to the report a little bit and summarize to you perhaps the most striking finding that's in there. We found that over the next 15 years it's projected that 15 million acres will be impacted by Bark Beetles in the West.

If you'll turn to page in my testimony, you'll note the first figure there. It's entitled Forest Health. That shows a graphic representation of where those 21 million acres are to be intact and on the landscape.

On the following page, on page 4 of my testimony, you will note another graph. It shows 2002 fires in the West. What this map shows in red are all the forests in the West that are currently unhealthy and where the fires in 2002 impacted on the ground. You'll notice a pretty strong correlation between where those fires occurred and where we have unhealthy forests. If you juxtapose that first graphic and this next graphic you can see and anticipate where we're going to see future problems in the West.

To provide a little more detail in terms of that, I'll again ask you to turn to page 5 of my testimony where there's a table. I'm not sure if the Clerk handed it out earlier, but there's actually a graph bar representation of what those numbers show there. And Chairman Pombo and Congressmen from California, you'll note what that table and this graph shows are acres of tree mortality by Forest Service region. California is Forest Service Region 5. You'll note from 2001 to 2002, we have a tremendous leap. In terms of absolute numbers, we're going from 78,000 acres to 847,000 acres.

Congressman Gibbons, Congressman Walden will also notice the same in your states and your regions. Now, this paints a fairly foreboding and a bleak picture, but I will say that we do have a course of action we can take to actively manage our forests.

Our Bark Beetle report lays out the course of action that would need to be taken. I'll summarize that and briefly say that we need to undertake a national course that undertakes prevention, suppression and restoration of those forests.

To wrap up my testimony, I'll bring it back to what's happening here in Lake Arrowhead and the San Bernardino National Forest. Lake Arrowhead is not alone and a community in itself. Where Lake Arrowhead is actually ahead is that they have, the communities come together and agree that action needs to have and that needs to take place. The same location in the rest of the country, but that debate is currently happening right now and I think what's happening with the Healthy Forest Restoration Act is a good example of what needs to happen so we can get to the point where we can take quick and decisive action to respond to these threats.

I encourage you in that sense that we must continue the discourse on what our management reaction should be and the Healthy Forest Restoration Act is a good start to that discourse. Thank you.

[The prepared statement of Mr. Jensen follows:]

Statement of Jay Jensen, Legislative Director, Western Forestry Leadership Coalition

Members of the House Resources Committee, thank you for the opportunity to testify before you today to present critical and timely information on the condition of our western forests. My name is Jay Jensen. I am the Legislative Director for the Western Forestry Leadership Coalition (Coalition), a group of western State Foresters [1], western USDA Forest Service Regional Foresters, and western USDA Forest Service Research Station Directors [2]. The coalition is a federal-state partnership representing the expertise and experience of these 34 western forestry leaders who have organized to help tackle many of the current resource issues we face in the West.

You are here today to discuss the forest health crisis in the San Bernardino National Forest, but, as you will see, the problem of bark beetles in the West is not unique to Southern California. The Coalition and its members are seriously concerned about what western bark beetles are doing to our forests and communities throughout the west. We greatly appreciate this opportunity to speak with one voice on this bark beetle issue and would like to present the findings of a report entitled, Western Bark Beetle Report: A Plan to Protect and Restore Western Forests (www.WFLCcenter.org). Requested by the House Resources Subcommittee on Forests and Forest Health, the USDA Forest Service in cooperation with the Western Forestry Leadership Coalition released the report in April of 2002.

[1] Includes the U.S. Territorial Foresters in the Pacific
[2] Includes the Forests Products Lab Director in Madison, WI

Historical Role of Bark Beetles

Today I would like to discuss the important recommendations of the report, but first allow me to present the larger context of western bark beetle impacts in relation to Lake Arrowhead's situation. Bark beetles in western forests have been present for millennia. They are an endemic species, that is one that is native to the area, and have a very important natural role to play in keeping forest ecosystems healthy that should be recognized. They act as "agents of change." Forests are dynamic and beetles contribute a healthy level of disturbance in the forest. Within their historic natural range of variation, they can act as a low-intensity disturbance in the forest, maintaining a proper balance of numbers of trees and forest ecosystem structure. Similar to fire, these low-intensity disturbances are an integral dynamic in keeping forests healthy.

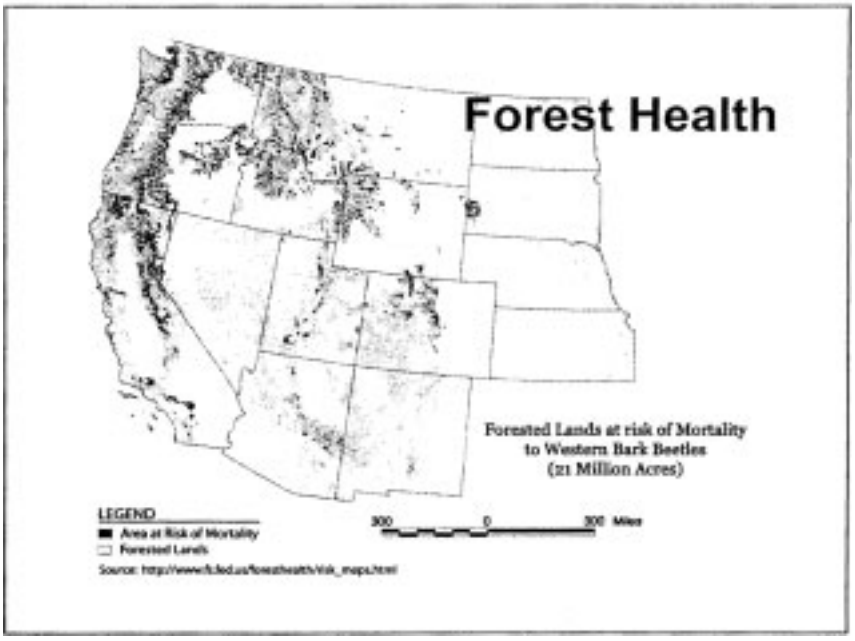
However, when our forests are unhealthy, the normal balance that exists is disrupted by numerous factors. In an unhealthy forest, normally low-level disturbances are exacerbated and result in high-level catastrophes that tend to be harder and costlier to address in terms of dollars and lives. Rather, these unhealthy forests can lead to high-level catastrophes that threaten the myriad of resources the public values in our forests; clean water, wildlife habitat, scenic beauty, timber, and clean air. Many of our western forests are no longer resilient to bark beetle outbreaks. No longer are forests able to withstand their effects, thus preventing the beetles from playing the role of a positive "agent of change."

The reasons why beetles are able to act outside their normal disturbance role are complex, but can be simply summed up by saying there are too many trees in the forest. Due to diminished active management in forests as a whole and decades of efficient wildfire suppression, forested lands have grown overcrowded. I am here to relay that many of our forests throughout the west are overstocked, over-mature, and lack diversity in species and age. Just as people are more susceptible to disease when in crowded environments, trees are forced to compete for more limited resources like water, sun and nutrients. Forests in these conditions cannot withstand natural stresses such as drought. With the ongoing droughts that are affecting much of the west compounding the problem, it becomes clear that trees and whole forests are extremely susceptible to health threats such as the bark beetle. In these conditions, beetles act outside of their natural range of variation, resulting in potentially devastating impacts to forest communities and, perhaps more importantly, human communities.

Values At-Risk

Our forests do not stand in isolation from the communities within and around them. On the contrary, people depend on them. The human communities around Lake Arrowhead are a perfect example. Within their branches, forests hold much of what we as a society value and, to some degree, take for granted every day. Forests provide benefits to urban and rural communities in the forms of recreation, wood products, clean and adequate water, wildlife habitat, scenic quality and jobs. As a whole, these items define our quality of life. When our forests are devastated by a wildfire outbreak, the forests and the resources that we hold so dear are at risk of deteriorating. This is what we risk when bark beetles are allowed to operate outside their natural range of variation.

FIGURE 1: Projected acres of western forests impacted by bark beetles.



Western Impacts

Our western bark beetle report found that over the next fifteen years, twenty-one million acres of western forests[3] are at high risk of experiencing significant tree mortality caused by bark beetles [See Figure 1—"Forest Health"; page 3].

Combined with continuing drought, we have a recipe for disaster, like the one we see here in Lake Arrowhead. Dead, dry acres of trees wait for a match or lightning strike to erupt into a wildfire affecting people and the communities that live and depend on these forests. Figure 2 ["2002 Fires in the West," page 4] is a powerful visual that shows the direct relationship between the condition of the land and the occurrence of wildfires from the 2002 wildfire season. You will note that the major wildfires from 2002 coincide with areas that are in the worst condition class. In straightforward terms, catastrophic fires are occurring primarily where forests are unhealthy.

[3] There are 362 million acres of western forests.

FIGURE 2: Relationship between forest health and wildfires, 2002 wildfire season



The truly unfortunate situation is that the problem is not getting better on its own. Table 1 ["Acres of mortality," page 5] shows the acreage adversely affected by bark beetles over the past six years. As you can see, we are moving on an exponential scale where the number of trees that have died over the past two years has more than doubled from 1.9 million acres to 4.1 million acres.

TABLE 1: Acres of mortality from bark beetles by USFS Region by Year (millions of acres)

	1997	1998	1999	2000	2001	2002
Region 1	259	281	432	395	546	920
Region 2	53	141	166	206	447	573
Region 3	91	41	20	59	154	716
Region 4	170	118	113	96	206	279
Region 5		47	29	33	78	847
Region 6	214	172	280	256	457	751
Region 10	573	335	288	121	104	58
Total	**1,361**	**1,136**	**1,327**	**1,165**	**1,992**	**4,144**

Notes:

1) Data source: National database of insect and disease aerial detection survey.

2) In 1997, Region 5 mortality data listed causal agent as "Unknown", therefore 1997 does not included data for Region 5.

This information presents an ominous case for the challenge ahead of us in the west, yet we have an answer. By actively managing the threatened acres of our forests, we can restore them to a healthy condition and avoid creating more situations like Lake Arrowhead. We have, within our knowledge and skills, the ability to avoid this. Specific actions can restore our forest to good health and reduce the

threats to communities. The Western Bark Beetle Report—A Plan to Protect and Restore Western Forests, focuses on three courses of action; prevention, suppression and restoration, all of which must be applied across all ownerships and boundaries to be effective.

Prevention

I would submit to you that prevention is the best option of the three to pursue and makes the most sense. If one can prevent or diminish unwanted bark beetle outbreaks before they occur, costs, impacts and disruptions are all minimized. A good analogy is our own health. It is smart to see a doctor regularly for preventative health measures. The same applies to bark beetles and other forest health threats. Preventative bark beetle efforts are aimed at returning the land to a more natural condition where a mosaic of species and forest age classes exist. Ultimately, prevention treatments, such as thinning forests (removing excess trees) and prescribed fires (intentionally set fires with management objectives), will result in lower overall fuel accumulations and fewer "ladder fuels" which allow flames from wildfire to spread from normal ground fires, high into the canopy. The end-result is a forest functioning within the normal and historic range of variation.

Suppression

If preventative measures fail or are not in place, the next option is to suppress the bark beetle outbreak. Unfortunately, suppression efforts tend to be the most costly option to undertake. Suppression strategies call for expedited treatments in order to limit the negative impacts of ongoing outbreaks. Emphasis should be placed in high-valued areas such as the wildland-urban interface, threatened and endangered species habitat, recreation sites, and critical watersheds that provide drinking water. Suppression actions include removal of potential and infested host material; the use of pheromones to capture beetles; and, at times, the limited use of pesticides to protect high-value trees during an outbreak.

Suppression efforts may give resource managers valuable time to design and implement prevention and restoration treatments that will reduce further bark beetle spread and return forests to a more resilient condition in the future.

Restoration

In some sense, restoration is the final goal of all our actions. We want to return forests to a healthier condition so they are more resilient to bark beetle outbreaks. When trees are healthy, they can fend off these natural predators with their own defense mechanism; the tree's own sap and pitch. This should be a guiding goal in all our efforts. The approach to restoration involves re-establishing proper tree spacing and an appropriate diversity of tree species for the site through targeted tree removals and plantings. Again, the challenge here is the magnitude of the problem ahead. As much of the west's forests are in poor health (estimates are as large as 190 million acres of federal land in either condition class 2 or 3), much work needs to be done to restore these lands to a point where bark beetles can return to their natural range of variability and act within its historic role as an agent of change.

Research

A word needs to be said about the continued need for research and development on bark beetles. We already know much about the interaction of unhealthy forests and outbreaks of bark beetles. Enough so that we can take action and have the confidence in knowing what we are doing will improve the situation. However, in order to become more effective in our response capabilities, continued improvement in our prevention, suppression and restoration abilities is prudent.

We can benefit from continually improving research efforts that include the following:

- Improved methods to predict where, when and how much bark beetle activity will occur on forested landscapes;
- Clarified results and interactions between bark beetle populations, wildfires and prescribed fires;
- Technologies for using natural attractants and repellents; and
- Continued education and outreach to improve understanding of the ecological role of disturbances caused by insects, disease and fire.

Conclusion

Lake Arrowhead is not an isolated situation. It is clear that much of the west faces similar threats from bark beetle outbreaks. The difference between current and historic outbreaks is the scale of interaction between bark beetles and their hosts. Present day western forests are much more susceptible to large-scale tree

mortality caused by bark beetles, whose impacts are even further exacerbated by drought.

The urgency is upon us. We risk damaging and losing forest resources Americans value so deeply. The evidence is clear that we need to actively manage our forests to have any chance in improving our forests' health. Strategic direction is already laid within the National Fire Plan and the guidance of the 10-year Comprehensive Strategy Implementation Plan. We must now make a long-term commitment to prevent, suppress and restore bark beetle impacted forests that involves all interested stakeholders as partners and approaches the issue of bark beetles across all ownerships.

We all can learn much from what plays out here in Lake Arrowhead, but we must continue public discourse on what our management response should be.

The CHAIRMAN. Thank you. Mr. Gibbons.

Mr. GIBBONS. Thank you very much, Mr. Chairman, and Supervisor Hansberger, what percentage of the tax revenue base for San Bernardino County is affected by the Lake Arrowhead and the San Bernardino Forest property and the fires here?

You talked about $8 billion valuation. That's a property tax valuation. What percentage of that is that of San Bernardino County's revenues?

Mr. HANSBERGER. Actually, it's probably a fairly small percentage. I should have those numbers at my fingertips. I do not. I would say it's probably somewhere in the range of less than 8 or 9 percent. However, local—there are many local service agencies within these mountain communities who rely on property tax as their means of survival and this is the 100 percent of their property tax revenue. So if you are a local community service district, if you are a local fire district, if you're a local hospital district, a local school district, you are heavily impacted by this and it may be the entirety of your income. The county itself may not be losing as much of the revenue, but it would have an adverse impact on us.

Mr. GIBBONS. So theoretically, if a disaster struck in this part of the county, it could bankrupt the others who would then have to support the small local community infrastructure that would not be supported by the tax base?

Mr. HANSBERGER. That's true.

Mr. GIBBONS. Dr. Bonnicksen, does treatment preclude fire or does it simply mitigate the type of fire?

Mr. HANSBERGER. Which treatment?

Mr. GIBBONS. Treatment of a forest, whether it's thinning, whatever the proposals are for this type. Not including, of course, prefires.

Mr. HANSBERGER. Treating a forest properly, in other words, making the forest function and look more or less as it should naturally will substantially reduce the fire hazard, but it doesn't eliminate the fire hazard.

However, in a forest like this, historically, these fires were every 9 to 18 years, sometimes a little longer in between, but most of the time the flame heights were a foot or two above the ground and then it flared up in patches here and there that were overgrown because there's always going to be a certain proportion of the forest in small patches, usually less than 2/10ths of an acre in size for this forest, where it would flare up, but the other patches being relatively fire resistant, would contain those flare ups and the fire

would drop back down to the ground. So that would be a normal fire regime here and that's what you'd get if you restored the forest.

Mr. GIBBONS. So theoretically, even if you treated the urban forest interface for a fire, you wouldn't preclude a fire from going through that area?

Dr. BONNICKSEN. First of all, it's awfully tough for me to figure out where this urban interface really is. If you look in these communities, you'll find these houses are scattered throughout the forest. We have Boy Scout Camps, Girl Scout Camps, cabins everywhere. I'm not sure I know where the interface is. It's all interlaced. The people live within the forest and there's no wall that we can build to separate them from the forest, so I'm convinced that there's only one way to protect both the communities and the forest and that's to manage it in a way that mimics its history.

Mr. GIBBONS. I guess the question was premised on the idea that if you treated a forest, you get less crown fires, which are devastating to a forest versus a ground fire which usually helps in terms of the health of a forest.

Dr. BONNICKSEN. I would certainly hope that once the forest is restored, recognizing in this case we're dealing with for the most part a dead forest, we can, however, through management and planning and other things, bring back the forest.

I would hope that fire would play some of its historic role in that future forest, continue to think it, continue to reduce the fuels, but it would never be possible to do that on a scale that matched its history because people live here, air pollution restrictions and so on, so it would always play a supplemental role. You're going to have to use mechanical methods from now into the foreseeable future to supplement that.

Mr. GIBBONS. Ms. Tuttle, I've only got a few seconds here left. I'd like to ask you how the State of California balances out the resource utilization between California International Guard map units and contracted out commercial fire fighting units?

Ms. TUTTLE. That would probably take more time than we have here. You recall that the State of California has its own fire resources that we draw upon. We have engines. We have fire fighters. We have crews. We have an aviation tanker force and helicopters and we work in close coordination with our Federal partners. We are dispatched together. We have regional operation centers. So the coordination with the Federal resources is if we need them on the particular fire. We had state responsibility fires. We have Federal fires and it just depends on the extent of resources needed and we share our resources. That's the strength of our system.

Mr. GIBBONS. I failed to ask the question properly, but my time has expired, so you——

Ms. TUTTLE. I'll be happy to talk with you afterwards.

Mr. GIBBONS. Exactly. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Cardoza.

Mr CARDOZA. Thank you, Mr. Chairman, I'd like to start by just making an observation that it seems to me after hearing this testimony that we're loving our forests to death and the hands off policy just isn't working.

The CHAIRMAN. One of the things I'd like, Dr. Bonnicksen, or the supervisor to mention or to answer this, is that it seems to me that because there's a lack of logging resources in the area, there's nobody left to utilize or to process the wood that you need to take out of the forest at this time. Is that right?

Mr. HANSBERGER. Essentially that's correct. Unfortunately, one of the ways we're disposing of timber today either at the county landfill or through the air curtain and destructors to actively burn the wood which breaks my heart to see a resource like that be destroyed without it ever having a use.

I mentioned earlier I appreciated the comment area, having grown up in this region, I remember when Big Bear Timber Company was an active company and we were actually logging here and I defy anybody to find today the results of that in a negative way in our forests. It simply isn't present and having lost them, we lost a very valuable tool.

Mr CARDOZA. That's the reason why I asked the question is because I recently was in Klamath Forest up north and they're afraid the same thing is going to happen to them that's happened down here and they feel that they're fearful that a lack of logging and lack of proper forest management will cause the same devastation that you're experiencing here with poor management practices.

Mr CARDOZA. I just recently came back from a trip to Israel, Dr. Bonnicksen, and in Biblical times they talk about how Israel, which has a very similar climate to here is a bountiful and forested land. And Mark Twain, in the 1860s goes over there and it's—he calls it a denuded wasteland, void of any vegetation for miles. Now you go back and there are healthy forests.

Is that the kind of forest practices that you're hoping to see in the rejuvenation after we can clear out here or does that really take a much more intensive effort than what we've put forward?

Dr. BONNICKSEN. Not to be too facetious, but not the forest practices that denuded the forest, but those that——

Mr CARDOZA. Exactly.

Dr. BONNICKSEN. I think here—I'm been dealing with restoration forestry for a very long time, actually restoration forestry began with Aldo Leopold in 1934, but we're used to dealing with a living forest. We just have to scope out its history. Here we're actually starting from scratch. I've never seen anything like this where we have to start with virtually no forest and build a whole new one. This is a monumental challenge that I think we as a society are obligated to undertake.

Mr CARDOZA. Ms. Tuttle, currently, the State of California is looking at a bill, S.B. 810. I believe it's on the Governor's desk. It would further restrict timber—it would put additional regulation on timber harvest plans. Does your administration have a position on that yet? I could just put in my two cents worth. I am thinking that this is not the proper way to go, but really need to do better planning and I'd encourage the Governor to veto that bill, but I'll let you speak.

Ms. TUTTLE. It is on the Governor's desk and the decision at this point is his to make. We do have a very rigorous Forest Practice Act in California. We do protect public trust resources. I personally have been very committed to retaining a strong sustainable forest

products industry in California and keeping our forest lands, our privately owned forest lands, in forest use because we grow trees, we have wonderful forest soils. This is a very sustainable and important industry to retain in California.

The forest practice rules do have salvage provisions in them for dead, dying and diseased material. The relationships with the regional water boards which is what you're referring to here with S.B. 810 is one that we try very hard through the review team process to accommodate the comments of the regional water boards. We accommodate or accept approximately 95 percent of what they request in terms of site-specific mitigation.

It's those—that other portion, particularly on the north coast where most of the concern has been raised.

Mr CARDOZA. If I could just have one more moment, Mr. Chairman, I'd just like to build upon what Mr. Walden said. I was in San Francisco the day of the Oakland Hills fire and there were embers and ash coming clear across the Bay so the amount of distance that these fires can travel and the embers that float from these devastating fires can go quite a distance.

The CHAIRMAN. Mr. Lewis?

Mr. LEWIS. Thank you, Mr. Chairman. Chairman Hansberger and Ms. Tuttle, I must say that I'm very pleased that you are part of the Panel for it's a reflection of the reality that many agencies are involved here. The challenge is a long one. Real dollars are going to be required. The county is under great pressure for their budget difficulties, the state is as well, so is the Federal government, but in the meantime, this is a crisis and we do not tend to be other than a crises-oriented society. I would hope that long-term commitment of all of our dollars would be a part of this.

Mr. Chairman, with your leave, I'm going to do everything I possibly can within that other piece of the body, the appropriations process, to try to help.

But I've never had the privilege, Mr. Chairman, to sit with a Panel quite as varied, but also talented, as this one. And so if you'll forgive me, Dr. Bonnicksen, let me specifically as you to help me understand what kind of model and what kind of time is required to do what you suggested? We've got a dead forest that is unprecedented. We must do what we need to do to protect those trees that have survived and in turn, go about what I was talking about earlier, perhaps modeling a way that we collect the seeds, build the foundation for replacing those trees that are going to be removed, hopefully not all by fire, but removed. What kind of time is involved, what kinds of dollars in your best guesstimate are involved in a comprehensive modeling of this forest?

Dr. BONNICKSEN. First of all, there's absolutely no question that we start close to the homes and businesses and schools where people are. We have to start there to do everything we can to protect them. We have to remove the dead trees, protect those trees that are alive, thin those trees that are in patches that are still too thick, release some of the big old Black Oaks that still have some full-size trees surrounding them and strangling them.

We have to be gentle on the site with the machinery we use so that it does not disturb the soil any more than necessary. We have to plant in the openings those species that are appropriate to the

size of the opening. If it's a small opening, you'd put in fir or cedar, although I think that will be naturally seeded in some areas.

In a somewhat larger opening, you'd put in sugar pine and in a larger opening still, you'd put in Ponderosa Pine. So we know basically how to do those things. And then work our way out from the communities into the forest at large. The cost is something like an average of between $1,000 and $4,000 an acre. I think we can recoup some of that cost if we can build infrastructure for the processing of biomass for energy production, for the production of ethanol, for example, as another source we can use.

In addition to that, I think if we move quickly in those areas closer to the communities where there are—there may be billions that you'd need ultimately on this forest that we'd harvest. We have to, I think, demonstrate or make people aware of the fact that this material, this wooden material, if we get to it quickly enough, even though it has blue stain in it from the—that was brought by the beetle, is still perfectly good wood for building homes. It's structurally sound and there should be no stigma attached to it. That's one of the reasons that value drops on this 52 percent within about 2 months after the beetle hits a tree is because people think that blue stain is not good wood. It's actually quite decorative and structurally sound. So I think we also have to educate the public to the value of this product so that we can market it at a price that makes it possible for the taxpayers to recoup some of the costs. But you just have to multiply out those numbers.

There's no way in the world that we're ever going to manage 474,000 acres because if you look at the terrain you can see it would be physically impossible to harvest that material and replace the forest. It's too steep, the soils are too shallow in some areas, so we're really talking about strategically restoring parts of this forest and then I'm afraid some of it's going to be a write off. We can't do anything about other than to hope it recovers as best it can, but I think at least half of this forest could be easily restored, but it would take ultimately that cost, minus whatever money we can recoup from the products we produce. Fifty to 100 years, they have a forest that looks like a real forest, depending upon the site, and I'd say a 10-year process to achieve what's achievable.

Mr. LEWIS. And 10-year process and probably literally hundreds of millions of dollars perhaps?

Dr. BONNICKSEN. It could easily be hundreds of millions of dollars. In fact, I offered kind of humorously to one of the guys in the Forest Service, I said, OK, I'll take this forest at $400 million. He said sold. I said uh-oh. So I don't know if that wold do it, but I do think that if we restored half of that and multiplied it by $1,000 to $4,000 per acre, minus whatever value we get, that's the cost.

Mr. LEWIS. It's my understanding that in areas like Mr. Walden's northwest that blue stain pine has become a popular product and literally being used in the marketplace. That kind of sale needs to take place in Southern California as well, but indeed, there are portions of the forest that are highly usable in the marketplace, if we will. In the meantime, I appreciate all of your testimony. It's a very valuable panel. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you. Mr. Walden.

Mr. WALDEN. Thank you very much, Mr. Chairman. I want to go back to this issue of the wildland urban interface because as I was reading the testimony we're going to hear soon from a representative of the Wilderness Society, he makes a very interesting point and that is that in California, 85 percent of all the land within a half a mile of 814 communities identified as being at risk from fire is nonFederal in ownership, a crucial fact completely overlooked by HFI. Is that—if that's the case then, I now better understand why some of these groups are pushing to focus virtually the entire portion of this bill on that half mile interface because then the bill would do virtually nothing. Is that not accurate? Anybody want to comment on that?

Go ahead, Ms. Tuttle.

Ms. TUTTLE. Let me venture into this, not as an endorsement or nonendorsement.

Mr. WALDEN. We'll accept an endorsement, but go ahead.

Ms. TUTTLE. Of any position, but let me just say that California has more wildlife urban interface than any other state in the nation. The entire front face of the Sierra, the entire Marin County up to Sonoma and Mendocino, the entire San Francisco south down through Monterey, all across this area, this region here, we have more interface than any other simply because we have a larger population and a larger mixing of these two land types.

We also have three types of interface. One is the interface with the Federal nexus. One is the intermix which is privately owned lands that have homes built in the forest and the third type is the interface that does not have a Federal nexus which is the Oakland Hills fire where that was regional parks next to dense urban areas. Down here, you have a lot of nonFederal nexus.

So just to clarify that, we have so much interface, frankly, I will take any projects any place. We do need to focus on the interface in California because of the loss of property aspect. It's different from Montana and Wyoming which has a different development.

Mr. WALDEN. I fully agree with you and in fact, commend your agency for the partnerships you have, frankly. In my state and in the Forest Service, you've done tremendous work. My point though is we looked in the Federal process to be better able to manage Federal lands. If we restrict the bulk of this process to a half a mile within a community, it's not that that work doesn't need to be done, it's that you've basically taken what we're trying to do to improve a system, focus virtually all of it over here where it will have little, if any, effect because according to this testimony, 85 percent of that land isn't Federal anyway.

So that's my issue.

Ms. TUTTLE. I'll let you have the conversation about that——

Mr. WALDEN. I didn't mean to put you on the spot, but I guess the question I'd have of you, I noticed that Governor Davis, you mentioned in your testimony, issued an emergency order to deal with some of these issues. Did that emergency order also deal with the planning process to get in and treat state lands or to work with private landowners that might fall under California state law? Did you streamline that and expedite it? And I'd be curious too, to know, what limits you may or may not have on types of materials that can be taken out, sized, diameter, all of that.

How does California deal with that?

Ms. TUTTLE. Because California has so much interface, we've been in this business a lot longer than the National Fire Plan. For at least 10 years, we have developed an infrastructure of three primary elements one of which is our Fire Safe Councils. This is the work that you have very active Fire Safe Councils here. They've been instrumental in bringing us together.

The second leg is the California Fire Alliance which are the combination of state and Federal agencies. We meet regularly to—and certainly now with the National Fire Plan and the grants, we've been using the alliance as our focus for the grants.

Because of the—because the philosophy of the Fire Safe Councils is to build constituencies from the bottom up rather than the top down, we have had very good environmental and public support for the fuel breaks projects that we do in our interface communities. We have not had the same kind of dissension in our fuel break projects.

Mr. WALDEN. Do you have the same kind of appeals process as the Forest Service has?

Ms. TUTTLE. Fuel break projects on private land, on our side of the Federal/private boundary, projects don't go forward if there is tremendous dissension on them. So we have had very high success with the projects that have been derived by the Fire Safe Councils, yes. And these are spread throughout the state.

Mr. WALDEN. And do you work on coming up with multiple alternatives for each project, or do you try and get a consensus to one?

Ms. TUTTLE. I failed to mention the California Fire Plan. We have a very rich data base of what are fuels are, what our fire behavior is and we have the knowledge in our unit chiefs and our fire managers. We come into this community of many stakeholders, the insurance companies, and so on, and we show them where, for example, if you have community that's totally surrounded by fuel, but the wind usually goes this way, then you would put a fuel break project here, not there.

We help them identify where the projects would make the most sense and then we build the consensus, we see what kinds of resources are available to us. We use every mix of fueling from below, sheltered fuel breaks, whatever it may be, whatever is appropriate for that site.

Mr. WALDEN. My time has expired, thank you.

The CHAIRMAN. If could just follow up on Mr. Walden's question, if you could explain to me what—maybe I misunderstood it, what did Governor Davis do in that emergency declaration of whatever it was? What—because I understood that it was a change of policy and from what your answer was, you do all these great things now.

Ms. TUTTLE. The executive order was very specific. There's an issue of gifts of public funds to private lands. We are not allowed to use our crews, our innate crews unless the tree is actively hot, where it is now bug infested. After the bugs have left and the trees are dead, the responsibility is on the local home owner, the private property owner to remove those trees. What the executive order did in March was to give us the authority to go on the private lands, on to trees that the bugs have left as long as we were within evacuation corridors. We were worried about trees falling and blocking

the road during a fire and so we have a wider corridor where we now have executive authority to go onto private lands and that is where we have focused our efforts.

The second part of the—there were two orders. One was in March that gave us that authority to go on to private land and it also streamlined some of our permit conditions for taking trees, the Timber Harvest Plan permit and contracting law, we simplified.

The second portion of the executive order was to frankly provide this additional funding for fire fighter response. We have a fourth fire fighter on each engine. We have additional engines. We have additional crews and we have a leased helicopter.

The CHAIRMAN. OK, I think I get it. Because the way it was reported, I thought there was something else that went along with that because at the Federal level we have to deal with all of the appeals process and everything else and that seems to be a big part of our problem in trying to deal with some of these clean up projects and thinning projects. I had understood that the state had done something to deal with that project.

Ms. TUTTLE. It's mostly through our—the system of bottom up, grass roots stakeholder built projects where we have agreement, we have so much interface and we have been able as much—every dime that you have provided through the Fire Plan grants, we have put to very good use and we appreciate it very much. There's lots of capacity here to receive and work with the funds.

We work well with our Federal partners. We've had to. We've been at it somewhat longer.

The CHAIRMAN. Obviously, we have a lot more to do.

Supervisor Hansberger, obviously, you're a lot more familiar with how this area is laid out in terms of private and public ownership and what the impacts are. One of the difficulties that we have had is that when we get the Forest Service comes in and they say we've looked at this forest and this is the area that we feel we should treat first, because of the wind patterns, because of the topography of an area and all of the different impacts, if we get into he issue of severely limiting where the Forest Service can go to protect those hands, in fact, one of the graphs that we have up here, in showing where the dead and dying trees are versus where the urban interface is, if we went a half mile outside of the urban interface, I don't see how it would do anything to solve some of the safety problems that we have.

Obviously, you guys have spent a huge amount of money in trying to deal with this issue. How do you deal with that urban interface, wildland interface?

Mr. HANSBERGER. Supervisor Bellen has joined me today and I represent a significant portion of—well, we represent virtually all the mountain top except in the Brightwood area and I have been very concerned because I've had sort of the unique experience, having been around a long time, and I've actually participated with the fire fighters in 1970 in what's called the Bear Fire and I was right in the midst of the Panarma Fire in 1980. The Panarma Fire in 1980 which took, I think, 347 homes in the town of San Bernardino. It started up here on the mountain and moved its way all the way down the mountain.

I was well over a half a mile from the fire with a couple of fire chiefs when we were trapped inside of our car by embers that were coming so hot and so fast that we could only stay in our car and keep driving, but we would have been severely injured if we left the car and it was igniting grasslands, a mile, mile and a half, two miles away from the forest because of the severe winds that we suffer here on this mountain and people who have not experienced what we refer to as our Santa Ana winds which is an incredible wind force, just don't understand what it can be with burning embers and how far they can carry them.

At that time, I lived in the town of Redlands and burning embers fortunately did not start a new fire, but actually were carried that far. So they carry for miles, Congressman, and I personally experienced—I call myself an expert only because I actually was there and it happened to me.

The CHAIRMAN. Thank you. And I thank the entire panel for your testimony. This has been one of the most informative panels that we have had on this subject in all of the hearings that we've had and I appreciate a great deal the time and effort that all of you put into your testimony. Thank you very much.

I'd like to call up our third panel. On Panel 3 we have Mr. Joe Grindstaff, General Manager, Santa Ana Watershed Project Authority; Dr. Hugh Bialecki, President of Save our Forest Association; Mr. Jay Watson, Director of Wildland Fire Program, the Wilderness Society; Mr. Richard M. Rosenblum, Senior Vice President, Transmission and Distribution, Southern California Edison Company; and Mr. Eddie Phillips, Americans For Forest Access.

Thank you and welcome today. I will remind our witnesses that under Committee rules you must limit your oral testimony to 5 minutes, but your entire written testimony will appear in the record.

I now would like to recognize Mr. Grindstaff for his statement.

STATEMENT OF JOE GRINDSTAFF, GENERAL MANAGER, SANTA ANA WATERSHED PROJECT AUTHORITY

Mr. GRINDSTAFF. Thank you very much, Mr. Chairman and Mr. Lewis. I appreciate the opportunity to be here and recognizing the time, I will try and be brief.

The Santa Ana Watershed Project Authority, the Santa Ana Watershed, covers from Big Bear in Idyllwild all the way on down to, through Orange County to the beach and about 5.3 million people live in our watershed. And contrary to popular belief about two-thirds of our water supply comes from our local water shed. So over a million acre feet of water per year is generated in a water shed here for local use and we spend lots of time fighting about the Colorado River and dealing with the Bay Delta, but our local resources are incredibly important.

I'm not an expert in forests and how to manage them, but I can tell you that the potential impacts of the fire here are really very, very significant. We put together just a kind of a brief estimate of what the impacts of the kind of potential fire we frankly expect will happen here will be and we expect it to be, costs to all of the people of the watershed to be on the order of $200 million and the impacts come first from flooding, although frankly because Mr. Lewis has

done such a good job and we've gotten Seven Oaks in, I'm not as worried about the immense flood potential. Although if we had a 100-year storm, after this kind of fire event happened, Seven Oaks wouldn't be enough, frankly. What we have in place would not be enough. But when you look at the debris, the mud, the rocks, the other kinds of things that come down, and we have one estimate that's in here of 1.7 billion cubic yards. Now it's an incredible amount of debris. Debris flows are not really well understood, but this area is relatively young geologically and would, in fact, have tremendous debris flows that would cost huge amounts of damage, really depending on what the nature of the fire would be.

Other kinds of impacts from fire, for example, you wouldn't think about it, but the salt level, the TDS level in the water coming down the mountain would be increased and that—it still would be drinking water quality, but the impact on the ground water would be that it would raise the TDS level and we'd actually have to put in treatment systems because we're regulated about water quality on our ground water here and it would reduce the number of times we'd be able to recycle the water and right now we recycle our water about three times before it actually makes its way to the ocean. So that would be a significant impact.

Ash contains in it enormous amounts of organic compounds. Those organic compounds, when combined in the water and used for drinking can create carcinogens, so again that would cause a problem for drinking water supplies, as we move forward. In these mountains, in particular, we have a lot of uranium, so a large fire would free up uranium and we would end up with radionuclides and that would also—and radon is also a problem in the region, that this would dramatically increase the impact. It's not something that, as a professional, I've spent a lot of time, but as we looked at this and we started to look at what the potential problems are, a fire up here could cause major, major impacts for everyone downstream in the watershed and it's really important that not only we take care of this here, but that we prevent this kind of thing happening in all of the watersheds throughout the nation, whether it's—before I worked here, I worked in Salt Lake City. The watersheds are incredibly important there. The watersheds are important throughout the nation. So with that, I commend the Committee for dealing with this issue and ask you to address it as you move along to try to prevent this in the future.

Frankly, I think we're going to have to deal with it and I think the forest here, as I understand it is dead and we're going to have more or less some of those impacts are going to be inevitable.

Thank you.

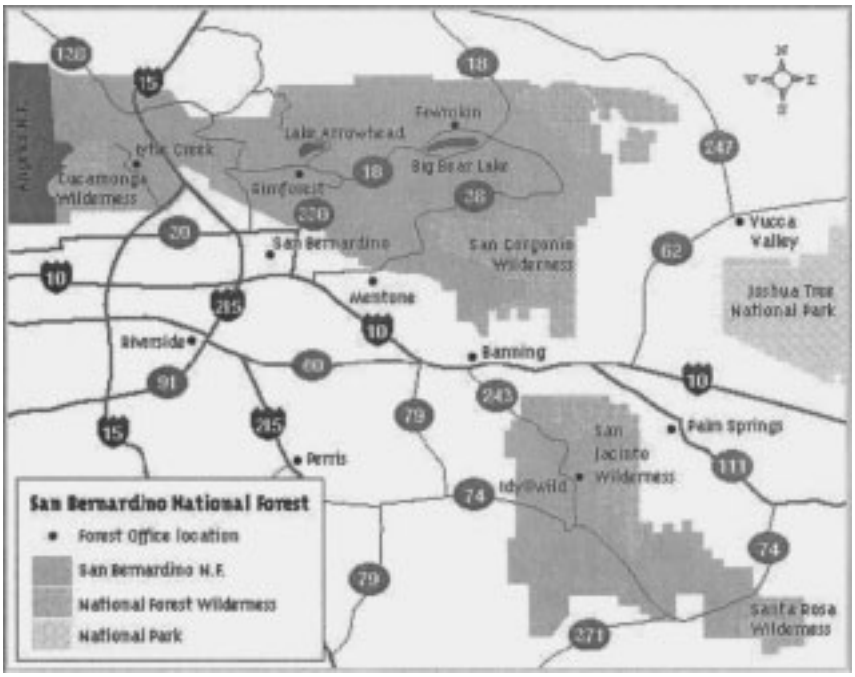
[The prepared statement of Mr. Grindstaff follows:]

Statement of P. Joseph Grindstaff, General Manager, Santa Ana Watershed Project Authority

Chairman Pombo, and members of the Committee on Resources, thank you for providing me this opportunity to address the potential watershed impacts to the Santa Ana Watershed from a significant forest burn in the San Bernardino National Forest. Over the long-term, it is crucial that we take steps to protect our forests from the kind of situation we face here. I also thank you for addressing the suitability of a federal grants program, which would minimize damage impacts of fire to the area and to increase the potential for fire control, life and property protection and a reduction in habitat loss.

Background

The Santa Ana Watershed derives a majority of the water for over 5 million people from the rainfall in and around the San Bernardino, San Gorgonio and San Jacinto Mountains' forest areas. Rainfall in these mountainous areas provides surface water flows and groundwater recharge throughout the region. Impacts to these areas will have significant impacts on the Santa Ana River and its watershed water quality. The last several years have seen significantly decreased rainfall and resultant drought conditions in these forests. This drought stress has made the forest susceptible to infestation by the Pine Bark Beetle, a serious pest of conifers. This combination of factors has resulted in large-scale mortality of trees in the area and the presence of an enormous source of combustible material. Fires in these areas are likely to be large and difficult to contain; the aftermath of any fire events will have extraordinary impact on the forest and the watershed.



The purpose of this summary is to document the significance of the likely damage to the forests, water quality, flood management, and related issues that require planning, monitoring and funding in the watershed. Impacts from large fires in isolated forest areas will be felt in areas far from the location of the fire and many of these costs will be borne by local government.

Fuel loads in the area of Lake Arrowhead and Big Bear Lake are extraordinarily high due to forest and private property management practices in these urban forest areas. Air and ground surveillance in January 2003, found over 171,000 total acres of forest area have significant tree mortality of which 70,000 acres are privately owned. Estimates by California Department of Forestry officials indicate over 180,000 acres are estimated to be at these levels. Mortality at these levels over such a large area and the resulting dry, standing timber will lead to high likelihood of uncontrollable fire situations in the forest above the watershed. It is now estimated that over 350,000 acres have been attacked by the beetle.

Threat

A likely burn risk scenario for this summer could include as much as 180,000 acres. This large impact to the forest would cause significant impacts to the watershed's water quality and flood management capability. These impacts will be apparent at the site of the fire and in the communities occupying the lower parts of the watershed. The impacts of this unusually high magnitude fire are estimated below.

Estimating the water quality impacts of a large burn are difficult but some research indicates this is a dire situation if winter rains are normal or heavy. Bureau of Land Management and Forest Service EIR's filed for controlled burn management, Forest Service research publications, Los Angeles County Flood control plans, impact history from the Heyman fire in Colorado and personal communications with Riverside Fire Lab personnel document the following impacts from ash runoff water from areas of burns:

1. A significant increase in total runoff and peak storm flows, more rapid snow melt and decreased snow pack;
2. Catastrophic increases in sediment and water turbidity from 30-to-50 times the normal expected debris flows with fine sediment carried far down stream;
3. Doubling or greater increases in total dissolved and suspended solids from even small burn areas;
4. Significant increases in nutrients loading, primarily nitrates and phosphorus formerly bound in soil and from prior airborne deposition in some areas where ground and surface waters already exceed Federal standards for these pollutants;
5. In cases where foundation rocks contain radionuclides, increases in Gross Alpha and Beta were observed; the headwaters of the Santa Ana River were home to a small Uranium mine and transport of uranium and its radiological progeny downstream in to near surface water is well documented;
6. Increases in organics, including toxic organics and carcinogenic compounds from partial combustion of forest materials and the transport of these compounds downstream to urban areas; and
7. Significant stress to forest species and to endangered and threatened species in the Santa Ana River and its tributaries; this would include the Federally protected San Bernardino kangaroo rat, the threatened Santa Ana sucker fish and the Santa Ana wooly star.

Impacts

These documented impacts will be expressed following any large fire in the Santa Ana Watershed. These impacts, when estimated from a likely burn scenario for the fire season of 2003 or 2004, could result in the following:

1. Total runoff is likely to increase by more than 10 percent and peak storm flows increases about 5 times the average to between 200,000 and 300,000 cubic feet per second. This is also likely to be exacerbated by more rapid snow melt;
2. Sediment loads carried downstream could 30 to 50 times normal taking an estimated 1.7 billion cubic yards of rock, sand, and debris into control structures and dams. The quantity of this material could take months or years to remove;
3. Long duration increases in water turbidity with fine sediment may be carried far down stream complicating groundwater recharge efforts;
4. A 2-10 fold increase in dissolved solids (TDS) or salts with increased flows could result in as much as 500,000 tons of added salt in the river and groundwater basins. Runoff water is needed for recharge or consumptive use, significant treatment requirements to remove or mitigate this TDS;
5. As much as 20,000 tons of nutrients nitrates and phosphorus formerly bound in soil and from prior airborne deposition released into the peak storm flows and eventually making its way into the groundwater in the first few years;
6. Significant transport of uranium and its radiological progeny downstream in surface waters and into near surface groundwater increasing the cost of radon treatment and future monitoring;
7. Increases in organics, including toxic organics and carcinogenic compounds from partial combustion of forest materials that will decrease the usability of one of this region's primary water sources; and
8. Sedimentation of the lands used by the San Bernardino kangaroo rat and the Santa Ana woolystar and choking turbidity reducing the useable habitat for the Santa Ana sucker fish.

These impacts are likely to be severe over five or more years depending on rainfall and storm intensity. The estimated cumulative costs to the watershed are estimated to be greater that $800 million, not including fire damage to homes and habitat.

Funding Recommendations

In addition to these expected impacts, several funding recommendations are listed to minimize the impacts of the fire to the area and to increase the potential for fire control, life and property protection and a reduction in habitat loss:

1. A dead tree removal matching grant to help fund tree removal on private lands in communities that agree to adopt ordinances, zoning and building codes and planning policies that ensure fire-wise building and rebuilding. $200 million.
2. Local Forest Service and California Department of Forestry crew augmentations to increase the rate of dead tree removal. $5 million for FY 2003 and $6 million for FY 2004.
3. Management planning and outreach for impact reductions and maximal compliance with existing damage minimization measures within the forest and watershed. $1 million FY 2003 and $2 million FY 2004.
4. Pre-fire and post-fire long-term monitoring of forest health, including strategic planning for long-range sustainable forestry practices after fires. $5 million FY 2003 and $7 million FY 2004.
5. Funding for desalting and salt management efforts in the San Jacinto and Santa Ana Watersheds to reduce the impact of salt and contaminants to the watershed. $40 million, grant on $80 million project.
6. Emergency Disaster funding through FEMA to declare a drought emergency to allow the use of FEMA assistance in advance of the fire. Policy Direction Fiscal Impact Unknown.

The following table lists significant cost items:

Impact/Program	Potential Sources	Estimated Cost
Flood Management Facility Damage and Debris Removal	Federal	$ 65,000,000
Recharge Basin Augmentation and Rehabilitation	Federal/State	$ 20,000,000
Dissolved Solids and Nutrient Removal	Federal/State	$ 80,000,000
Water Treatment for U and Toxics/Organics	Federal	$ 25,000,000
Monitoring for long-term surface and groundwater impacts	Federal	$ 5,000,000
Fuel Removal Matching Grants	Federal/State	$200,000,000
Forest Service and CDF Augmentations	Federal/State	$ 11,000,000
Emergency Disaster Funding	Federal	Unknown
Planning, Management and Outreach	Federal	$ 3,000,000
Pre/Post Fire Monitoring	Federal	$ 10,000,000

Requested Action

Fund the Programs and Impacts above to minimize damage and future costs and prepare to fund actual fire costs as they occur.

The CHAIRMAN. Dr. Bialecki.

STATEMENT OF DR. HUGH BIALECKI, PRESIDENT, SAVE OUR FOREST ASSOCIATION

Dr. BIALECKI. Thank you and good afternoon. Chairman Pombo, Congressman Lewis and Members of the Committee, good afternoon, and welcome to Lake Arrowhead. I'm Dr. Hugh Bialecki, President of Save Our Forests Association; Board Member, past President of the Lake Arrowhead Communities Chamber of Commerce; and local business owner.

I'm speaking today on behalf of Save Our Forests Association, a leading local conservation organization in the San Bernardino Mountains and I welcome this opportunity to address the Panel.

As a long-time resident of the San Bernardino Mountains community, I and the constituents I represent are very concerned about the forest health crisis in the San Bernardino National Forest and throughout the West. We're also concerned that the

leading prescription to address the crisis, the Healthy Forest Initiative, was passed by the House of Representatives earlier this year. We applaud the Committee's request to the Congress to pass a wildfire fighting supplemental, addressing this year's fire fighting needs.

Our primary concerns with the Healthy Forest Initiative has to do with the lack of direct funding through block grants to assistant communities in creating and maintaining community protection zones, the lack of opportunities for communities to be directly involved in the creation, and the review of many fuel reduction options the Forest Service should consider in creating and maintaining CPZs and the severe limitation of our right to challenge a Federal agency's input when we believe the agency is moving in a direction that will not or is not creating conditions that improve or protect our quality of life and quality of the forest experience for our visitors.

In light of the legislation's first purpose, to reduce the risk of damage to communities, we see little or nothing contained in the legislation that will immediately increase the efforts of the agencies to create and maintain community protection zones, the areas 500 yards of the community. The Forest Service, the Western Governors Association and a host of fire scientists around the country have repeatedly said that the most effective protection for communities will occur within the community protection zones and immediately around structures.

Today, adequate community protection zones are in their earliest stages of design and implementation. Public land advocates have been asking the Forest Service to create CPZs around our forest communities since the mid-1990s. I point to the Sierra Nevada framework as an early example.

I'd like to take this opportunity to recognize and thank the efforts of Congresspersons Lewis, Bono, Senator Feinstein and County Supervisors Dennis Hansberger, Paul Bellen and Forest Supervisor Gene Zimmerman, for recognizing the threat to our community and working with us through the fire agencies and local fire safe councils to obtain emergency funding. We also thank Congressman Lewis for his foresight and leadership in providing consistent land and water conservation revenue to this forest.

What does a healthy forest mean here in the San Bernardinos? An urban forest with an easy access of 20 million Californians, an urban forest that is the most recreated national forest in the country, maintaining a healthy forest in the SBNF means maintaining our mountain quality of life. It means maintaining the resources that provides that special quality of life which includes open space, clean air, watersheds, serenity, aesthetics, recreation, wildlife, solitude and providing an outlet and an escape from the pressures of city life.

Because of forest density, multi-year drought, Bark Beetle infestation, we do not have a healthy forest. This national forest is at extreme risk of catastrophic fire. Some say our forest is dying. Some say it is already dead.

The Save Our Forest Association and many others are not giving up on this forest. The Bark Beetle infestations spreads like wildfires and it must be fought like wildfires.

We believe that the health of the forest can be recovered.

There's obviously a critical need for fire protection. We're fully aware of that fire danger and have recently evacuated residents from the Bridge fire. Prior to that the Willow Fire which consumed over 60,000 acres of our resources while costing millions of dollars.

Four important steps should be taken. One, declare a Federal state of emergency.

Two, establish community protection zones to avoid devastation within the communities such as we've already seen in some of our local war zone neighborhoods, denuded trees, loss of ecosystems, wildlife with incredible economic loss to private homeowners.

Three, maintain public participation in the process. Who has a more invested interest to ensure protection of the SBNF from fire than residents, visitors and resource users in surrounding communities?

Four, immediate intensive reduction of fuel load, removing hundreds of thousands of dead and Bark Beetle infested dying trees to involve substantial increase in Forest Service personnel, increases in Federal funding, creating products from the biomass and developing incentives for non-local loggers to remain working in the SBNF.

We need to protect and enhance the health of our present forest resources, taking action to ensure that the healthy trees and ecosystems stay healthy, to increase the number of Forest Service research scientists and properly fund those scientists to manage the forests with designated funding. Following scientists' recommendations on how to maintain a healthy forest, increasing funding and personnel on a long-term basis, we know preventive measures are cost effective and that crisis management in fighting forest fires are not.

And again, we need to maintain public participation.

Henry David Thoreau perhaps said it best "in wildness is the preservation of the world."

California needs your help in preserving this island of wildness in these mountains. The time for action is now. Our public is already working toward achieving this common goal. We're counting on your help. Thank you.

[The prepared statement of Dr. Bialecki follows:]

Statement of Dr. Hugh Bialecki, President, Save Our Forest Association, and Board Member, Lake Arrowhead Communities Chamber of Commerce

Chairman Pombo, Congressman Lewis, and members of the committee. Good afternoon and welcome to Lake Arrowhead. I am Dr. Hugh Bialecki, President of the Save Our Forest Association, Board member and past president of the Lake Arrowhead Communities Chamber of Commerce, and am speaking today on behalf of the Save Our Forest Association, the leading local conservation organization in the San Bernardino Mountains. I welcome the opportunity to address the panel today.

As a long-time resident of the San Bernardino Mountain's community, I and the constituents I represent are very interested in and concerned about the on-the-ground effects of the Healthy Forest Bill, as passed by the House of Representatives earlier this year. Before I get to that, I'd like to applaud the committee's request to the congress to pass a wildfire fighting supplemental addressing this year's fire fighting needs.

First, we agree that work must be done to address the health of our forest environment and that action is needed to address the many short and long term issues our forests face. We agree that harmful logging practices and effective fire suppression have created forest conditions that threaten communities and in some cases may threaten the wild characteristics American's seek when they live in or visit a

forest. I believe that Martha Marks, President of Republicans for Environmental Protection, expresses the feelings of most Americans when she describes our national wildlands as, "...an intrinsic part of this nation's patriotic heritage, the symbol of our national vigor and freedom, and an irreplaceable trust for our future." I thank the committee for bringing focus to this very important national issue.

Our primary concerns with the Healthy Forest Initiative have to do with the lack of direct funding through block grants to assist communities in creating and maintaining community protection zones, the lack of opportunities for communities to be directly involved in the creation and review of the many fuel reduction options the forest service should consider when creating and maintaining community protection zones, and the severe limitations of our right to challenge the federal agencies in court when we believe the agency is moving in a direction that will not or is not creating conditions that improve or protect our quality of life and the quality of the forest experience for visitors.

Lack of Focus and Direct Funding to communities though block grants

In light of the legislation's first purpose, "to reduce the risks of damage to communities," we see little or nothing contained within the legislation that will immediately increase the efforts of the agencies to create and maintain community protection zones, the areas within 500 yards of a community. The Forest Service, the Western Governors Association and a host of fire scientists around the country have repeatedly said that the most effective protections for communities will occur within the community protection zone and immediately around structures. Today, adequate community protection zones are in their earliest stages of design and implementation. Public land advocates have been asking the Forest Service to create CPZ's around our forest communities since the mid-1990's. I point to the Sierra Nevada Framework as an early example.

One could imagine the greater security in communities like Crestline, Lake Arrowhead, Running Springs, Big Bear and Idyllwild would have if maintained CPZ's existed, and all of our homes and common buildings had defensible fuel zones. The threat of fire would be greatly reduced. However, much of this does not exist, and there is much to be done by the community, the county, the state and federal government. For instance, updating county zoning regulations specifically defining and mandating defensible space while also providing for adequate monitoring and enforcement will make our communities safer tomorrow. We'd still be removing those dead trees killed by the bark beetle, but there would be a lot less work to do. Since the early 1990's the Save Our Forest Association and the Sierra Club's San Gorgonio Chapter have been prescient in the education of our community by hosting forums calling attention to the need for fuels reduction and responsible logging practices. For instance, the removal of small diameter trees and brush reduction.

Unfortunately, it takes the overt threat of disaster to get people to recognize what needs to be done. Today, as we are addressing the issue, other obstacles are in our way. The local, county and state governments are all operating in deficit and money and manpower are scarce; however, an emergency situation requires the federal government to step in. I would like to take this opportunity to recognize and thank the efforts of Congresspersons Lewis and Bono and County Supervisor Hansberger and Forest Supervisor Zimmerman for recognizing the threat to the community and working with us to obtain emergency funding. We understand that the latest five million dollars to come to the San Bernardino National Forest was money that had been appropriated for fuel reduction projects in the eleven national forests of the Sierra Nevada. While we obviously appreciate the prioritization and movement of the money, we ask that those affected forests are reimbursed in full, as soon as possible. It would be a tragedy if other needed fuel reduction projects could not be completed because the money was directed elsewhere, leaving other communities at risk.

Priorities

In the light that the administration has identified the increased threat to communities from forest fire due to successive years of drought, dead trees and insect infestations, I'll speak now to funding priorities. The Fiscal Year 2004 budget put forward by the administration proposes to spend $265 million on commercial timber sales, while only $228 million are going for hazardous fuel reduction projects. What is more important, getting the cut out, or protecting communities by thinning small diameter trees and clearing brush? Furthermore, while the Healthy Forest Initiative would appropriate $25 million a year through 2008 to biomass companies, it appropriates zero dollars to communities through block grant programs. We agree that if the slash and small trees removed in the creation and maintenance of community protection zones can be utilized commercially, they should be; however, we are very

concerned that the focus of forest health not be dominated by the economics of extraction and the pursuit of profitable balance sheets. Commercial logging or resource extraction under the guise of forest thinning /fuel reduction will result in the further degradation of our forest resources. Our community will not accept a trade-off that endangers its wildlife, aesthetic values, recreational opportunities and watersheds. The bill has an excessively broad definition of areas that will be eligible for thinning operations, and locally would include the entire forest, even remote roadless areas far from our community. Scientists, including former Forest Service Chief Jack Ward Thomas, have identified that the critical areas to be treated occur within 500 yards from a community. We can contemplate a situation where the local forester is tasked to create revenue by logging large trees away from the community, moving scarce resources from the creation and maintenance of community protection zones.

Public Comment

There is a well-established right for the people to fully participate in the formulation of federal administrative actions. The Healthy Forest Initiative attempts to scale back public participation in crucial community decision-making. The position that allowing the public to participate in the formulation of local policy and that lawsuits have prevented fuel reduction projects from occurring is misleading and unfounded. Two successive reports from the General Accounting Office in 2002 and 2003 state that 95 percent of fuel reduction projects proceed without objection and 97 percent proceed within the 90-day appeal process. Furthermore, I have a local example of a fuel reduction project in 1991 that was found to be cutting trees in excess of 22" in diameter leaving behind smaller trees, brush and slash. This was a commercial timber sale under the guise of a fuel reduction project. Only through community involvement was the inappropriate cutting of large trees stopped, with a legal settlement that specifically allowed the Forest Service to cut trees 22" in diameter or less and those "...infested with mistletoe, insects, parasites or disease creating a danger to the health or vigor of a surrounding tree or tree stand. The Forest Service may thin small trees in any of the units as a silviculturist deems necessary."

Additionally, over the last couple of months, the forest community has participated in the San Bernardino National Forest Mountain Summit which brought together over 200 people, from various backgrounds and points of view, to discuss the future of this forest fifty years from now. Protecting the quality of life and visitor's experience in the San Bernardino's was the dominant theme. There was consensus that fundamental to the mountain quality of life is the protection of wildlife, the watersheds, recreational opportunities and fire safe communities. Ultimately we agreed that only by increasing the communication between our community and the agencies can the public gain the confidence that the Forest Service is managing this national forest effectively.

Finally, the work that must be done in our forests and communities is not only long term, but perennial. Only through the provisions of the National Environmental Policy Act can we know that forest projects are being planned and executed appropriately. Open and transparent deliberations are the cornerstone of sound public policy and the most direct route to creating a healthy future for the San Bernardino's and all our national forests.

The CHAIRMAN. Mr. Watson.

STATEMENT OF JAY WATSON, DIRECTOR OF WILDLAND FIRE PROGRAM, THE WILDERNESS SOCIETY

Mr. WATSON. Mr. Chairman, Members of the Committee and Congressman Lewis, my name is Jay Watson and I'm Director of the Wilderness Society's Wildland Fire Program. I work out of the State of California. It is all too clear that the San Bernardino region deserves your attention and therefore, I really would like to congratulate Senator Feinstein and Representative Lewis for securing an additional $30 million for the region.

This Administration, the Congress, future Administrations have to make a sustained investment in hazardous fuel reduction for years to come if we are going to reduce the risk of fire and bring forest ecosystems back into some kind of ecological balance.

I would also say that securing new monies for the area is a much better approach then one recently followed by the Administration and that approach $5 million was taken from the Hazardous Fuel Reduction budgets of 11 other national forests in California and rerouted to San Bernardino. I don't dispute the fact that the San Bernardino needs that money, but so do those 11 other forests. They face hazardous fuel, fire risk problems as well.

I also note that two-thirds of the $30 million will float to non-Federal jurisdictions and that also stands in sharp contrast to the Healthy Forest Initiative which applies solely to Federal lands. While land fire doesn't recognize land ownership boundaries so any solution to reducing fire risk must make resources available to and work across all land ownerships.

The situation here in San Bernardino cries out for cooperation and a commitment to finding ways to alleviate the danger that now exists. That is what we have seen in many, many ways. MAST has been established and no one will disagree with their short term and midterm priorities.

I do see the possibility for future controversy as perhaps as the Forest Service moves out into more remote forest health projects, but to reduce and perhaps even avoid that controversy, the Agency should involve the local community, all stakeholders and balance the equally legitimate, but sometimes competing goals of habitat protection and fire risk reduction. After all, in many places in the West and throughout California, the land itself, the forests and the lakes are what are attracting new businesses and new evidence of and new economic opportunity to many regions.

Just as there is no single cause for this situation, facing the San Bernardino, there is no single solution. I'll get to the question from Mr. Walden about the half mile zone later, but one of our other fundamental criticisms of the Healthy Forest Initiative is that it brings with it little or not new money. Rather, it seeks to pay for the removal of surface and ladder fuels through timber sales and through increased deficiency and decisionmaking.

Make no mistake about it, the Wilderness Society does not oppose commercial logging. That is not the issue. The issue is that a significant investment is going to have to be made in forest restoration and community protection and one of the greatest obstacles I believe throughout the West to a successful hazardous fuel reduction program is that by and large, the predominant materials that have to come out of the forest, are surface fuels and small and mid-diameter trees would serve as ladder fuels. And in many cases, those materials have little or no commercial value. So we simply have to find new markets, new uses for materials that today are considered noncommercial.

Biomass, perhaps, is part of the answer here. It seems unfortunate, if not crazy, to be burning hundreds of tons of wood every day and not generating a single watt of electricity, yet again we're competing regulatory mechanisms or capital needs to make that possible.

In an industrial infrastructure of skilled and well-paid forest workers are needed to do the actual job of reducing hazardous fuels and I would argue that an appropriately scaled community-based forest industry can play an important role in seeing that the right

works gets done in the right places. It can do so because a community-based forest industry works on an economy of scale that can turn a profit, can employ people by using the right materials, small diameter trees and mid-diameter trees and perhaps even dead and down wood material for biomass. One thing the Forest Service can do to benefit and promote a community-based forest industry in an economy of scale is to recommit to small business set asides, simply writing contracts for the big boys in the timber industry who need large volumes and large trees. Small mill owners, local contractors can be part of the solution, but they need to have access to material. With that said, the Wilderness Society will gladly work with and support the Forest Service and the State of California in finding legitimate solutions to the situation facing the San Bernardino region and elsewhere.

Thank you.

[The prepared statement of Mr. Watson follows:]

Statement of Jay Thomas Watson, Director, Wildland Fire Program, The Wilderness Society

Mr. Chairman, members of the committee, my name is Jay Watson. I am the Director of The Wilderness Society's Wildland Fire Program. This is my second trip to the San Bernardino National Forest this year, and I am pleased to see the Committee focus its attention on the "San Berdoo" as it is commonly called. It is all too clear that the San Bernardino region needs and deserves this attention, as well as a series of other state and federal investments. Perhaps your visit today will help lead to those investments of resources, time will tell. Along those lines, I would like to recognize and congratulate Senator Dianne Feinstein and Representative Jerry Lewis for securing an additional $30 million for the region as part of the Fiscal Year 2004 Legislative Branch Appropriations Bill.

Securing new monies earmarked for the area is a far preferable approach than the Robbing Peter to Pay Paul approach recently followed by the Bush Administration. That approach resulted in $5 million being taken from the fire risk reduction budgets of 11 other national forests in California—forests that needed that money for their own hazardous fuel reduction and community protection efforts. Moreover, I note that two-thirds of the $30 million will flow to non-federal jurisdictions. That stands in sharp contrast to the Administration's Healthy Forests Initiative, which provides no assistance to non-federal jurisdictions for fire risk reduction. Since wildland fire doesn't recognize land ownership boundaries, any legitimate and effective solution to reducing the risk of wildfire must work across all land ownerships in a coordinated fashion. That is one of the fatal flaws of the Healthy Forests Initiative, it focuses exclusively on federal land and does nothing to reduce fire risk across a landscape characterized by mixed ownerships.

The situation here in the San Bernardino region was decades in the making. It was the result of a number of factors including fire suppression, sustained drought, insects, and an overly dense forest in many places, primarily because of the exclusion of periodic fires that would have reduced the number of small trees. The acute danger produced by this combination of factors has been further complicated by geography, population growth, and development patterns.

It is a complex and quite frankly frightening situation for which there is no easy answer. The crisis on the San Bernardino cries out for cooperation—people pulling together to find solutions and taking actions to alleviate the danger that now exists. Certainly, here in Lake Arrowhead, that is what we have seen in many, many ways.

For example, federal, state, and local jurisdictions and agencies have joined together to form the interagency Mountain Area Safety Task Forces (MAST) in Riverside and San Bernardino Counties to facilitate a comprehensive approach to addressing the public safety threat facing the region. To date, no one could argue with the short and mid-term priorities established by MAST. So congratulations are in order. I do see the possibility for controversy in the out-years as the Forest Service undertakes more general and possibly less defined forest health treatments. To reduce that controversy, the Forest Service must balance the sometimes competing, yet mutually important and legitimate, goals of habitat protection and fire risk reduction.

Just as there is no single cause for the situation facing the San Bernardino, there is no single answer either. Make no mistake about it, the Healthy Forests Initiative (HFI) is no panacea to the situation facing the region. First, as I mentioned earlier, the HFI applies only to federal land. Here in the San Bernardino region, as in every other western state, land ownership patterns are a mixture of federal, state, local, private, and tribal lands. In fact, here in California, 85 percent of all the land within one-half mile of 814 communities identified as being at risk from fire is non-federal in ownership—a crucial fact completely overlooked by the HFI.

Secondly, the Healthy Forests Initiative will bring with it little or no new funding. Rather, it seeks to pay for the removal of hazardous fuels through traditional timber sales. Another way of saying that is that under HFI, we will be cutting down the very trees we are supposedly trying to save from burning up to pay for the removal of surface and ladder fuels. The Wilderness Society does not oppose commercial logging, that is not the issue. The issue is that a significant investment is going to have to be made in forest restoration and community protection. Tens of billions of dollars in taxpayer monies have been spent removing fire from the landscape, building logging roads, and subsidizing timber production on the national forests—to think we can restore the forests and protect communities on the cheap is a fallacy. It is going to take real money and time. If we are truly facing a forest health crisis—then show me the money and don't pretend that we can treat millions of acres of land without having to pay for it. Unfortunately, if you read H.R. 1904, which embodies the President's Initiative, no where is there an authorization of appropriations for hazardous fuel reduction.

Therefore, the solution to the crisis on the San Bernardino will more likely be found in a combination of individual actions, such as Governor Davis's emergency proclamation which enhanced fire preparedness and eased restrictions on removing trees from private lands, last week's $30 million infusion in federal money, MAST, a lot of notable work on private lands by individual landowners, and additional funding being made available across ownerships.

Some suggest that the answer is simply a question of returning timber management to the San Bernardino National Forest. That is a grossly simplistic suggestion. A timber program would not have prevented what we see happening here today. A timber program would not have prevented a sustained four years of drought. Moreover, the absence of a wood products industry in southern California, combined with the reality that many of the dead or dying trees are of declining timber value, or no value at all in the case of Coulter pine, which account for a significant portion of the trees in the surrounding forest, tells me that a sawtimber solution is a fantasy.

With that said, tree removal obviously plays an important role in the response to this situation in the San Bernardino region. However, a primary obstacle to seeing that tree removal is undertaken as legitimate hazardous fuel reduction, i.e. "the right work in the right places," throughout the west, is the challenge of finding appropriate, commercial uses for forest materials that are generally thought of as having little value. I am talking about surface and small-diameter ladder fuels, which every reputable fire scientist clearly recognizes as the most important fuels in need of treatment to reduce the risk of uncharacteristic wildland fire.

In other words, new uses, new markets, and value-added wood products must be identified and developed. The reality is that a certain amount of industrial infrastructure and trained workers are needed to do the actual work of reducing fire hazards and restoring fire-adapted ecosystems. But it must be the right infrastructure and the right wood products industry—a wood products scaled to make use of those smaller diameter materials and markets.

Towards that end, appropriate hazardous fuel reduction efforts would be facilitated and enhanced by the work of small mill owners and contractors. Appropriately scaled, community-based forestry and local contractors can play a vital role in seeing that the "right work gets done in the right places." They can do so because their economies of scale allow them to turn a profit utilizing the same raw materials that should be removed through hazardous fuel reduction—materials such as surface and ladder fuels. Jobs would be created in the wood products industry, people would benefit, rural communities would benefit, as would the forest. Another part of that equation is a Forest Service willing to enter into smaller contracts, rather than focusing solely on large contracts with just the big boys in the timber industry—contracts that small mill owners have no hope of bidding on.

Here, in the San Bernardino region, that could take the form of small or portable biomass plants and portable sawmills to supplement the production of mulch and other uses that are being found for the woody material being removed. As far as I can tell, some of these opportunities are being investigated, while others are actually being pursued through the Forest Service's State and Private Forestry Program.

I would be interested in learning more about these efforts as they would appear to be a good match with our vision of an appropriately-scaled wood products industry being part of the solution to reducing fire risk. After all, it is truly unfortunate to be incinerating several hundred tons of wood every day and not generating a single watt of electricity.

In conclusion, The Wilderness Society will gladly work with and support the Forest Service, the State of California, and local interests in finding legitimate solutions to the situation facing the San Bernardino region.

Thank you.

The CHAIRMAN. Thank you.

Mr. Rosenblum.

STATEMENT OF RICHARD M. ROSENBLUM, SENIOR VICE PRESIDENT, TRANSMISSION AND DISTRIBUTION, SOUTHERN CALIFORNIA EDISON COMPANY

Mr. ROSENBLUM. Mr. Chairman, Members, Congressman Lewis, I'm Dick Rosenblum with Southern California Edison. I head up the transmission and distribution department of our utility and we're the group mostly responsible for Southern California Edison's work up here in this crisis. In my time, I'd like to make probably three quick points.

First, Southern California Edison comes at best after more than a century operating in these communities. We've always felt ourselves as responsible for our communities and stewards of both the infrastructure and the land.

In this area, we have about 700 miles of electric conductor, that's exposed to this forest. About 20,000 structures, most of those are wooden poles, but others are substations and transformers and the like. We've been working cooperatively and in what I think is the best partnership I've seen in 28 years in this business with California Department of Forestry and Fire Protection, the U.S. Forest Service, the local fire agencies up here, the California Public Utilities Commission and the other members of the MAST. It's really been by my observation the best partnership I've seen ever. I think that's largely due to the efforts of everybody involved.

Two, I'd like to point out one of the effects of the Governor's emergency declaration and that was to order the utilities in California, which in this case is primarily ourselves, to completely remove trees as opposed to just trimming trees that might come in contact with our lines when they fall. Now the difference would be, for instance, if a tree were 90 feet away from the lines and it was a 100-foot tree. In the past, our responsibility was to cut the top 10 feet so when it fell over, it wouldn't hit the lines. Now we're to remove it completely to the ground. That is an immense task. Just our portion of this effort will be by our current preliminary estimate 350,000 trees will have to be removed.

We have today, 55 management employees, largely foresters, working on identifying the areas and 15 crews when we're fully staffed will be working here at cutting down trees. That will be about 275 trees a day. And even at that rate, we estimate that will take us 6 years. It is an immense project.

The third point I'd like to make in my brief comments is that the biggest single restricting factor in this effort is the debris removal. Others have already talked about that. We think it would be about

750 tons of debris a day, when we're at capacity just for our effort. Fixing that restricting is probably the single biggest and most important task that faces all of us. At Edison, we're already looking at the biomass plans that several people have referred to. We've taken it upon ourselves without yet CPUC approval, Public Utility Commission approval, to develop a request for proposal for a plant that we think could dispose of a great portion of that debris. We will move forward, together with the Public Utilities Commission to try to select a plant and get one installed in a timeframe that will help solve the problem, but it need be soon. It would almost certainly have to be new plant and it will take some time.

One way to sort of summarize the cost of this, of the whole project is by cost. Our estimate is today that our cost alone would be about $350 million over the next 6 years and that will be borne by all 4.4 million of our customers.

As I've said, and I really want to reinforce, a very effective partnership moving forward today. We've grown to be a part of that partnership. We think this effort can be done safely expeditiously and with full regard to the environment.

Thank you very much.

[The prepared statement of Mr. Rosenblum follows:]

Statement of Richard M. Rosenblum, Senior Vice President, Transmission and Distribution, Southern California Edison Company

Chairman Pombo and Members of the Committee,

Southern California Edison Company (SCE) appreciates the opportunity to appear before you today. Even more, we appreciate the interest that the Committee has taken in the critical problem faced by the beautiful mountain communities that are such an integral part of our service territory. We have served the residents and businesses in the San Bernardino National Forest for over a century. These are our neighborhoods too. Many of our employees live, work and raise their families in these mountain communities. In cooperation with the U.S. Forest Service, the California Department of Forestry, County and local fire agencies, the California Public Utilities Commission, the Mountain Area Safety Task Force (MAST), local fire safety councils and the other dedicated agencies and community alliances working on the Bark Beetle problem, we're gratified to be a part of the solution.

Just a few years ago, none of us could have imagined that we would now be facing the loss of the vast majority of the pine trees that are such a hallmark of these picturesque communities. While such a concentration of trees has long presented a challenge for us in keeping our transmission and distribution lines clear of vegetation, our extensive inspection and maintenance programs have enabled us to do a good job of it. And yet all these efforts pale in comparison with what we must now do to help solve the current problem.

A few statistics help to convey the scale of SCE's commitment to this problem:

- Within the infested area, SCE has approximately 700 miles of electric line, 20,000 structures (primarily poles) and 5 substations;.
- We currently estimate that, in keeping with Governor Davis' Emergency Proclamation and the direction of the Public Utilities Commission, we will be removing in excess of 350,000 dead or dying trees that could potentially fall into our electric lines. These are typically large, mature trees—so we must often clear a path 100 feet or more on either side of each of the lines that run to every home and business in these communities. The immediate and startling implication is that there will be very few pine trees left standing around any inhabited structure in many of the impacted communities;
- SCE has 55 management employees involved in addressing the Bark Beetle situation, with more to be added as necessary;
- We currently have contracts with 3 tree removal firms, and recently issued a Request for Proposals to bring on additional crews; when we are fully manned, we will have about 15 full-time contract tree removal crews with in excess of 100 people working every day in the infested area.;
- We are ramping up our removal efforts as quickly as possible; soon we will be removing 275 or more trees per day. As noted below, this number, especially

when combined with the removal efforts of other agencies, may well exhaust the capacity of the various existing disposal means;
- We are currently lowering and reinstalling about 10 electric distribution lines every day to permit the safe removal of trees near the wires. This total will increase dramatically as we and others continue to ramp up tree removal efforts-and our customers will continue to be substantially inconvenienced by the necessary interruptions in their electricity;
- To reduce the threat of fire in the affected areas, we have initiated special operating procedures that require any circuit that experiences an unplanned outage to be fully physically inspected before it can be re-energized. While this is a necessary safety precaution, it will significantly increase the length of outages experienced by our customers;
- The current estimate is that it will take approximately 6 years to remove the over 350,000 dead or dying trees that could fall on our electric lines; and
- Our current estimated cost for the project, which we expect the Public Utilities Commission will order be borne by all of our 4.4 million customers, is over $300 million—and potentially substantially more. It's important to note that our tree removal expenses are a pass-through for SCE. That is, there is no profit component, and cost recovery in rates is subject to retrospective review and approval by the PUC.

Frankly, the magnitude of this problem is unlike anything we've dealt with before. The trees in question are generally very large and often close to homes and businesses as well as power lines. Many must be removed using cranes and other heavy equipment. Furthermore, one of the greatest challenges, and the limiting factor in our progress, is the disposal of the countless tons of organic matter generated by the accelerating tree removal effort. We are working earnestly to support the responsible agencies as they look for innovative solutions to the disposal problem. Possibilities such as wood-fueled biomass plants are being thoroughly examined. SCE has also volunteered to coordinate the process of seeking out qualified firms that could build such facilities, and then contracting with them for the electricity generated from their operations. As you might imagine, pursuing such solutions on an accelerated basis is not easy, and we may need your help to expedite the permitting of such projects. That brings us to the topic of what you can do to help us deal with this problem.

The communities and agencies impacted by this problem are energized and working together earnestly. What they need most are time and money. The costs and logistics to remove and dispose of over 1 million dead or dying trees in the affected areas are simply immense. Many property owners are personally facing removal costs in the tens of thousands of dollars, and agency staffing and financial resources are being stretched to their limits. Any federal funds that can be allocated to our State to ultimately defray homeowner and agency costs can and will be used quickly and efficiently on the front lines of this battle. The second way that you can help is to provide the means to shorten or eliminate the processing of required permits or expedite the issuance of waivers of regulations that will almost certainly be needed to allow innovative disposal methods to be quickly implemented. We hope that your Committee will want to serve as a focal point and "barrier breaker" when the need for quick governmental action arises as this situation continues to unfold.

Our corporate goal is to do everything we can to cooperate with the responsible agencies to mitigate the Bark Beetle problem safely, expeditiously and with full regard for our environment. We can do nothing less for our customers, neighbors, colleagues and families.

Thank you again for the opportunity to address the Committee today.

The CHAIRMAN. Thank you.

Mr. Phillips.

STATEMENT OF EDDIE PHILLIPS,
AMERICANS FOR FOREST ACCESS

Mr. PHILLIPS. Thank you, Congressman Pombo, staff, invited guests. I thank you for the opportunity to address you with my concerns and the concerns of the Americans For Forest Access and affiliated organizations.

My name is Eddie Phillips. I was born in Big Bear 67 years ago and have lived in the mountains most of my life. Recently, we were

spared from a disaster. Everything was perfect for a total aerosol on the Bridge Fire, available aircraft, close proximity to loading facilities with almost perfect weather, low winds and a massive amount of ground support. As everyone is aware, the forests in Southern California are a disaster waiting to happen. We have many sick forests like the San Bernardino National Forest. Visual damage, millions of dead and dying trees caused by drought and Bark Beetle. This mess will take many years to clean up and correct. We need to look at the past to make corrections for the future health of the forest.

Before man, fire cleansed the forest. Now that man is part of the equation we must find another way of cleansing the forest without catastrophic fires. Our forefathers raised cattle which lowered the amount of flash fuels in the forest floor. They allowed the forests in Southern California using select logging methods which always left a healthy stand of trees. We have mining which was and still is an important part of the industry. For this our forefathers had been criticized partially by the environmentalists. If you look at what actually took place, cattle grazing kept down the growth of the brush and grasses. Logging kept the forests from being overgrown with trees. Miners and loggers built the roads for access, for their use, but also for fire suppression. During drought years, trees were able to fight off disease and the Bark Beetle because of competition for water wasn't as great as the overgrown forests of today.

In recent years, everything is directed at saving the endangered species, while the overall health of the forest has been ignored. The public lands have been assaulted by armies of botanists and biologists, all looking for a species to save and to protect using taxpayer and foundation grants to help them in their search. The policy is now and has been for many years to let the brush grow, leave the dead and dying vegetation on the forest floor to create and maintain what these experts claim is a more natural setting and homes for all these tiny critters.

All but a few cattle are gone because the allotments were canceled and logging has been stopped except for salvage sales. Mining has been almost regulated out of business and the forest is overgrown with brush and trees. What else was done? We have limited the access to public lands to protect species and what has that got us? A disaster waiting to happen that will not only take our homes, but will kill all the species we have been trying to save.

What can we do for the future? Look at the past. Use what we have learned. Inject proven science with a good dose of common sense.

What can we do now to protect our homes and forests? Keep hoping all existing access to our public lands that exist today, all system and nonsystem roads and trails are needed today more than ever to access for fire crews, their equipment and to remove the dead and dying trees. Without the access, these trees will remain in the forest and the fire danger will increase.

The Forest Service will tell you they can't afford to maintain these roads. The Forest Service has never maintained the majority of these roads. They continue in existence because they are driven on regularly by forest visitors. Use is what keeps them open.

The San Bernardino National Forest, Mountain Top District is presently going through the NEPA process to close an additional 80 plus miles of nonsystem roads. The claim is they are illegal, short, too close together and serve no useful purpose. On a flat map, this is the way they appear. Go drive them. If you can find one that's not already blocked off or fenced, the majority are not what they appear to be on the map and are extremely useful to access many areas in the forest.

Next, we have the new Forest Management Plan for the four Southern California forests. The proposals on the table are new wilderness designations, roadless areas, potential roadless, areas nonmotorized, special interest areas, wild scenic rivers, nonmotorized back country and back country motorized. These all represent motorized access closures. Any and all of these can be modified, deleted during the planning process. If you stop the forest visitors from using these roads, the roads will disappear into the underbrush. How will the fire crews protect our homes in the forest and its creatures and how will the Forest Service manage the forest without good access?

I'd like to point out and you have in these books a couple of maps. That one there covers the system and nonsystem roads. This is the way many of the roads in the forest have been blocked, with boulders to keep out illegal recreation vehicles. All we've done with this, they can go right by it or over it, but the fire trucks and emergency vehicles cannot access these areas.

That one marked 1, 2 and 3, blocks off approximately between 2,000 and 3,000 acres for emergency services other than by air. I've tried to find roads into that area and I haven't been able to locate any yet that are good enough to take fire equipment on. There's private property on the edge of that that's fenced on the backside.

Down here, we have the 24,000 to 45,000 acre mineral withdrawal. They've gone to extensive degrees in their books saying how they will not affect any other type of use other than mining, but everywhere I go I find fences. This slide that says—I'm sorry, I put that one upside down. It says "please help protect our forest habitat. Foot travel only. No vehicles." And this—where you find it is in this mineral withdrawal area to protect the limestone and endemic weed.

Thank you for your time and allowing me here today.

[The prepared statement of Mr. Phillips follows:]

Statement of Ed Phillips, Americans for Forest Access

Gentlemen: Thank you for the opportunity to address you with my concerns and those of Americans for Forest Access and its affiliate organizations.

My name is Eddie Phillips. I was born in Big Bear city 67 years ago and have lived in these mountains most of my life.

Recently we were spared from a disaster. Everything was perfect for a total air assault on the Bridge Fire. Availability of aircraft, close proximity to loading facilities with almost perfect weather and low winds and a massive amount of ground support.

As everyone is aware, the forests in southern California are a disaster waiting to happen. We have many sick forests like the San Bernardino National Forest (SBNF.) The visual damage is millions of dead or dying trees caused by drought and Bark Beetles. This mess will take many years to clean up and correct.

We need to look at the past to make corrections for the future health of the forest. Before man, fire cleansed the forests. Now that man is part of the equation, we must find another way of cleansing the forest without catastrophic fires. Our fore-

fathers grazed Cattle, which lowered the amount of flash fuels on the forest floor. They logged the forests in southern California using select logging methods, which always left a healthy stand of trees. We have mining, which was and still is an important industry. For this our forefathers have been criticized harshly by environmentalists. If you look at what actually took place, cattle grazing kept down the overgrowth of brush and grasses. Logging kept the forests from being overgrown with trees. Miners and Loggers built the roads for access for their uses but also for fire suppression activities.

During drought years, the trees were able to fight off disease and the Bark Beetle because the competition for water wasn't as great as in the overgrown forests of today.

In recent years, everything is directed at saving endangered species while the overall health of the forest has been ignored. The public lands have been assaulted by armies of botanists and biologists all looking for a species to save and protect using taxpayer and foundation grants to help them in their search. The policy is now, and has been for many years, to let the brush grow and leave the dead and dying vegetation on the forest floor to create and maintain what these "experts" claim is a more "natural" setting and homes for all those tiny critters.

All but a few cattle are gone because the allotments were cancelled. Logging has been stopped except for salvage sales, mining has almost been regulated out of business, and the forest is overgrown with brush and trees. What else was done? We have limited the access to Public Lands to protect the species and what have we got? A disaster waiting to happen that will not only take our homes but will kill all those species we have been trying to save!

What can we do for the future? Look at the past. Use what we have learned. Inject only proven science with a good dose of common sense.

What can we do now to protect our homes and forest? Keep open all of the existing access to our Public Lands that exist today. All system and non-system roads and trails are needed today more than ever for access for fire crews and their equipment and to remove the dead and dying trees. Without this access these trees will remain in the forest and the fire danger will increase.

The Forest Service (FS) will tell you they can't afford to maintain these roads. The FS has never maintained the majority of these roads. Their continued existence is because they are driven on regularly by the Forest visitors. Use is what keeps them open. The SBNF Mountain Top District is presently going thru the NEPA process to close an additional 80+ of non-system roads. The claim is they are illegal, short, too close together and serve no useful purpose. On a flat map this is the way they appear. Go drive them, if you can find ones that are not blocked off or fenced. The majority aren't what they appear to be on the map and are extremely useful to access many areas in the forest.

Next we have the new Forest Management Plan for the four southern California forests. The proposals on the table are: new wilderness designations, roadless areas, potential roadless areas, non-motorized, special interests areas, wild and scenic rivers, non-motorized back country, and back country motorized. These all represent motorized access closures. Any or all of these can be modified or deleted during the planning process. If you stop the forest visitors from using these roads, the roads will disappear into the underbrush. How will the fire crews protect our homes or the forest and its creatures and how will the Forest Service manage the forest without good access?

I will be happy to answer any questions you may have regarding my testimony or the documents or maps that I have included.

Once again, thank you for your time and for allowing me to be here today.

The CHAIRMAN. Thank you very much. I recognize Congressman Walden.

Mr. WALDEN. Thank you, Mr. Chairman. I just wanted to follow up on a couple of things that have been said because I think it's important to make sure the bill is fully understood and I believe it was Dr. Bialecki that said at least in your prepared testimony that the healthy forest legislation jeopardizes "public participation" in the planning process.

And I struggle with that because the legislation locks in the current public notice and comment requirements. It locks in the existing public scoping requirements that are there already in the law

and rule. It requires an additional public meeting over and beyond what is currently required. The Bipartisan Western Governors Association recently sent a letter to the legislation for actually codifying or attempting to put into law the Western Governors Association collaborative public participation framework and so as I hear this over and over about how we're going to cut the public out, a reading of the bill would indicate we're actually expanding and trying to do exactly what I think you and Mr. Watson said, in fact, to involve the public more in the beginning. Because I think that ultimately is how we get that solved is you get the stakeholders in a community like this together with the agencies and you work out—in fact, that is why we're trying to change the appeals process so that when the local stakeholders have come together, you don't have somebody that never participated, having the right to appeal. And what we're proposing in this legislation is that in order to have standing to appeal, you would have had to have participated in a substantive manner in the process, which I think is a good idea. Do you have a comment on that?

Dr. BIALECKI. Well, I do. I believe the fuels process is actually shortened down to 15 days and it's my experience that realistically, formulating an appeal takes more than 15 days, even when you've been involved in the process previously, so that's a key point.

Mr. WALDEN. You're talking about to go to court is 15 day period. The status quo is the same—the appeals process is status quo. We haven't changed that. We're saying if you're going to court, it's 15 days.

Dr. BIALECKI. When we can avoid those processes in the beginning, everyone benefits.

Mr. WALDEN. I couldn't agree more and that's the crux of the problem. The GAO found that of those thinning projects that were subject to appeal and 457 of them they looked at weren't even subject to appeal, they were the prescribed burns that aren't subject to appeal. If you take those out, you find 59 percent of the thinning projects were appealed. And moreover, 52 percent of the projects proposed for the wildland urban interface on Federal lands were appealed, more than half. So what we're trying to do is drive a system that streamlines this before everything burns. And so that's important.

The other point I'd like to make is on funding. I helped write the bill last year that we came very close to and we worked closely with George Miller from California and my colleague Peter DeFazio and myself and Scott McInnis from Colorado. We had an authorization in that bill of $3.8 billion, I think over 10 years. Now remember, an authorization doesn't get you a dime, it just says you can go to the appropriators and try to get money. So that's all we can do even in this legislation. And we got the bejeezus beat out of us by various environmental group.

Senator Feinstein sort of widened, got attacked, and we had an authorization in there. So all of a sudden this year we don't have an authorization. That seems to be the issue, but that aside, in the Fiscal Year 2004 Interior bill we got $36 million in state and private forestry line items to fund, cost show projects on private lands; $51 million in national fire plan for state and private forest restoration has fuels reduction; $22 million to attack insect and

disease outbreaks on private lands. It's a new program to deal with this threat in the West. So that partnership is to work with private lands. federally, for Federal lands, we have over $400 million set aside to deal with hazardous fuels reduction and the estimates we're beginning to get if we implemented this legislation is a savings to the agencies to do the work to fund the people we all know need to be in place would be upwards of $100 million that instead of concocting plans that will never go anywhere, and over half of them being appealed anyway, can actually be put in thinning and saving our forests in our communities.

And so I guess I come to this with a huge amount of frustration because I've heard the talk about small mill towns. You come to my District. I'll show you small mill towns where single operators did exactly what you said 10 years ago. They can go down to a 5-inch diameter tree and when the forests burn, it takes 3 to 5 years to get the wood out because of appeals and it is worthless at that point. They have shut down, they are dismantling, they're importing lots from fires in New Mexico, Arizona and now moving their whole operations to Lithuania and you don't have the infrastructure in my District. You don't have it here. And we're not going to have it anywhere in our forests and we, as taxpayers, are going to pay the bill for it.

I apologize, I've gotten on my soapbox and my time is up. Thank you, Mr. Chair.

[Applause.]

The CHAIRMAN. Mr. Gibbons.

Mr. GIBBONS. Thank you very much, Mr. Chairman, and I wanted to go back to a statement that Mr. Grindstaff spoke earlier about, a large amount of debris that will flow off of the watershed into the water systems in these communities, carrying an inordinate amount, probably, of uranium which is a naturally occurring mineral in these hills. Now I'm very sensitive to that, simply because I worry that when you have this uranium-enriched sludge, you'll want to send it to Nevada.

[Laughter.]

I hope that's not the case. We must do something to stop this run off.

In any event, what is the likelihood that fire in this area, the San Bernardino Forest, could have a dramatic effect on the water supply to Southern California areas?

Mr. GRINDSTAFF. A major fire, there's 100 percent likelihood that it will have an impact. Absolutely, there is no doubt that if we have the kind of fire that I think we're likely to have from everything I've heard from professionals, if we have 100,000 acre fire here, that flows into our watershed, that will have an impact on our water supply. Depending upon the area, we may have uranium released, we may not.

We certainly will have lots of organic chemicals that come down as part of the ash. We certainly will have lots of sediments that cause us not to be able to recharge as much water into the ground. We certainly will have lots of debris that in the kinds of geologic conditions we have may be more dangerous than the water from flooding. So I think that's absolutely 100 percent certain and a major fire, that will have major impacts on our water supply.

Mr. GIBBONS. Could you actually, in some instances, lose access to drinking water?

Mr. GRINDSTAFF. Absolutely. In some instances, we would lose that, at least temporarily. I think in most cases with money you can do lots of things with water. You can clean it up. But it will take time and money and we could certainly lose facilities that currently deliver water to customers throughout the upper watershed. We certainly would lose, have major water quality problems throughout the watershed and it would certainly cost us, I think our $200 million estimate is low and that's just capital costs. That's not on-going, that's just up-front capital costs for some of those issues.

Mr. GIBBONS. That is an incredible statement you've made. I know there's concern because you can go 2 weeks without food and still survive, but you can't go very long without water.

Mr. GRINDSTAFF. Probably one of the impacts would be we'd want to import more water from Northern California, as popular as that would be, or we'd want to get more water from the Colorado River and I mean those are the kinds of balancing acts and you're trying to figure out.

Right now, we do a very good job of optimizing our local water supply. In Southern California, our watershed, Riverside, San Bernardino and Orange Counties are the least dependent on imported water.

Mr. GIBBONS. I would presume that you've actually got a plan in place to be able to provide water, drinking water to the people of this region, should a disastrous fire occur.

Mr. GRINDSTAFF. We do. We have a plan in place to do that, but it does involve right now using stored water, using water that we would import from other areas, but principally stored water.

Mr. GIBBONS. Let me ask Mr. Watson, does the Wilderness Society advocate a minimum size tree or a maximum size tree to be left in a forest for cutting.

Mr. WATSON. No. I do not believe there's any single diameter limit you can pick throughout the West and have it apply to all forest types. I think we're really much more of a case by case forest type by forest type basis. The Forest Service has tried to do that in the Sierra Nevada, but what you come up with there doesn't apply in another forest type. So I don't think it's feasible to do that in legislation.

Mr. GIBBONS. Mr. Watson, let me say that you're the voice of reason for the Wilderness Society.

Mr. WATSON. I've been told that before.

Mr. GIBBONS. We have heard vastly different way from a number of other witnesses who have purported to represent the Wilderness Society, the Sierra Club, etcetera, all of the groups that are intrastakeholders in forests that have a standard by which they want to advocate no larger than say 18 inches would ever be cut, regardless of the quality, the thickness, the distribution and cover of a forest or tree area within a specific area.

Mr. WATSON. We have a Sierra Nevada framework which ranges anywhere from 12 inches and sort of out in the middle of nowhere, low intensive treatments up to 30 inches in diameter, close to homes and towns. And we supported that plan strongly.

We opposed where the Forest Service is going now because it's changing that to 30 inches everywhere, even in the best of the best old growth, but no, you cannot pick any single diameter tree and I would say that generally speaking it's the smaller diameter and mid-diameter trees, the so-called ladder fields that are the primary cause of catastrophic wildfires, combined with surface fuels, but I'm glad to answer the question the way I did.

Mr. GIBBONS. I think, since my time has expired, all I can say is that you did hear Dr. Bonnicksen say that you do need the small, medium and large diameter trees to have a healthy forest, so you can't just leave old growth there.

Mr. WATSON. Of course not, I'm not saying scoop everything out from underneath the big trees and walk away. That's—it's a balancing act.

Mr. GIBBONS. Thank you.

The CHAIRMAN. I'm going to go to my questions and I'll recognize Congressman Lewis last.

Mr. Watson, I want to get your perspective on—because this is something I struggle with, on the urban wildland interface. In some areas, it would make sense to concentrate on the half mile or a mile from an urban area. In other areas, when we had a hearing in Arizona, they talked about how because of the valley that led up to the particular town that we were in and it made a lot more sense for them to go on the other end of that valley and thin that and try to stop the fire from coming in because of the wind effects and everything that came down that valley, doesn't that—on a case by case basis, forest by forest, community by community, doesn't it make a lot more sense to have the people that are actually on the ground making the decisions as to where best to spend a limited amount of money than for Congress to pass something that says you've got spend it within a half mile of the interface?

Mr. WATSON. That's ayes and no. On the Senate side, we're seeing legislation crafted that goes beyond a half a mile, maybe it links up with—extends three quarters of a mile to link up with a logical geographic feature, a ridge top, a road or river, something like that to make an effective fuel break.

The CHAIRMAN. But even that's talking about three quarters of a mile.

Mr. WATSON. OK, and then beyond that, looking at—defining that acceptable zone as the area that's been looked at through a community based fire protection plan that cuts across ownerships and that could extend out to the ridge two miles out, but there's been some kind of process, like you said, locally based to develop a comprehensive fire protection plan for that specific community and I think that bears looking at very closely because it certainly could be far more practical than just an arbitrary figure.

A half mile might be out in the middle of a dog-eared thicket. It doesn't solve any purpose. I think one reason that figure has shown up is if you look back to the National Fire Plan, the Western Governors Association, the Sierra Nevada framework, interior report language, they all have asked and set the top priority as the wildland urban interface, however that may be defined. I guess it could be defined in a number of ways, but the top priority in the near term, next 5, maybe 10 years, is the wildland urban interface.

That's probably how long it's going to take to wok in that zone. And then once that's done, then start going out into the forest.

The CHAIRMAN. In the bill that the House passed, that is identified as the priority because I think we can all agree that that should be the priority, but I've heard ever since 2 years ago, I guess, that we got into this bill, or 3 years ago now, they keep talking, going back to trying to limit it as much as they possibly can to as small an area as possible and the more that we go out and listen to people and look at forests in different places, we keep hearing from the people who actually are there, that won't work here.

Mr. WATSON. It's one size fits all. That doesn't make sense.

It's got to be locally—I suspect that's where things will wind up. Maybe it will be 50-50 in where the funding is spent. I think the reason people are calling for a hard requirement, not just setting priorities, but a hard requirement to spend X percent in the wildland urban interface is Congress has been asking the Forest Service to do that for a couple of years now and it was 30 percent the first year and then maybe 50 percent.

I think in many ways there are times when the Agency has to be given pretty clear direction on where it's supposed to work because it does have a habit of wondering off wherever it wants to work.

The CHAIRMAN. I don't disagree with you on that. I've been a strong advocate of us being much more direct in the legislation we pass and taking a more firm stand on exactly what congressional intent is.

That's been—we like to blame the agency when they don't do what we thought we told them to do, but we're not clear as to what we told them to do. That happens all the time, but in this particular case, I think it would be a huge policy mistake to follow along this idea that we're going to have an arbitrary limit and I don't care if it's a half mile or three quarters or a mile. You can come up with whatever number you want because every forest is different. And if we just look around here and what I know and what I've seen of this particular area, that doesn't necessarily solve the problem. In some areas it does and other areas it just doesn't make sense.

Mr. WATSON. And there's room for abuse at the other end. You can sit at the bottom of the east slope of the Colorado Rockies and say the wildland urban interface extends up to the continental divide. That's not practical either. I mean that's how far the fire may have burned, but that's not a practical area to focus limited resources.

The CHAIRMAN. No. When you're dealing with limited resources, you're accurate in that respect, but in terms of what's best for the health of the forest, that may be what we need to do. And if you look at the San Bernardino Forest, obviously, the entire forest is in a world of hurt right now.

Mr. Rosenblum, I wanted to ask you, you said that it would take 750 tons a day and that's just your work.

Mr. ROSENBLUM. That's correct.

The CHAIRMAN. That's not the rest of this stuff. That's just what you have. So I guess it's about 30 truckloads a day that will be coming out of there just doing yours?

Mr. ROSENBLUM. I think that's roughly correct.

The CHAIRMAN. And where would that go?

Mr. ROSENBLUM. Right now, it's going to all the places that have been mentioned, some of it is trucked down the hill and sold as lumber. Some of it as pulp. Some of it is going to landfills and some of it will be in burners.

The CHAIRMAN. Why would we be putting it in landfills? Is it because there's nowhere else to put it?

Mr. ROSENBLUM. I think that's essentially it. It has to go somewhere.

That's why we're focusing so strongly on a biomass power plant. We really think that's by far, if it's feasible, the best solution. Unfortunately, it's going to take a certain amount of time to bring it on line.

The CHAIRMAN. In this bill, we do address the biomass side of it and the energy bill, as you know, we're trying to get that through as well.

Thank you very much. Mr. Lewis?

Mr. LEWIS. Thank you very much, Mr. Chairman. I ask the Chairman to allow me to comment and perhaps question last because first of all I very, very much appreciate the dedication of Mr. Pombo, the Chairman of this Committee and the Members who've been here today, but beyond that, Mr. Chairman, to mention to you and to those members that we are for good or for ill a crises-oriented society.

Mr. Grindstaff mentions some dams around this territory that have finally been completed. I have told the story of a 4-year-old boy standing by his back window on 17th Street in San Bernardino and dropping a ping pong ball which dropped about three feet and hit the water and floated out through the back fence. Some 60 years after that, we completed the Seven Oaks Dam which was stimulated by that flood.

Here, we have a potential crisis that is incredible to imagine and yet you really have to see it to believe it. Mr. Rosenblum has talked about the cost of just doing his work on the hill. Between Mr. Rosenblum and Mr. Grindstaff's problem with our watershed, we're talking about somewhere near a half billion to $750 million of a real outlay by the citizens who are serviced by these two areas. Taxpayers are involved, consumers are involved and I would just really urgently ask you and your members to help us convince the Congress that we must give priority for high levels of dollar input now not later.

We're beginning to get the message, but sessions like this help a lot. I see in the audience people who have spent their lifetime in our forests, some professionally, others loving it, but we're about to lose it because in many cases in many ways by public policy and otherwise, we have abused it and indeed I hope we can use this crisis to rethink our preconceived notions about what is good management in terms of environmental practice.

This forest is an incredible asset. We are about to lose it. I will not stop here for we can play a progressive role month in and

month out to make sure that this model becomes a forest that's being rebuilt as we go about trying to figure out what to do with the dead trees.

I very much appreciate all of those on the Panel, particularly the Wilderness Society as Mr. Pombo discussed Mr. Watson, perhaps a moderate, but frankly those voices who care about our environment need to be heard and in turn, those who have cared the most over the years need to use crises like this to rethink where we ought to be going because those simply answers just don't provide real answers for the long term.

Mr. Chairman, you've helped us all a lot. You're to be congratulated and we appreciate all of the Members' participation.

The CHAIRMAN. Thank you.

[Applause.]

I just want to conclude by thanking the other Members of the Committee, Mr. Cardoza is from Northern California. He had a plane to catch, so he apologized to everyone, but he had to leave a little bit early.

Mr. Gibbons from the State of Nevada, Mr. Walden from the State of Oregon, have made the effort to take time away from their Districts and their families to be here and I appreciate the effort that they put in to be here as well.

I'd like to thank Congressman Lewis for his persistence in getting us out here and constantly reminding us that the San Bernardino National Forest is in a state of crisis and it was extremely important that we bring the Committee here so I thank him for doing that and for hosting us today.

I'd also like to thank all of our witnesses for the effort that they put in. It is never easy to come before a congressional panel and testify and usually it makes people a little bit nervous about doing it and I appreciate the effort that all of you put in in preparing your testimony and for being able to answer the questions that the Committee has.

I will say that if there are any further questions, they will be submitted to you in writing. If you could answer those in writing in a timely manner so that they can be included in the hearing record.

To those members of our audience who did not have the opportunity to testify who would like to have had that opportunity, the Congressional Record will be held open for 10 days. You can submit written testimony to the House Resources Committee. That testimony will be included as part of this hearing and it will be included at the proper point in the Congressional Record.

I want to thank everybody for your hospitality. Thank you for being here today. I thank our witnesses and members and most of all, thank the audience for being here. And I'd also like to thank the staff. They did a fantastic job of putting this all together. It's always a little bit more difficult for them to go away from D.C. and try to put a hearing together out in a place like this, but I appreciate the work that they put in.

Thank you all very much and the hearing is adjourned.

[Applause.]

[Whereupon, at 3:54 p.m., the hearing was adjourned.]

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