WILDFIRE PREPAREDNESS: AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE

OVERSIGHT HEARING

BEFORE THE

SUBCOMMITTEE ON NATIONAL PARKS, FORESTS AND PUBLIC LANDS

OF THE

COMMITTEE ON NATURAL RESOURCES
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

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CONTENTS

OVERSIGHT HEARING ON "WILDFIRE PREPAREDNESS: AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE"

Tuesday, June 19, 2007
U.S. House of Representatives
Subcommittee on National Parks, Forests and Public Lands
Committee on Natural Resources
Washington, D.C.

The Subcommittee met, pursuant to call, at 10:03 a.m. in Room 1324, Longworth House Office Building, Hon. Raúl M. Grijalva [Chairman of the Subcommittee] presiding.

Present: Representatives Grijalva, Bishop, Kildee, Christensen, Holt, Sarbanes, DeFazio, Hinchey, Kind, Inslee, Udall, Shuler, Duncan, Tancredo, Pearce, Heller, Sali and Lamborn.

STATEMENT OF THE HON. RAÚL M. GRIJALVA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARIZONA

Mr. GRIJALVA. Let me call the Committee on National Parks, Forests and Public Lands to order.

This is an oversight hearing on wildfire preparedness. Let me welcome everyone to today's oversight hearing on wildfire preparedness. I look forward to the testimony from today's witnesses, and to a thoughtful discussion and exchange on what I believe and many believe is a very, very important topic.

This year's wildland fire season is off to an early start, with several large fires, primarily in the southeastern United States. There have been especially large fires in Georgia and Florida. Today we will be hearing from Robert Farris, State Forester of Georgia, about the fires in his state.

While the fire season is not quite underway in the West, westerners are bracing for it. It could be a dramatic fire season fueled by recent drought and climate change.

Fire is a necessary ecological process that renews the productivity of fire-adapted ecosystems. However, the impacts of large, uncharacteristic fires continue to grow. The old saying about an ounce of prevention is worth a pound of cure is certainly the case with wildland fire. It is critical to have an adequate Federal investment in preventive programs that reduce the threat of wildland fire in order to lower the fire suppression costs down the road.

Unfortunately, the President's Fiscal Year 2008 budget requests include a $96 million cut in wildfire preparedness. This included a

proposed cut in state fire assistance, even though an estimated 85 percent of the lands in wildland-urban interface are state, private, or tribal lands.

I am happy to join my colleague, Chairman Norm Dicks, in calling this cut to wildfire preparedness irresponsible, and I want to thank him for proposing to restore the wildfire preparedness funding in the Interior appropriations bill.

I also believe that we are being penny-wise and pound-foolish by underfunding our budget for forest thinning. Internal agency studies have indicated that the need for investment in forest thinning is many times more than the funding requested in the President's budget. We all know that the funding requested in the President's budget falls far short of the target set in the Healthy Forest Restoration Act.

My concern is that this lack of investment in thinning now just leads to higher suppression costs in the future. Computer models have indicated this repeatedly; and frankly, I think it is just common sense. And so I also thank Chairman Dicks for proposing to raise the funding for hazardous fuel treatment above the President's current budget request.

Today we will be hearing from the Government Accountability Office and the USDA Inspector General. The GAO has found in two separate reports that the Forest Service and the Department of the Interior still lack an overall cohesive strategy in dealing with wildland fire. Under Secretary Rey told this committee two years ago that he would submit such a plan with the Fiscal Year 2007 budget request. We have yet to receive that plan.

Even with the progress the agencies have made in this area, the GAO says that the agencies have not produced a cohesive strategy on wildland fire that they have been called to do.

The USDA Inspector General has also found that the Forest Service lacks a process for assessing the level of risk that communities face from wildland fire. The Inspector General further found that the Forest Service does not have the ability to ensure that the highest priority fuels reduction projects are being funded first. This is a major concern. I see this firsthand in my home state of Arizona, where we have many hazardous fuels projects that are already NEPA-approved and ready to go, but awaiting Federal investment. That leaves our community at risk, and frankly is unacceptable.

Today we are joined by the Arizona State Forester, who can give us a good picture of the need for Federal investment in thinning projects in Arizona. And Arizona is just one state of many which is in a similar predicament.

I am glad to hear that the Federal land management agencies are working to address these problems with a hazardous fuel priority list. I hope that any new process they develop will be transparent to all stakeholders.

I also look forward to hearing from the witness, Mike DeBonis, about the role between wildfire and poverty. A study conducted by the University of Oregon found that the rural poor often live in the most fire-prone areas, and cannot afford to meet their basic economic needs and still pay for the wildfire protection measures that are required.

As a former county supervisor, I know this firsthand about the influx of development and wildland-urban interface in the West. The newspaper USA Today found that since the year 2000, roughly 450,000 people have moved to rural western areas at most risk from wildfire. Insurance companies in many western states are now requiring homeowners to protect their homes from wildfire risk, or lose their insurance.

Today we will be hearing from Supervisor Elizabeth Archuleta about the efforts of the National Association of Counties on wildland-urban interface fire.

I look forward to hearing from all our witnesses, and thank those who have traveled far to be here today.

I would now like to recognize our Ranking Member, Mr. Bishop, for any opening statement he may have. Sir.

STATEMENT OF THE HON. ROB BISHOP, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF UTAH

Mr. BISHOP. Thank you, Mr. Chairman, I appreciate the chance at being here. I am extremely appreciative of the Chairman for establishing the dress standard for today's meeting, and invite any of our guests, if you would like to do the same thing, as well.

I really want to know who actually decided to build the Capitol in this swamp. Those of us from—and some people want to spend six years sweating out here? It is just amazing.

So those of us in the west, I hate humidity. I want dry. That is all there is to it. All the Jergens in the world is fine, just give me dry.

Mr. Chairman, I want to thank you for having this hearing today on wildfire preparedness. It cannot be overstated just how important it is that we work together in a bipartisan manner to find solutions to the growing threat of wildfires in our national forests and public lands, and that ever-growing costs to our Federal agencies in dealing with these fires.

I would like to commend Chairman Rahall and Ranking Member Young for their March 14 letter to the House Committee on the Budget asking them for additional funding for wildfire suppression. And I would ask unanimous consent to submit this letter for the record.

Mr. GRIJALVA. Without objection.

Mr. BISHOP. Thank you, sir.

[The letter to the House Committee on the Budget follows:]

U.S. House of Representatives
Committee on Natural Resources
Washington, DC 20515

March 14, 2007

Chairman John Spratt, Jr.
House Committee on the Budget
Room 207, Cannon House Office Bldg.
Washington, D.C. 20515-6065

Ranking Member Paul Ryan
House Committee on the Budget
Room B71, Cannon House Office Bldg.
Washington, D.C. 20515-6065

Dear Chairman Spratt and Congressman Ryan:

As you are aware, wildfire suppression funding has become a critical problem for the Bureau of Land Management and, more particularly, the USDA Forest Service. We are asking for your thoughtful consideration in helping address two primary concerns in this regard.

First, as you are aware, annual funding for firefighting is done by a formula based on the previous ten-year's average. If costs for any given year exceed the ten-year average, the agencies are forced to borrow money from other non-firefighting accounts. Sometimes these funds are never restored, but even when they are the time delay is often months or even years. Consequently, serious harm has been done to the continuity and viability of Forest Service and BLM programs. To address this problem, in 2004 and 2005, your Committee included language in the Budget Resolution creating a flexible spending cap of an additional $500 million for fire suppression---to be used only if regular suppression funds were exhausted. This assistance made a major difference in maintaining viable Forest Service and BLM programs. We would appreciate your assistance once again in providing similar budget support language for fire suppression.

Second, the Administration's budget for the Forest Service reflects another serious problem with fire suppression funding, again as a result of utilizing the ten-year cost average. Because of the increase in number and size of wildfires, fire suppression costs are increasing dramatically. Given the budget caps, this means that as more funds are diverted to fire suppression, fewer funds are available for all other programs. This year suppression is funded at $911 million–a 23% increase over last year's funding of $741 million. In the last 18 years, the wildfire management portion of the agency's budget has gone form 13% to 45%. The result is that the Forest Service is planning a 2,127 reduction in FTEs, next year. This is a major restructuring of the mission of the Forest Service, not by Congressional intent, but by the structure of the budgeting process. We believe that holding all Forest Service programs hostage to the severity of any given fire season---a factor largely outside the control of any organization---is an unreasonable way to fund and manage a federal agency. Recognizing that about 2% of wildfires---those that escape initial attack---are responsible for approximately 85% of all firefighting costs, we would like to explore with you options for funding large-fire suppression costs that do not drain the operating budgets of the land management agencies.

If we fail to address the serious damage wildfire costs are having on the Forest Service and BLM, we will need to prepare for major changes in all the programs and amenities that our federal lands provide. Thanks for your consideration---we look forward to working with you on these crucial matters.

Sincerely,

Nick J. Rahall II
Chairman

Don Young
Ranking Member

Mr. BISHOP. It is clear that additional funding is needed for the Forest Service and BLM in order for them to combat wildfire. The cost of fighting wildfires is skyrocketing: 47 percent of the Forest Service budget will go to wildland fire management, which is four times what it was a decade ago.

There really are two issues that beg for answers. First, there is the immediate issue that the Forest Service budget is being consumed by wildfires—there is a pun intended there—to be at the detriment of other vital programs.

But the second issue that we must deal with—and Dr. Daugherty will provide excellent testimony on this—is the need to implement widespread hazardous fuel reduction treatments. This makes sense environmentally, and it definitely makes sense economically.

Our national forests are tinderboxes, and, like the movie Groundhog Day, we continually repeat the same scene every Sunday, every summer—the rest of the days of the week, as well—every summer, especially for those of us who live out west.

Hazardous fuel reduction will help save our forests and communities from catastrophic wildfires, and with aggressive implementation the percentage of money the Forest Service and BLM must spend on fighting fires will decrease.

I would like to thank our witnesses for coming. I look forward to hearing your testimony.

I yield back.

Mr. GRIJALVA. Thank you very much, Mr. Bishop. And let me begin with our witnesses, and thank them very much.

Under Secretary Mark Rey will be our first witness. He is the Under Secretary for Natural Resources and Environment at the Department of Agriculture, thank you for being with us, Secretary Rey, and I look forward to your testimony. Sir.

Mr. REY. Mr. Chairman, with your permission, Mr. Allred and I divided the material so that it would be actually more efficient if he went first, and I will follow him.

Mr. GRIJALVA. Mr. Allred.

STATEMENT OF C. STEPHEN ALLRED, ASSISTANT SECRETARY, LAND AND MINERAL MANAGEMENT, U.S. DEPARTMENT OF THE INTERIOR

Mr. ALLRED. Thank you, Mr. Chairman, Members of the Subcommittee. Thank you for the opportunity to testify today. From someone who is a recent transplant from the West, I am finding the temperature and the humidity to be a real challenge, as well.

It is my pleasure to appear here today with Mark, because we represent the Department of Agriculture and the Department of the Interior.

As you know, multiple factors contribute to our wildland fires, including weather, fuel types, terrain, location and proximity to our biggest challenge, the wildland-urban interface, as you had indicated. Certainly changing temperatures, prolonged drought, expansion of the wildlands-urban interface, continued accumulations of biomass, and the substantial increase in what leads me to be very concerned are highly flammable invasive species on the rangelands are converging to increase the risk of catastrophic loss from our wildland fires.

In combination, these trends present continuing challenges in our efforts to decrease the number and the cost of those fire incidents.

One challenge we face is addressing, as I indicated, wildland fire in areas such as the wildland-urban interface, where suppression efforts are inherently more expensive. The rate of growth in the wildlands-urban interface is triple that outside of that area. We estimate there were some 8.4 million new homes constructed in the 1990s in this area.

Another one obviously, as you have indicated, is the accumulation of flammable biomass on public lands, and that continues to be a risk for major fires.

The Departments, both Ag and Interior, worked aggressively to reduce the amount of hazardous fuels and restore the health of our public lands and rangelands. We have used the authorities that were provided to us under the President's Healthy Forest Initiative and the Healthy Forest Restoration Act to expedite those actions.

In 2006, more than half of the total areas treated were inside the wildlands-urban interface. We will continue to emphasize that goal to treat approximately another 2 million acres in the wildlands-urban interface in 2007.

A quick look at what the outlook is for this year. Certainly we expect the potential in 2007 to be higher than normal across much of the Southwest, California, portions of the Great Basin and

Northern Rockies, and smaller portions of the Northwest, Alaska, and the Southeast. Critical conditions certainly continue to be drought, the low snow pack, and the warmer-than-normal forecast temperatures that we believe will result in early snow melt. These conditions have already resulted in burning of over 1.2 million acres in the southern area, and more than almost 200,000 acres in the eastern area.

To prepare for these natural conditions anticipated in the 2007 fire season, the Departments are working to improve the effectiveness of our firefighting resources. Our resources are comparable to those available in 2006. Permanent and seasonal firefighters, hot shot firefighting crews, smoke jumpers type one and type two, incident management teams, and national incident management organizations are ready to respond.

D.O.I.'s aviation assets include type-one and type-two helicopters, single-engine air tankers and water scoopers on exclusive-use contracts, and additional resources on local or regional contracts or on an on-call-as-needed basis.

As we have already demonstrated this year during fires in the Southeast, we leverage our firefighting ability by shifting our firefighters and equipment as the season progresses. Assignments are made on anticipated fire starts, actual fire occurrence, fire spread and severity, with the help of predicting services.

The initial attack of the fire is handled by the closest available local resources, and continues to be our major emphasis. In the event of multiple, simultaneous fires, resources are prioritized and allocated by a national multi-agency coordinating group. Prioritization ensures firefighting forces are positioned where they are needed most.

Mr. Chairman, Members of the committee, again, I appreciate the opportunity to visit with you, and I would be happy to answer any questions at the appropriate time.

Mr. GRIJALVA. Thank you very much.

Under Secretary Rey, thank you.

STATEMENT OF MARK REY, UNDER SECRETARY, NATURAL RESOURCES AND ENVIRONMENT, U.S. DEPARTMENT OF AGRICULTURE

Mr. REY. Thank you, Mr. Chairman. Now that Assistant Secretary Allred has talked about the fire season outlook for the year and our preparedness efforts, I am going to talk a little bit about our fuels treatment efforts and our efforts to contain costs on large-incident fires.

Today we treat more fuels than ever, and we collaborate with our local, state, and tribal partners more effectively than ever. Our focused efforts to remove accumulation of fuels in our forests and grasslands is having a positive effect on the land, and is helping to reduce wildfire risk to communities.

The Federal land managing agencies will have treated nearly 25 million acres of Federal at-risk lands, from 2000 through 2007, including approximately 20 million acres treated through the Hazardous Fuel Reduction programs, and about 5 million acres of landscape restoration, accomplished through other land management activities.

At 25 million acres, it is a size and an area roughly the size of the State of Ohio. We are treating acres at a rate four times the average annual treatments during the 1990s.

The Department of Agriculture, in cooperation with the Department of the Interior, in collaboration with our non-Federal partners, continue to increase the community protection emphasis of the hazardous fuels program. Community wildfire protection plans are essential for localities to reduce risk and set priorities. Over 1100 of these plans, covering 3,000 communities, have been completed nationally. An additional 450 plans are progressing toward completion.

The implementation plan of the 10-year comprehensive strategy for fuels treatment was updated and released with the Western Governors Association and the Western State Foresters in December of 2006. The goals and guiding principles from the 2001 document are constant, but performance measures and implementation tasks have been updated to reflect the progress made toward national fire plan goals in the past five years, and to build on our successes.

Also, last fall the Administration released its cohesive fuels strategy, the subject of earlier GAO analyses, to assist with prioritization of fuels treatment needs.

In September 2006, the Office of Inspector General conducted an audit report on the implementation to the fuels treatment work under the Healthy Forest Initiative. The OIG audit recommended that the Forest Service implement a consistent analytical process for assessing the level of risk the communities face from wildfire; strengthen the prioritization of projects; and improve performance measures and reporting standards in order to better communicate the outcome of treatments.

The Forest Service concurred with the five recommendations in the report, and developed a series of action steps that are summarized in my testimony.

Let us talk a bit about cost containment. As you indicated, Mr. Chairman, suppression costs have escalated in recent years, as wildfire seasons have generally lasted longer and the acreage burned has grown. The external factors noted by Mr. Allred also influence the number and severity of incidents.

While safety is our primary concern, our departments do share concerns about the cost of fires, and are committed to doing all we can to contain these costs.

The Departments of Agriculture and Interior are taking the issue of large-fire cost containment very seriously, and are actively moving forward to implement a number of cost-containment adjustments, both summarized in the testimony for the record, as well as in materials that I will submit for the record.

The comprehensive list of management efficiencies has been developed to guide actions over the short, intermediate, and long term, and to produce results with the two departments working together.

That will conclude my summary of the written statement for the record. I would like to submit one additional study for the record, because this past month the Brookings Institution released a report entitled, "Towards a Collaborative Cost Management Strategy:

2006 U.S. Forest Service Large Wildfire Cost Review Recommendations." This report is by an independent panel that assessed agency performance on the 20 large fires that burned 1.1 million acres across 17 national forests during 2006.

The panel found that the Forest Service exercised appropriate and adequate fiscal diligence in suppressing wildfires during the record-breaking 2006 season. The panel report also makes a series of recommendations for improvement that the Agency will begin to act on immediately.

I will submit a copy of the complete report for the record of this hearing, and be happy to respond to any questions.

Mr. GRIJALVA. Thank you. Without objection, that will be part of the testimony.[NOTE: The study has been retained in the Committee's official files.]

[The joint prepared statement of Mr. Rey and Mr. Allred follows:]

Statement of Mark Rey, Under Secretary for Natural Resources and Environment, U.S. Department of Agriculture, and C. Stephen Allred, Assistant Secretary for Land and Minerals Management, U.S. Department of the Interior

INTRODUCTION

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to testify on wildland fire preparedness for the 2007 fire season and hazardous fuel reduction activities. Since the Department of the Interior (DOI) and the Department of Agriculture (USDA) work closely together in fire management, the two Departments are providing a joint statement.

WEATHER, WILDLAND URBAN INTERFACE, AND WOOD

Multiple factors contribute to wildland fire. These factors include weather, fuel type, terrain, location with respect to the wildland urban interface (WUI), and other highly valued landscapes, and managerial decisions made before and during fire incidents. In addition, changing temperatures and prolonged drought across many portions of the West and Southeast, an expansion of the WUI and an increase in the number of people living in the WUI, continued accumulation of wood fiber, and substantial increases in highly flammable invasive species, such as cheatgrass, are converging to increase the risk of catastrophic loss from wildland fires. In combination, these trends present continuing challenges in our efforts to decrease the number and cost of fire incidents.

Over the last few years, we have reported regularly to Congress on these challenges. The 2005 Quadrennial Fire and Fuels Review by DOI and USDA examined the growth of the WUI, the area where structures and other human developments meet or intermingle with undeveloped wildland. The review found that 8.4 million new homes were added to the WUI in the 1990s, representing 60 percent of the new homes constructed in the United States. The rate of growth is triple the rate of construction outside of the WUI. Also, the recent Audit Report by the Office of Inspector General "Forest Service Large Fire Suppression Costs" found that the majority of Forest Service large fire suppression costs are directly linked to protecting property in the WUI. These reviews illustrate the challenge of addressing wildland fire in land areas such as locations in the WUI where fire suppression is inherently more expensive.

Another challenge is addressing the accumulation of flammable biomass on our public lands, a major cause of fire risk. The Departments have worked aggressively to reduce the amount of hazardous fuels on Federal lands and restore the health of our public forests and rangelands, utilizing the authorities provided under the President's Healthy Forests Initiative and the Healthy Forests Restoration Act to expedite action. In 2006, more than half of the total acres treated were inside the WUI. We will maintain this emphasis with a goal to treat approximately 2 million acres in high-risk wildland urban interface areas through the hazardous fuels reduction program in 2007.

2007 WILDLAND FIRE SEASON OUTLOOK

Most of the eastern, central and northwestern U.S. has a normal outlook for significant wildland fire potential in 2007. A portion of the Southwest is predicted to have a below-normal wildland fire season. This area includes northeastern New

Mexico, and small parts of southeastern Colorado, western Oklahoma, and northern Texas, where it borders New Mexico. Wildland fire potential is expected to be higher than normal across much of the Southwest, California, portions of the Great Basin, the Northern Rockies, a small portion of the Northwest, Alaska, and the Southeast. The amount of precipitation many areas receive in the early summer periods is an important factor in the severity of the fire season.

The critical conditions influencing the 2007 wildland fire outlook are:

- Drought conditions are expanding and intensifying across large portions of the West and Southeast, and drought relief is not expected in these areas through the season.
- Low snow pack, warmer-than-normal forecast temperatures, and early snow melt over most of the West will likely dry out timber fuels and could cause an early onset of fire season in some areas.
- Abundant new and carry over fine fuels are expected to green-up and cure early, leading to an active and prolonged grassland fire season.
- Another hotter than normal summer is projected for the West. Depending on heat levels and timing of higher temperatures, higher elevation fuels could dry quickly and be susceptible to ignitions.

The fire season is already producing incidents that are evidence of our concern about the 2007 fire season. Drought and high temperatures have resulted in the burning of over 1.1 million acres in the Southern Area, including areas located in the Big Turnaround, Sweat Farm Road, Bugaboo Scrub and Florida Bugaboo fire complex in Northern Florida and Southeastern Georgia. More than 161,000 acres have burned in the Eastern Area, including the Ham Lake fire in Northern Minnesota and in Canada, which burned for over eighteen days, due to drought conditions and winds.

WILDLAND FIRE PREPAREDNESS

To prepare for these natural conditions anticipated in 2007 Fire Season, the USDA and DOI are working to improve the efficiency and effectiveness of our firefighting resources. New management efforts are allowing for increased mobility of firefighting forces and aviation assets.

Firefighting Forces

For the 2007 fire season, we have secured firefighting forces—firefighters, equipment, and aircraft—comparable to those available in 2006. As has already been demonstrated during the fires in the Southeast, we leverage our firefighting ability by shifting our firefighters and equipment as the fire season progresses. Fire managers assign local, regional and national firefighting personnel and equipment based on anticipated fire starts, actual fire occurrence, fire spread, and severity with the help of information from Predictive Services.

More than 18,000 firefighters will be available, including permanent and seasonal Federal and State employees, crews from Tribal and local governments, contract crews, and emergency/temporary hires. This figure includes 92 highly-trained Hotshot firefighting crews and about 400 smokejumpers nationwide. There are 17 Type 1 national interagency incident management teams (the most experienced and skilled teams) available for complex fires or incidents. Thirty-eight Type 2 incident management teams are available for geographical or national incidents.

Initial attack of a fire is handled by the closest available local resource regardless of agency jurisdiction. Generally this means that the agency with management jurisdiction and protection responsibility for the location of the fire, such as a national forest, Tribal lands, Bureau of Land Management unit, wildlife refuge, or national park, will handle initial attack. Often, our partners at the local community or county level are the first to respond.

Two interagency National Incident Management Organization (NIMO) teams were staffed in 2006, and are operational with two seven-member full-time Type I Incident Management Teams ready to respond to wildland fire incidents. The teams are headquartered in Atlanta, Georgia and Boise, Idaho and will help wildland fire agencies improve future fire management programs. Currently, the Atlanta NIMO team is assisting the Florida State incident management team on the Florida Bugaboo fire. Last week, the Boise NIMO team concluded nearly 40 days of assisting FEMA in its tornado disaster response operation in Greensburg, Kansas. Both teams will be called to assist in wildland fire incidents this season, and when they are not on assignments, they will implement the NIMO Implementation Plan, which calls for improvements in wildland fire program management in the areas of training, fuels management, cost containment, and leadership development, among others.

The National Interagency Coordination Center, located at the National Interagency Fire Center in Boise coordinates critical firefighting needs throughout the nation. In the event of multiple, simultaneous fires, firefighting resources are prioritized and allocated by the National Multi-Agency Coordinating group, composed of national fire directors headquartered at NIFC. Prioritization ensures firefighting forces are positioned where they are needed most. Fire managers dispatch and track personnel, equipment, aircraft, vehicles, and supplies through an integrated national system. If conditions become extreme, assistance from the Department of Defense is available under our standing agreements, as well as firefighting forces from Canada, Mexico, Australia, and New Zealand using established agreements and protocols.

Aviation

The wildland firefighting agencies continue to employ a mix of fixed and rotor wing aircraft. Key components of our 2007 aviation assets include 16 civilian large air tankers on federal contracts, along with 41 Type 1 and Type 2, or heavy and medium, helicopters on national use exclusive-use contracts; and 84 Type 2 and 3 helicopters on local or regional contracts. Additionally, there are nearly 300 call-when-needed Type 1, 2 and 3 helicopters available for fire management support as conditions and activity dictate.

Although both the large and single-engine air tanker programs have evolved in recent years, we are confident that we have appropriate and cost-effective assets in place or available to respond to the air support needs in the field. Twenty three Single Engine Air Tankers (SEATs) will be on exclusive-use contracts for the 2007 fire season and about 80 available on a call-when-needed basis. Some states and local areas also contract their own SEATs.

In addition, there will be two water-scooper airtankers on exclusive-use contracts and an additional one available on a call-when-needed basis for the 2007 fire season. Additional water-scooper aircraft will be available through agreements with state and county firefighting agencies. As in the past, military C-130 aircraft equipped with Modular Airborne Fire Fighting Systems (MAFFS) will be available to supplement our large air tanker fleet as needed. Six MAFFS are available this year.

MITIGATING WILDLAND FIRE RISK TO COMMUNITIES AND THE IMPACTS OF FIRE ON THE ENVIRONMENT

We have dangerous fire and fuels conditions in areas in the United States and the situation is becoming increasingly complex. However, we now treat more fuels than ever, and we collaborate with our local, state and tribal partners more than ever before. Our focused effort to remove accumulation of hazardous fuels in our forests and grasslands is having a positive effect on the land and is helping to reduce wildland fire risk to communities.

Some of our specific accomplishments in reducing hazardous fuels include:

- Despite an unprecedented wildfire suppression workload, the Forest Service and DOI improved fuel conditions and ecosystem health on 4 million acres of land in 2006, of which 2.6 million acres were treated through hazardous fuels reduction programs and 1.4 million acres of land restoration accomplished through other land management activities.
- The Federal land management agencies will have treated nearly 25 million acres from 2000 through 2007, including approximately 20 million acres treated through the hazardous fuels reduction programs and about 5 million acres of landscape restoration accomplished through other land management activities.
- In 2006, the Administration treated many overstocked Federal forests. Hazardous fuels treatments resulted in qualitative improvements of at least 994,000 acres in fire regimes classes 1, 2, or 3 that moved to a better condition class. In addition, the Administration has begun measuring the percentage of total National Forest System land for which fire risk is reduced through movement to a better condition. The Administration is continuing to work on metrics for forest health changes that will help demonstrate the outcomes of projects that remove fuels.
- USDA and DOI, in collaboration with our non-federal partners, continue to increase the community protection emphasis of the hazardous fuels program. Community Wildfire Protection Plans are essential for localities to reduce risk and set priorities. Over 1100 CWPPS covering 3,000 communities have been completed nationally and an additional 450 plans are progressing toward completion.
- The LANDFIRE project has now been completed for the western third of the mainland United States. The data are being used in setting hazardous fuel treatment priorities by local field units and regionally, and are used in

managing large, long duration wildfires burning across landscapes. USDA and DOI are also testing methods of modeling fire risk with LANDFIRE data to help better inform hazardous fuel treatment prioritization.

- USDA and DOI are developing methods for effectively allocating fuels reduction funds and measuring the effectiveness of those treatments in terms of community risk reduction. The agencies will identify national priorities within the fuels program and focus funding on those priorities, develop more effective measures of risk reduction through the introduction of systematic risk analysis tools for fire hazard analysis and fuels treatment implementation, and strengthen the project criteria for WUI fuels treatments.
- The "Implementation Plan" of the "10 Year Comprehensive Strategy" was updated and released in December of 2006. The goals and guiding principles from the 2001 document are constant, but performance measures and implementation tasks have been updated to reflect the progress made toward National Fire Plan goals in the past five years and build upon our success.

Collaboration among communities and local Forest Service and DOI agencies' offices has resulted in highly effective and successful hazardous fuels reduction projects. One example is the New Harmony (Utah) Community Fire Plan that called for coordinated treatments on forested lands managed by the State of Utah, the Bureau of Land Management, Dixie National Forest and individual property owners. Between 2002 and 2004 the agencies and landowners completed fuel treatments that reduced fire intensity in the treated areas helping fire fighters to more safely protect the community during the 2005 Blue Spring Fire. In another example, the use of Healthy Forests Restoration Act (HFRA) authorities enabled federal agencies and local communities to quickly begin clean-up and fuels reduction in the wake of hurricanes that devastated Gulf Coast communities and surrounding forests in 2005. The Forest Service and DOI worked closely, using HFRA authorities, to facilitate the National Forests of Mississippi to successfully remove over 1.3 million tons of hazardous fuel from over 100,000 acres, salvaging over 240 million board feet of timber. Nearly 1000 miles of fuel breaks were constructed and another 500 miles will be completed this year to protect homes in the wildland urban interface.

In this challenging fire season, citizens who live or vacation in fire-prone areas must take personal responsibility to protect their individual homes. Valuable information about how to increase their safety and protect their homes and property is available through the FIREWISE program. Homeowners can learn how to protect their homes with a survivable, cleared space and how to build their houses and landscape their yard with fire resistant materials. Information about the FIREWISE program can be found at www.firewise.org, sponsored by a consortium of wildland fire agencies that includes the Forest Service, the DOI, the National Fire Protection Association, and the National Association of State Foresters.

USDA Office of Inspector General—Progress on Implementation of the Healthy Forests Initiative

In September 2006, the USDA Office of Inspector General, Southeast Region, concluded an Audit Report on the Implementation of the Healthy Forests Initiative. The OIG audit recommended that the Forest Service implement a consistent analytical process for assessing the level of risk that communities face from wildfire, strengthen its prioritization of projects, and improve performance measures and reporting standards in order to better communicate the outcome of treatments. The Forest Service concurred with the five recommendations of the report and developed an action response and estimated completion date for each. An update on progress includes:

- In August 2006, the Forest Service completed development of the Hazardous Fuels Prioritization and Allocation Process—a national methodology to assess the risk and consequence of wildfire that prioritizes the allocation of hazardous fuels funds to the Regional level. The Forest Service applied the Hazardous Fuels Prioritization and Allocation Process framework to assist in the allocation of fuels funding in the last quarter of FY 2006 and to allocate hazardous fuels funds for FY 2007. DOI is working with Forest Service to adapt the Hazardous Fuels Prioritization and Allocation Process to meet BLM's vegetation and landscapes and will begin a pilot implementation process.
- In December 2006, the Forest Service completed work with the DOI and other partners in the Wildland Fire Leadership Council to update the 10-Year Implementation Plan. National performance measures were set and Program Assessment and Rating Tool (PART) measures assess performance based on achievement of desired conditions.
- In December 2006, the Forest Service completed accomplishment reporting with additional detail (i.e. acres moved to better condition class) in the FY 2006

Forest Service Performance Accountability Report (PAR). The FY 2007 PAR report will incorporate new outcome measures from the 10-Year Implementation Plan and will report accomplishments by Region.

- In February 2007, the Forest Service changed appropriate annual targets to multi-year averages and included emphasis on outcomes rather than outputs in the agency FY 2007 Program Direction and future President's Budgets. All accomplishment and budget documents for FY 2008 and beyond reflect the new PART performance measures that demonstrate agency performance by focusing on risk reduction and restoration outcomes.
- Due in July 2007, the Forest Service will refine the Hazardous Fuels Prioritization and Allocation Process with updated data sources for the FY 2008 allocation, develop a methodology to determine outcomes of all activities to achieve desired condition (i.e. wildfires), and monitor and update severity mapping through the LANDFIRE.
- Due in October 2007, and still in progress, the Forest Service will require documentation of Regional methodology as part of General Management Reviews with seven Regions to be reviewed in FY 2007 and change the National Fire Plan Operations and Reporting System and FACTS databases to incorporate geospatial information for all hazardous fuel treatments.

MANAGING THE COST OF FIGHTING WILDLAND FIRE

Suppression costs have escalated in recent years, as wildfire seasons have generally lasted longer and the acreage burned has grown. The external factors noted earlier in this testimony influence the number and severity of incidents. While safety is our primary concern, our Departments do share concerns about the cost of fires and are committed to doing all we can to contain these costs.

Over the last several years, various studies and assessments dedicated to fire suppression costs have been conducted by the National Academy of Public Administration, the Wildland Fire Leadership Council, the Brookings Institution, and the Government Accountability Office (GAO). As a result of the reviews, more than 300 recommendations have been documented to suggest approaches to trim the costs of wildland fire suppression. The agencies have taken these reviews seriously, and the overall awareness and personal responsibility for cost-containment among the federal fire agencies has never been more acute.

In 2006, TriData, a Division of System Planning Corporation, under contract with the Forest Service, completed a review and analysis of 22 past cost containment reports and made recommendations regarding those which would yield the greatest savings. The Tridata report determined there were 203 unique recommendations directed at improving wildfire suppression cost containment. Of those, the report identified 71 recommendations that represented potentially high to extremely high cost savings if implemented. As of August 2006, we have taken or are in the process of taking action on 57 of these recommendations. We have not implemented corrective actions on the remaining recommendations for various reasons, including that the recommendation involves actions beyond agency authority, the action must be deferred due to pending court decisions, or that recommendations were directed at isolated events. Both the Forest Service and DOI are working on a comprehensive report on recommendations for large fire cost reviews. We expect that report to be available later this year.

DOI and USDA are taking the issue of large fire cost containment very seriously and are actively moving forward to implement these important changes. The comprehensive list of management efficiencies has been developed to guide action over the short, intermediate and long-term and to produce results. The Forest Service and DOI are working together in collaboration and our staff is committed to action.

RECENT STUDIES

Government Accountability Office—Wildland Fire Management: Update on Federal Agency Efforts to Develop a Cohesive Strategy to Address Wildland Fire Threats:

In May 2006, the GAO issued a report entitled, "Wildland Fire Management: Update on Federal Agency Efforts to Develop a Cohesive Strategy to Address Wildland Fire Threats." The report reiterated its recommendation to develop a cohesive wildland fire management strategy. It also acknowledged the Departments' progress on LANDFIRE and Fire Program Analysis, but urged continued vigilance in ensuring that appropriate data is utilized. In response, we have collaborated with our partners on the following:

- Cohesive Fuels Strategy: USDA and DOI issued a Cohesive Fuels Strategy to set forth priorities for fuels reduction projects to guide investments in reducing risks of catastrophic wildland fires and enhance strategically placed "defensible space" in areas at risk.

- LANDFIRE: USDA and DOI are presently completing an operations and maintenance plan for LANDFIRE. This plan includes provisions for ensuring that data is updated and maintained and that a stable organization will be available to provide such data for the users. The Wildland Fire Leadership Council will be reviewing this plan at its June meeting. Implementation of the plan will begin in 2008 as the project is completed and will continue uninterrupted into the future.
- Fire Program Analysis (FPA): One of the principal functions of the LANDFIRE program is to provide data to support Fire Program Analysis (FPA). FPA is on schedule, with the prototype expected to be delivered this summer and system delivery expected in 2008. FPA will enable managers to better evaluate the effectiveness of alternative fire management strategies in order to meet land management goals and objectives.

As we continue to strive aggressively to contain the costs of wildland fire suppression, our primary goal will continue to be the protection of life, property and resources. We share the GAO's interest in prioritizing fuels treatment work and increasing accountability for cost containment and have taken many steps forward. We are hopeful that GAO and this Subcommittee are able to ascertain from the actions that have been taken and planned, that the agencies indeed have established strategies, goals and objectives for reducing costs of large wildfire suppression and improving hazardous fuels reduction. We believe that the 10-Year Strategy Implementation Plan, Office of Management and Budget PART Improvement Plan, Forest Service Strategic Plan, and new DOI Strategic Plan, along with the Management Efficiencies initiatives underway, demonstrate a commitment to constantly improve performance, efficiency and accountability.

Secretary of Agriculture's Independent Panel—Brookings Institution

On May 22, 2007 the Brookings Institution released a report "Towards a Collaborative Cost Management Strategy—2006 U.S. Forest Service Large Wildfire Cost Review Recommendations." This report is by an independent panel that assessed agency performance on 20 large fires that burned 1.1 million acres across 17 national forests, five regions and six states that exceeded $10 million in cost. The Brookings Institution's Project Director acted as facilitator of the process and author of the report. The purpose was to determine if the agency exercised fiscal due diligence in managing specific incident suppression activities. The panel found that the Forest Service exercised appropriate and adequate fiscal diligence in suppressing wildfires in the record breaking 2006 season. The panel report also makes a series of recommendations for improvement that the agency will begin to act on immediately. The report is available at the USDA website http://www.usda.gov/wps/portal.

CONCLUSION

In conclusion, Mr. Chairman and members of the subcommittee, we are prepared for the 2007 fire season. Where local areas experience severe fire risk, firefighters, equipment and teams will be assigned. We have a long-term and complex fuels and fire situation that will continue to need to be addressed by communities, tribes, states, and federal agencies. We appreciate your continued support and work as we move forward on these challenges. We are happy to answer any questions you might have.

Mr. GRIJALVA. Let me turn now to Ms. Robin Nazzaro, Director of Natural Resources and Environment, Government Accountability Office.

Ms. Nazzaro, thank you.

STATEMENT OF ROBIN NAZZARO, DIRECTOR OF NATURAL RESOURCES AND ENVIRONMENT, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Ms. NAZZARO. Thank you, Mr. Chairman and Members of the Subcommittee. I am pleased to be here today to discuss Federal agencies' efforts to prepare for and respond to wildland fires effectively

Increasing wildland fire threats to communities and ecosystems, combined with the rising costs of addressing those threats, have

not abated. On average, the acreage burned annually by wildland fires from 2000 to 2005 was 70 percent greater than the acreage burned annually during the 1990s.

Appropriations for wildland fire preparation and response, including appropriations for reducing fuels, have also increased substantially over the past decade, totally about $3 billion in recent years.

As Mr. Allred mentioned, a number of factors have contributed to more severe fires and corresponding increases in expenditures for wildland fire management activities. However, in light of the Federal deficit and the long-term fiscal challenges facing the nation, attention has increasingly focused on ways to contain these growing expenditures, and to ensure that agencies' wildland fire activities are appropriate and carried out in a cost-effective and efficient manner.

My testimony today is based on several of our previous reports and testimonies, which identified critical actions the agencies need to complete if they are to effectively prepare for and respond to wildland fires.

First, because a substantial investment and decades of work will be required to address wildland fire problems that have been decades in the making, the agencies need to develop a cohesive strategy that addresses the full range of wildland fire management activities. Such a strategy would identify the available long-term options and associated funding for reducing excess vegetation and responding to wildland fires.

We first recommended in 1999 that such a strategy be developed to address the problems of excess fuels and their potential to increase the severity of wildland fires and the cost of suppression. By 2005, the agencies had yet to develop such a strategy, and we reiterated the need for such a strategy and broadened our recommendations focus to better address the inter-related nature of fuel reduction efforts and wildland fire response.

Further, because the agencies said they would be unable to develop such a strategy until they had completed certain key tasks, we recommended that the agencies develop a tactical plan outlining these tasks, and the timeframes needed for completing each task and the cohesive strategy.

These tasks include finishing data systems that are needed to identify the extent, severity, and location of wildland fire threats in our national forests and rangelands; updating local fire management plans to better specify the actions needed to effectively address those threats; and assessing the cost effectiveness and affordability of options for reducing fuels and responding to wildland fire problems.

Although the agencies have made progress on these tasks, they have yet to complete the joint tactical plan outlining the critical steps, together with the related timeframes that it would take to complete a cohesive strategy.

With respect to the agencies' efforts to contain wildland fire costs, as we testified before the Senate Energy and Natural Resources Committee this past January, their efforts lack several key elements fundamental to sound program management, such as clearly defining cost containment goals, developing a strategy for

achieving the goals, and measuring progress toward achieving them.

For their cost containment efforts to be effective, the agencies need to integrate cost containment goals with the other goals of the wildland fire program, such as protecting life, resources, and property, and to recognize that trade-offs may be needed to meet desired goals within the context of fiscal constraints.

Further, because cost containment goals need to be considered in relation to the other wildland fire goals, it is important that the agencies integrate their cost containment goals within an overall cohesive strategy. Our forthcoming report on Federal agencies' efforts to contain wildland fire costs includes more detailed findings and recommendations to the agencies to improve their management of their cost containment efforts. This report is expected to be released at a hearing before the Senate Committee on Energy and Natural Resources, scheduled for June 26, 2007.

In summary, complex conditions have contributed to increasing wildland fire severity. These conditions have been decades in the making, and will take decades to resolve.

In light of the large Federal deficit and the long-term fiscal challenges facing the Nation and our agencies, it is important that the agencies develop an effective and affordable strategy for addressing these conditions.

To make informed decisions, such a cohesive strategy needs to identify the long-term options and associated funding for reducing excess vegetation and responding to wildland fires. Until a cohesive strategy can be developed, it is essential that the agencies create a tactical plan for developing this strategy, so Congress understands the steps and timeframes involved and can monitor the agencies' progress.

Further, without clear program goals and objectives and corresponding performance measures, the agencies lack the tools to be able to determine the effectiveness of their cost containment efforts.

Mr. Chairman, this concludes my prepared statement. I would be pleased to answer any questions that you or other Members of the Subcommittee may have.

[The prepared statement of Ms. Nazzaro follows:]

Statement of Robin M. Nazzaro, Director, Natural Resources and Environment, U.S. Government Accountability Office

Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to discuss the key steps that we believe federal wildland fire agencies—the Forest Service within the Department of Agriculture and four agencies [1] within the Department of the Interior (Interior)—eed to complete to manage their efforts to prepare for and respond to wildland fires effectively. Increasing wildland fire threats to communities and ecosystems, combined with rising costs of addressing those threats—trends that we and others have reported on for many years—have not abated. On average, the acreage burned annually by wildland fires from 2000 to 2005 was 70 percent greater than the acreage burned annually during the 1990s. Appropriations to federal agencies to prepare for and respond to wildland fires, including appropriations for reducing fuels, have also increased substantially, from an average of $1.1 billion annually from fiscal years 1996 through 2000 to an average of more than $2.9 billion annually from Fiscal Years 2001 through 2005

[1] The four agencies are the Bureau of Indian Affairs, Bureau of Land Management, Fish and Wildlife Service, and National Park Service.

(adjusted for inflation, these appropriations increased from $1.3 billion to $3.1 billion). A number of factors have contributed to more-severe fires and corresponding increases in expenditures for wildland fire management activities. These factors include an accumulation of fuels due to past fire suppression policies; severe weather and drought in some areas of the country; and growing numbers of homes built in or near wildlands, an area known as the wildland-urban interface. In light of the federal deficit and the long-term fiscal challenges facing the nation, attention has increasingly focused on ways to contain these growing expenditures and to ensure that federal agencies' wildland fire activities are appropriate and carried out in a cost-effective and efficient manner.

My testimony today is based on several of our previous reports and testimonies, which together discuss key issues we have identified over the last 7 years in federal agencies' management of wildland fire and critical actions the agencies need to complete if they are to effectively manage their efforts to prepare for and respond to wildland fires.[2] Specifically, my testimony focuses on the Forest Service and Interior agencies' (1) efforts to develop a long-term, cohesive strategy to reduce fuels and address wildland fire problems and (2) management of their efforts to contain the costs of preparing for and responding to wildland fires.

Summary

In summary, the Forest Service and Interior agencies need to complete several actions to strengthen their overall management of the wildland fire program. Because a substantial investment and decades of work will be required to address wildland fire problems that have been decades in the making, the agencies need to develop a cohesive strategy that addresses the full range of wildland fire management activities. Such a strategy should identify the available long-term options and associated funding for reducing excess vegetation and responding to wildland fires if the agencies and the Congress are to make informed decisions about an effective and affordable long-term approach for addressing problems that have been decades in the making. We first recommended in 1999 that such a strategy be developed to address the problem of excess fuels and their potential to increase the severity of wildland fires and cost of suppression efforts.[3] By 2005, the agencies had yet to develop such a strategy, and we reiterated the need for a cohesive strategy and broadened our recommendation's focus to better address the interrelated nature of fuel reduction efforts and wildland fire response. Further, because the agencies said they would be unable to develop a cohesive strategy until they have completed certain key tasks, we recommended that the agencies develop a tactical plan outlining these tasks and the time frames needed for completing each task and a cohesive strategy.[4] Although the agencies concurred with our recommendations, as of April 2007, a tactical plan had yet to be developed.

Second, as we testified before the Senate Committee on Energy and Natural Resources in January 2007, the steps the Forest Service and Interior agencies have taken to date to contain wildland fire costs lack several key elements fundamental to sound program management, such as clearly defining cost-containment goals, developing a strategy for achieving those goals, and measuring progress toward achieving them. For cost-containment efforts to be effective, the agencies need to integrate cost-containment goals with the other goals of the wildland fire program—such as protecting life, resources, and property—and to recognize that trade-offs will be needed to meet desired goals within the context of fiscal constraints. Further, because cost-containment goals need to be considered in relation to other wildland fire program goals, it is important that the agencies integrate cost-containment goals within an overall cohesive strategy. Our forthcoming report on federal agencies' efforts to contain wildland fire costs includes more-detailed findings and recommendations to the agencies to improve the management of their cost-containment efforts; this report is expected to be released at a hearing before the Senate Committee on Energy and Natural Resources scheduled for June 26, 2007.

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[2] GAO, Wildland Fire Management: Lack of a Cohesive Strategy Hinders Agencies' Cost-Containment Efforts, GAO-07-427T (Washington, D.C.: Jan. 30 2007); Wildland Fire Management: Update on Federal Agency Efforts to Develop a Cohesive Strategy to Address Wildland Fire Threats, GAO-06-671R (Washington, D.C.: May 1, 2006); and Wildland Fire Management Important Progress Has Been Made, but Challenges Remain to Completing a Cohesive Strategy, GAO-05-147 (Washington, D.C.: Jan. 14, 2005).

[3] GAO, Western National Forests: A Cohesive Strategy Is Needed to Address Catastrophic Wildfire Threats, GAO/RCED-99-65 (Washington, D.C.: Apr. 2, 1999).

[4] GAO-05-147.

Background

Over the past decade, the number of acres burned annually by wildland fires in the United States has substantially increased. Federal appropriations to prepare for and respond to wildland fires, including appropriations for fuel treatments, have almost tripled. Increases in the size and severity of wildland fires, and in the cost of preparing for and responding to them, have led federal agencies to fundamentally reexamine their approach to wildland fire management. For decades, federal agencies aggressively suppressed wildland fires and were generally successful in decreasing the number of acres burned. In some parts of the country, however, rather than eliminating severe wildland fires, decades of suppression contributed to the disruption of ecological cycles and began to change the structure and composition of forests and rangelands, thereby making lands more susceptible to fire.Increasingly, federal agencies have recognized the role that fire plays in many ecosystems and the role that it could play in the agencies' management of forests and watersheds. The agencies worked together to develop a federal wildland fire management policy in 1995, which for the first time formally recognized the essential role of fire in sustaining natural systems; this policy was subsequently reaffirmed and updated in 2001. The agencies, in conjunction with Congress, also began developing the National Fire Plan in 2000.[5] To align their policies and to ensure a consistent and coordinated effort to implement the federal wildland fire policy and National Fire Plan, Agriculture and Interior established the Wildland Fire Leadership Council in 2002.[6] In addition to noting the negative effects of past successes in suppressing wildland fires, the policy and plan also recognized that continued development in the wildland-urban interface has placed more structures at risk from wildland fire at the same time that it has increased the complexity and cost of wildland fire suppression. Forest Service and university researchers estimated in 2005 that about 44 million homes in the lower 48 states are located in the wildland-urban interface.

To help address these trends, current federal policy directs agencies to consider land management objectives—identified in land and fire management plans developed by each local unit, such as a national forest or a Bureau of Land Management district—and the structures and resources at risk when determining whether or how to suppress a wildland fire. When a fire starts, the land manager at the affected local unit is responsible for determining the strategy that will be used to respond to the fire. A wide spectrum of strategies is available, some of which can be significantly more costly than others. For example, the agencies may fight fires ignited close to communities or other high-value areas more aggressively than fires on remote lands or at sites where fire may provide ecological or fuel-reduction benefits. In some cases, the agencies may simply monitor a fire, or take only limited suppression actions, to ensure that the fire continues to pose little threat to important resources, a practice known as "wildland fire use."

Agencies Need a Cohesive Strategy to Address Wildland Fire Problems

Federal firefighting agencies need a cohesive strategy for reducing fuels and addressing wildland fire issues. Such a strategy should identify the available long-term options and associated funding for reducing excess vegetation and responding to wildland fires if the agencies and the Congress are to make informed decisions about an effective and affordable long-term approach for addressing problems that have been decades in the making. We first recommended in 1999 such a strategy be developed to address the problem of excess fuels and their potential to increase the severity of wildland fires and cost of suppression efforts.[7] By 2005, the agencies had yet to develop such a strategy, and we reiterated the need for a cohesive strategy and broadened our recommendation's focus to better address the interrelated nature of fuel reduction efforts and wildland fire response. The agencies said they would be unable to develop a cohesive strategy until they have completed certain key tasks. We therefore recommended that the agencies develop a tactical plan outlining these tasks and the time frames needed for completing each task and a cohe-

[5] The National Fire Plan is a joint interagency effort to respond to wildland fires. Its core comprises several strategic documents, including (1) a September 2000 report from the Secretaries of Agriculture and the Interior to the President in response to the wildland fires of 2000, (2) congressional direction accompanying substantial new appropriations in Fiscal Year 2001, and (3) several approved and draft strategies to implement all or parts of the plan.

[6] The Wildland Fire Leadership Council is composed of senior Agriculture and Interior officials, including the Agriculture Under Secretary for Natural Resources and Environment; the Interior Assistant Secretary for Policy, Management, and Budget; the Interior Deputy Assistant Secretary for Business Management and Wildland Fire; and the heads of the five federal firefighting agencies. Other members include representatives of the Intertribal Timber Council, the National Association of State Foresters, and the Western Governors' Association.

[7] GAO/RCED-99-65.

sive strategy. These tasks include (1) finishing data systems that are needed to identify the extent, severity, and location of wildland fire threats in our national forests and rangelands; (2) updating local fire management plans to better specify the actions needed to effectively address these threats; and (3) assessing the cost-effectiveness and affordability of options for reducing fuels and responding to wildland fire problems.

First, federal firefighting agencies have made progress in developing a system to help them better identify and set priorities for lands needing treatment to reduce accumulated fuels. Many past studies have identified fuel reduction as important for containing wildland fire costs because accumulated fuels can contribute to more-severe and more costly fires. The agencies are developing a geospatial data and modeling system, called LANDFIRE, intended to produce consistent and comprehensive maps and data describing vegetation, wildland fuels, and fire regimes across the United States.[8] The agencies will be able to use this information to help identify fuel accumulations and fire hazards across the nation, help set nationwide priorities for fuel-reduction projects, and assist in determining an appropriate response when wildland fires do occur. LANDFIRE data are nearly complete for most of the western United States, with data for the remainder of the country scheduled to be completed in 2009. The agencies, however, have not yet finalized their plan for ensuring that collected data are routinely updated to reflect changes to fuels, including those from landscape-altering events, such as hurricanes, disease, or wildland fires themselves. The agencies expect to submit a plan to the Wildland Fire Leadership Council for approval later this month.

Second, we reported in 2006 that 95 percent of the agencies' individual land management units had completed fire management plans in accordance with agency direction issued in 2001.[9] As of January 2007, however, the agencies did not require regular updates to ensure that new data (from LANDFIRE, for example) were incorporated into the plans. In addition, in the wake of two court decisions—each holding that the Forest Service was required to prepare an environmental assessment or environmental impact statement under the National Environmental Policy Act (NEPA)[10] to accompany the relevant fire management plan—the Forest Service decided to withdraw the two plans instead of completing them. It is unclear whether the agency would withdraw other fire management plans successfully challenged under NEPA; nor is it clear whether or to what extent such agency decisions could undermine the interagency policy directing that every burnable acre have a fire management plan. Without such plans, however, current agency policy does not allow use of the entire range of wildland fire response strategies, including less aggressive, and potentially less costly, strategies. Moreover, in examining 17 fire management plans, a May 2007 review of large wildland fires managed by the Forest Service in 2006 identified several shortcomings, including that most of the plans examined did not contain current information on fuel conditions, many did not provide sufficient guidance on selecting firefighting strategies, and only 1 discussed issues related to suppression costs.[11]

Third, over the past several years, the agencies have been developing a Fire Program Analysis (FPA) system, which was proposed and funded to help the agencies

- determine national budget needs by analyzing budget alternatives at the local level—using a common, interagency process for fire management planning and budgeting—and aggregating the results;
- determine the relative costs and benefits for the full scope of fire management activities, including potential trade-offs among investments in fuel reduction, fire preparedness, and fire suppression activities; and
- identify, for a given budget level, the most cost-effective mix of personnel and equipment to carry out these activities.

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[8] A fire regime generally classifies the role that wildland fire plays in a particular ecosystem on the basis of certain characteristics, such as the average number of years between fires and the typical severity of fire under historic conditions.

[9] Fire management plans are local plans prepared by individual agency management units (such as national forests or wildlife refuges) to define each unit's program to prepare for and manage fires; such plans are important for identifying the fuel reduction, preparedness, suppression, and rehabilitation actions needed at the local level to effectively address wildland fire threats.

[10] For major federal actions that significantly affect the quality of the human environment, the National Environmental Policy Act requires all federal agencies to analyze the environmental impact of the proposed action. 42 U.S.C. § 4332(2)(C).

[11] Independent Large Wildfire Cost Panel, chartered by the U.S. Secretary of Agriculture, Towards a Collaborative Cost Management Strategy: 2006 U.S. Forest Service Large Wildfire Cost Review Recommendations (Washington, D.C., May 15, 2007).

We have said for several years—and the agencies have concurred—that FPA is critical to helping the agencies contain wildland fire costs and plan and budget effectively. Recent design modifications to the system, however, raise questions about the agencies' ability to fully achieve key FPA goals. A midcourse review of the developing system resulted in the Wildland Fire Leadership Council's approving in December 2006 modifications to the system's design. FPA and senior Forest Service and Interior officials told us they believed the modifications would allow the agencies to meet the key goals. The officials said they expected to have a prototype developed for the council's review in June 2007 and to substantially complete the system by June 2008. We have yet to systematically review the modifications, but after reviewing agency reports on the modifications and interviewing knowledgeable officials, we have concerns that the modifications may not allow the agencies to meet FPA's key goals. For example, under the redesigned system, local land managers will use a different method to analyze and select various budget alternatives, and it is unclear whether this method will identify the most cost-effective allocation of resources. In addition, it is unclear how the budget alternatives for local units will be meaningfully aggregated on a nationwide basis, a key FPA goal.

Although the agencies have made progress on these three primary tasks, as of April 2007, they had yet to complete a joint tactical plan outlining the critical steps, together with related time frames, that the agencies would take to complete a cohesive strategy, as we recommended in our 2005 report. We continue to believe that, until a cohesive strategy can be developed, it is essential that the agencies create a tactical plan for developing this strategy, so Congress understands the steps and time frames involved in completing the strategy.

Lack of Clear Goals or a Strategy Hinders Federal Agencies' Efforts to Contain Wildland Fire Costs

As we testified before the Senate Committee on Energy and Natural Resources in January 2007, the steps the Forest Service and Interior agencies have taken to date to contain wildland fire costs lack several key elements fundamental to sound program management, such as clearly defining cost-containment goals, developing a strategy for achieving those goals, and measuring progress toward achieving them. First, the agencies have not clearly articulated the goals of their cost-containment efforts. For cost-containment efforts to be effective, the agencies need to integrate cost-containment goals with the other goals of the wildland fire program—such as protecting life, property, and resources. For example, the agencies have established the goal of suppressing wildland fires at minimum cost, considering firefighter and public safety and values being protected, but they have not defined criteria by which these often-competing objectives are to be weighed. Second, although the agencies are undertaking a variety of steps designed to help contain wildland fire costs, the agencies have not developed a clear plan for how these efforts fit together or the extent to which they will assist in containing costs. Finally, the agencies are developing a statistical model of fire suppression costs that they plan to use to identify when the cost for an individual fire may have been excessive. The model compares a fire's cost to the costs of suppressing previous fires with similar characteristics. However, such comparisons with previous fires' costs may not fully consider the potential for managers to select less aggressive—and potentially less costly—suppression strategies. In addition, the model is still under development and may take a number of years to fully refine. Without clear program goals and objectives, and corresponding performance measures to evaluate progress, the agencies lack the tools to be able to determine the effectiveness of their cost-containment efforts. Our forthcoming report on federal agencies' efforts to contain wildland fire costs includes more-detailed findings and recommendations to the agencies to improve the management of their cost-containment efforts; this report is expected to be released at a hearing before the Senate Committee on Energy and Natural Resources scheduled for June 26, 2007.

Conclusions

Complex conditions have contributed to increasing wildland fire severity. These conditions have been decades in the making, and will take decades to resolve. The agencies must develop an effective and affordable strategy for addressing these conditions in light of the large federal deficit and the long-term fiscal challenges facing our nation. To make informed decisions about an effective and affordable long-term approach to addressing wildland fire problems, the agencies need to develop a cohesive strategy that identifies the available long-term options and associated funding for reducing excess vegetation and responding to wildland fires. Because the agencies cannot develop such a strategy until they complete certain key tasks, we continue to believe that in the interim the agencies must create a tactical plan for de-

veloping this strategy so that Congress can monitor the agencies' progress. While the agencies continue to work toward developing a cohesive strategy, they have initiated a number of efforts intended to contain wildland fire costs, but the agencies cannot demonstrate the effectiveness of these cost containment efforts, in part because the agencies have no clearly defined cost-containment goals and objectives. Without clear goals, the agencies cannot develop consistent standards by which to measure their performance. Further, without these goals and objectives, federal land and fire managers in the field are more likely to select strategies and tactics that favor suppressing fires quickly over those that seek to balance the benefits of protecting the resources at risk and the costs of protecting them. Perhaps most important, without a clear vision of what they are trying to achieve and a systematic approach for achieving it, the agencies—and Congress and the American people—have little assurance that their cost-containment efforts will lead to substantial improvement. Moreover, because cost-containment goals should be considered in relation to other wildland fire program goals—such as protecting life, resources, and property—the agencies must integrate cost-containment goals within the overall cohesive strategy for responding to wildland fires that we have consistently recommended.

Mr. Chairman, this concludes my prepared statement. I would be pleased to answer any questions that you or other Members of the Subcommittee may have at this time.

Mr. GRIJALVA. Thank you very much. We may now turn to Deputy Inspector General, Department of Agriculture, Ms. Kathleen Tighe. Thank you.

STATEMENT OF KATHLEEN S. TIGHE, DEPUTY INSPECTOR GENERAL, U.S. DEPARTMENT OF AGRICULTURE

Ms. TIGHE. Thank you. Good morning, Chairman Grijalva, Ranking Member Bishop, and Members of the Subcommittee. Thank you for inviting the Office of Inspector General to testify today concerning our work on wildfire preparedness issues.

The Office of Inspector General has conducted substantial audit and investigative work pertaining to the Forest Service and its vital stewardship role to preserve and protect America's national forests.

My written statement contains my full testimony, so I just plan on highlighting a brief few points.

One of the most extensive and serious problems related to the health of our national forests is the over-accumulation of dead vegetation that can fuel fires, as noted by Mr. Allred earlier. The increase in the amount of hazardous fuels is the result of factors such as extended drought conditions, widespread disease, and insect infestations that have killed or affected large areas of forest, and past fire suppression practices that have prevented the natural use of wildland fire to reduce the accumulation of hazardous fuels.

Reducing the buildup of hazardous fuels is crucial to reducing the severity and cost of wildfires. The Healthy Forest Initiative was launched in August 2002, with one of the primary goals being to reduce the threat of wildfire by removing hazardous fuels from areas in national forests that constitute the greatest threat of catastrophic fire.

In September 2006, the Office of Inspector General completed an audit that evaluated the Forest Service efforts to implement the Healthy Forest Initiative. Our audit produced findings and recommendations on three primary issues that I will highlight for you this morning.

The first pertains to the agency's assessment of risk, determining the level of risk that communities face from wildfires. At the time of our audit, the Forest Service did not have a consistent analytical process to assess the comparative level of risk different communities faced. In order to allocate its resources most effectively, the Forest Service needs to be able to identify the level of risk for significant wildfires, and what actual benefit would be achieved by conducting specific fuel reduction projects. We recommended that the agency develop guidance for assessing risks from wildland fires that is applied on a consistent basis among regions, forests, and districts.

The second major finding was that the Forest Service did not have the ability to ensure that the highest priority fuel reduction projects would be funded first. Because projects were not prioritized under uniform national criteria, there was no systematic way to allocate funds to the most critical projects.

Funds were allocated based on a region's historical funding levels, and targets for numbers of acres to be treated. We recommended that the Forest Service ensure that the process to identify and prioritize the most effective fuel reduction projects can be utilized at all levels to ensure funds are distributed according to the priority of projects.

The third major recommendation resulting from our review pertained to the Forest Service's performance measures and reporting standards. The agency's focus has been on achieving annual targets that are measured in number of acres treated. We found that the Forest Service's performance measures and reporting standards did not provide adequate information to evaluate the effectiveness of a fuel treatment practice.

We recommended that the Forest Service develop and implement a more meaningful and outcome-oriented performance measure, such as acres with risks reduced. I am pleased to report that the Forest Service, as noted by Under Secretary Rey, agreed with our audit findings, and committed to take action on them.

We note that the Forest Service's budget justification for Fiscal Year 2008 placed an emphasis on measures to identify and treat wildfire risks. We appreciate the willingness of Under Secretary Rey and Forest Service officials to fully consider and respond to our review. The management and staff of the Office of Inspector General have a deep respect for the work done by Forest Service personnel to preserve and protect our national forests.

Before concluding, I would like to mention that additional oversight work that we will conduct regarding the Healthy Forest Initiative, we plan to conduct a follow-up audit in Fiscal Year 2008. Our objective will be to look at the Forest Service implementation of our recommendations, and whether its responsive actions have been effective.

This concludes my testimony. Thank you very much for affording me the opportunity to testify before the Subcommittee, and I would be happy to answer questions.

[The prepared statement of Ms. Tighe follows:]

Statement of Kathleen S. Tighe, Deputy Inspector General, Office of Inspector General, U.S. Department of Agriculture

Good morning, Chairman Grijalva, Ranking Member Bishop, and Members of the Subcommittee. Thank you for inviting the Office of Inspector General (OIG) of the Department of Agriculture (USDA) to present our views on wildfire preparedness issues. OIG has conducted substantial audit and investigative work pertaining to the Forest Service (FS) and its vital stewardship role to preserve and protect America's national forests. As requested by the Subcommittee, my testimony will present the findings and recommendations produced by our review of FS' implementation of the Healthy Forests Initiative (HFI).

USDA, through FS, is responsible for the management of our Nation's 155 national forests and 20 grasslands. These lands cover more than 192 million acres. FS officials face significant challenges in their important stewardship activities, for it is clear that wildfires on FS lands are becoming larger and more expensive to extinguish and suppress. From fiscal year (FY) 2000 to 2006, FS suppression costs averaged $900 million annually and exceeded $1 billion in 4 of those 7 years. In some years, FS has had to borrow funds from other programs to pay for its wildfire suppression activities, and this has adversely affected FS' ability to accomplish work in other areas.

FS has estimated that the 73 million acres of the land it manages and 59 million acres of privately owned forest land are at high risk of ecologically destructive wildland fire. One of the most extensive and serious problems related to the health of national forests is the over-accumulation of dead vegetation that can fuel fires. The increase in the amount of hazardous fuels is the result of several major factors. First, extended drought conditions have significantly increased the amount of unhealthy or dead forests and vegetation. Second, widespread disease and insect infestations have killed or affected the health of large areas of national and private forestland. Third, past fire suppression practices of the Federal, State, and local governments, private companies, and individuals have prevented the natural use of wildland fire (Wildland Fire Use—WFU) to reduce the accumulation of hazardous fuels.

It has been estimated by some FS managers that hazardous fuels are accumulating three times as fast as they can be treated. The accumulation of hazardous fuels has contributed to an increasing number of large, intense, and catastrophically destructive wildfires. Reducing the buildup of hazardous fuels is crucial to reducing the extent, severity, and costs of wildfires.

The Healthy Forests Initiative (HFI) was launched in August 2002 by President Bush to reduce the risks severe wildfires pose to people, communities, and the environment. The HFI includes a number of policy, program, and legislative changes to help achieve this. One of the primary goals of the HFI is to reduce the threat of wildfire by removing hazardous fuels from areas in national forests that constitute the greatest threats of catastrophic fire. Catastrophic fires can destroy hundreds of thousands of acres at one time, burn entire communities, destroy watersheds that are the source of water for millions of people, and take the lives of community residents and firefighters. These fires can burn with such intensity that they change the composition of the landscape and soil for generations. A catastrophic wildfire can grow to such an extent that it creates its own weather pattern and becomes physically impossible to suppress without the assistance of nature (i.e. significant amounts of rain). Already in the 2007 fire season, one fire in Georgia and Florida has burned approximately 468,000 acres (731 square miles). This is approximately 2.4 times larger than the entire land area of New York City or about 12 times that of Washington, D.C.

In September of 2006, OIG completed an audit that evaluated FS efforts to implement the HFI. We focused our audit work on the agency's hazardous fuels reduction program because more than half of FS' funding under the HFI is allocated for this purpose. For FY 2005 and 2006, the FS budget for hazardous fuels reduction was approximately $262 million and $281 million, respectively. Our review evaluated the methods used by FS to identify, select, and fund fuel reduction projects. We also evaluated how the agency reported accomplishments.

At the time of our review, FS' identification of and funding for fuel reduction projects were determined and performed at the discretion of individual field units, after they performed various analyses to identify communities at risk. FS did not require the use of a specific set of criteria or analytical process to ensure that the identification of projects was consistent nationwide, or to justify the selection of one project over another. FS allocated hazardous fuels reduction funds to its regions based primarily on historical funding levels and established acres as targets. Regional officials were then responsible for making funding allocations to Forest Su-

pervisors and final project allocation decisions were made at the local level. Funds were not allocated to the regions based upon identified wildfire risks or those fuel reduction projects that would be most effective in reducing that risk.

Specifically, our audit evaluated FS management controls to (1) determine if the hazardous fuels reduction projects that were conducted were cost beneficial, (2) how FS identified and prioritized such projects, (3) the agency's process for allocating funds among projects in different regions, and (4) the agency's process to report hazardous fuels reduction accomplishments. I would like to advise the Subcommittee of the primary findings and recommendations from our audit.

Audit Findings and Recommendations

Assessment of Risk

At the time of our audit, we found that FS lacked a consistent analytical process for assessing the level of risk that communities faced from wildland fire and determining if a hazardous fuels project would be cost beneficial. FS had not developed specific national guidance for weighing the risks against the benefits of fuels treatment and restoration projects.

In order to allocate resources most effectively, it is important for FS to be able to identify which communities and what National Forest System (NFS) resources are at risk. FS needs to be able to determine the level of risk for significant and destructive wildland fires throughout the NFS and what the potential benefit or payback would be from conducting a specific fuels reduction project. While we agreed with FS that a traditional cost benefit analysis would be impractical, we concluded that FS could develop a set of criteria to compare the relative degrees of exposure and risk to wildland fire that each community faces. The assessment should include a measure of the benefits and/or consequences of selecting one project over another for treatment.

Currently, FS' nine regions each have different ways of identifying priorities. At the time of our audit, FS could not adequately compare hazardous fuels reduction projects among regions. This affects the ability to identify, on a national basis, those projects that should be funded and completed first. While some areas or communities may be at high risk from wildfires, it may not be effective for FS to spend large sums of money on hazardous fuels reduction projects if the nearby communities have not enacted and enforced rigorous building and zoning regulations, otherwise known as "Firewise" regulations. A community's lack of Firewise regulations could significantly reduce the effectiveness of any FS efforts to reduce hazardous fuels around the community. FS officials believe that the new LANDFIRE system being developed will provide more accurate nationwide data so that they can better define and identify areas where fuels treatment would be most cost beneficial.

In the interim while new systems are being developed, FS needs to develop a methodology to evaluate the effectiveness of alternative strategies in meeting the agency's hazardous fuels reduction program goals. Without a sound process for assessing the level of risk that communities face from wildland fire, one that agency managers can apply consistently, FS will be unable to identify and prioritize the most effective fuel reduction projects.

Prioritizing and Funding Projects

FS also did not have the ability to ensure that the highest priority fuels reduction projects were funded first. Because projects were not prioritized under uniform, national criteria, there was no systematic way to allocate funds to the most critical projects. Funds were allocated based upon a region's historical funding levels and targets for number of acres to be treated that were set by FS Headquarters office in Washington, D.C. There were no controls in place to prevent funds from being allocated to projects in order to achieve targets of acres treated instead of reducing the most risk. This could lead to less important projects being funded.

We recommended that FS develop and implement specific national guidance for assessing the risks wildland fires present to residents and communities and determining the comparative value and benefit of fuels treatment/restoration projects. We also recommended that FS establish controls to ensure that the process and methodology to identify and prioritize the most effective fuels reduction projects can be utilized at all levels to ensure funds are distributed according to the priority of the projects. This process should have uniformity (and comparability) from the local level (districts) through to the Headquarters office and across geographic boundaries (i.e. among regions).

Performance Measures and Reporting Standards

We found that FS' performance measures and reporting standards did not provide adequate information to evaluate the effectiveness of a fuel treatment practice. They

did not communicate to either FS managers or other stakeholders whether the treatment of an acre of forest had resulted in changing its condition class,[1] or if the project reduced the risk from catastrophic wildland fire. The agency's focus has been on achieving firm annual targets (output) that are measured in the number of acres treated. However, these acres are not homogenous, meaning that some acres of hazardous fuels create much more risk to communities and resources than others. Reporting the number of acres treated did not communicate the amount of risk that has been reduced. Focusing only on acres treated did not communicate key information on the effectiveness of the treatment practice. In addition, hazardous fuels accomplishment reports did not provide detailed information to evaluate the overall progress of the program; details such as the location of treatments, changes in condition class, and initial or maintenance treatments are not reported.

We recommended that FS develop and implement a more meaningful and outcome-oriented performance measure for reporting metrics, such as acres with "risk reduced" or "area protected." Also, FS should direct that implementing effective integrated treatments are more important than solely meeting acreage targets. We also recommended that FS improve accomplishment reporting by including more detailed information, such as breaking down accomplishments by region, noting changes in condition class, and differentiating between initial and maintenance treatments and multiple treatments on the same acres.

FS agreed with our audit findings and each of our HFI program recommendations and committed to take action on them.

HFI Activities in FY 2008

FS' estimated budget for Hazardous Fuel Reduction activities in FY 2007 is $291.8 million and is projected by agency officials to be $292 million for FY 2008. While the amounts for FY 2007 and FY 2008 are approximately the same, the proposed FY 2008 amount of $292 million is 25% more than the enacted amount for FY 2004 of $233 million.

OIG plans to conduct a follow-up audit in FY 2008. Our objective will be to determine if FS has implemented the agreed upon recommendations and whether the agency's responsive actions have been effective. FS' FY 2008 budget justification reflects some of the measurements we recommended in our report, i.e., reporting accomplishments by changes in condition class, reporting accomplishments obtained through other land management activities, and distinguishing accomplishments between initial treatments and maintenance treatments. The budget justification's FY 2008 plan places an emphasis on identifying and treating risks.

As part of our evaluation of the key management challenges facing the Department in 2007, we identified large fire suppression cost as a new challenge. This challenge encompasses the HFI. During our audit of FS' Large Fire Suppression Costs,[2] we identified the accumulation of hazardous fuels, especially within the wildland urban interface, as a major factor in increasing fire suppression costs. We believe that improving the health of the National Forests will ultimately help reduce agency costs for suppressing wildfires.

I want to express my sincere thanks to FS officials and employees for the assistance and considerable cooperation they extended to OIG during these two audits. FS faces many difficult programmatic issues and natural resource challenges as it strives to provide good stewardship of America's national forests. OIG's management and staff greatly appreciate the excellent but frequently uncredited work that FS employees perform on a daily basis to preserve and enhance our precious national forests.

This concludes my testimony. Thank you again for affording me the opportunity to testify before the Subcommittee. I would be pleased to address any questions you may have.

Mr. GRIJALVA. Thank you very much. And let me begin with some questions.

And let me begin by asking you, elaborate on one of the points in your testimony where you talked about how the agency's habit

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[1] The fire-regime condition class is an expression of the departure of the current condition from the historical fire regime resulting in alterations to the ecosystem. A condition class is measured as a 1, 2, or 3, with 3 being the most significant departure from the historical fire regime. Activities that cause the departure include fire exclusion, timber harvesting, grazing, growth of exotic plant species, insects, and disease.

[2] OIG Report, "Forest Service Large Fire Suppression Costs." Report No. 08601-44-SF, November 2006.

of reporting how many acres has been treated is not helpful in determining how much fire risk has been reduced. If you could elaborate on that point.

Ms. TIGHE. Absolutely. What we would like to see, I mean, reporting on acres treated is an output measure. What we would like to see is a more qualitative measure that looks at whether treatment of those acres has reduced the risk. And so you would look at whether a condition class has changed after treatment, and areas like that.

And I believe we have seen some steps in the right direction. As I noted in the budget justification for Fiscal Year 2008, Forest Service has, in fact, included performance measures along those lines. It is simply not, we didn't think it was sufficient to look simply at acres treated. You have to be more qualitative.

Mr. GRIJALVA. Yes. And let me follow up on that, if I may. The common criticism is that the Forest Service fuel reduction work, it seems that the agency seems to be more focused on meeting acreage targets than treating acres that will reduce that wildland-urban interface to communities.

That common criticism correlates or doesn't correlate with the findings of this audit?

Ms. TIGHE. Yes, it absolutely does. In our opinion, what needs to be done is develop criteria that—you can use acres as one measure or one criteria to look at. But the criteria ought to be more evaluative and consistently applied throughout the National Forest System, so that you are looking at, you know, what is the risk of, in particular locations. And then what are the protection capabilities of those locations, and what values in those locations are there to be protected.

Mr. GRIJALVA. Which leads me to my final question for you, if I may, Ms. Tighe.

In the opening statement and some of the other comments that will be made today, we are going to talk about the funding for that hazardous fuel reduction program. And the President's budget is even way below what was authorized in the Healthy Forest Restoration Act.

Do you think that this underfunding of hazardous fuels is a factor with the problems that we have seemed to encounter with implementing some of the issues that you discovered in the initial audit?

Ms. TIGHE. The Office of Inspector General hasn't exactly evaluated it in terms of how much funding has gone to the program. I think our position is that what funding there is ought to be used wisely. And so, you know, the first matter is you have to do it according to priorities.

Mr. GRIJALVA. Thank you. Ms. Nazzaro, if I may, you stated that the first recommendation about developing a cohesive strategy on wildland fire management was in 1999, as of this April. And we still don't have that strategy. In your communication with the agencies, have they indicated why it has taken so long to get to that strategy development, or producing a cohesive strategy?

Ms. NAZZARO. You are correct in that we made the initial recommendation back in 1999, and then we came back in 2005 and looked at it again and reiterated that need.

At the time there was a discussion about the need for certain information to be able to develop a cohesive strategy. And we concurred with the agency that there were some key building blocks, if you will, to help them get that data, which would be, for example, they have a program called Landfire, which was going to provide key data and modeling data that would be useful in developing such a cohesive strategy.

At that time, because they needed to complete these building blocks, we said then give the Congress a tactical plan as to what it is going to take to complete those projects, as well as a timetable for when you think you can complete a cohesive strategy. And we still haven't seen the tactical plan nor the cohesive strategy at this point.

Mr. GRIJALVA. Yes. And let me follow up, with the time that I have left, the Under Secretary and the Assistant Secretary have indicated in their testimony that they hope that GAO will ascertain from their actions that they have established strategies, goals, and objectives dealing with wildland fire.

Does the work that I referenced in their testimony, does that meet what GAO had been requesting in terms of a cohesive strategy on wildland fire?

Ms. NAZZARO. No, sir. We had key elements that we felt were needed in this cohesive strategy. One was certainly that this was an investment strategy, if you will, over the long term. So we were looking for something that would be decades.

You know, this problem, as I mentioned, has been decades in the making, and it is going to take us a long time to get out from under. There are a lot of fuel treatments that are needed, and that is going to be very expensive.

So what we are looking for is that there would be options. You know, what would be needed as far as fuel treatments, integrated with the other goals and objectives of the organization, including what they need to do on preparedness and suppression. And then set their priorities, if you will, and to put associated cost estimates, so that Congress has some idea what is it going to take us to get out from under this problem.

Mr. GRIJALVA. Thank you very much. My time is up.

Mr. Bishop.

Mr. BISHOP. Thank you, Mr. Grijalva. I first of all would like to remind the rest of the committee that you haven't taken Mr. Grijalva's and my entire standards to heart here.

When I was Speaker of the House in Utah, we used to have sweater day, where no one could speak unless they were in a sweater, not in a suit. I don't think we are allowing anyone in a jacket to testify today.

But Mr. Grijalva, I am going to be here for the long haul. I would like to yield to the rest of my committee to go first, so I can go last. And I believe, Mr. Tancredo, you have a 10:45 appointment? So if I could ask him to start.

Mr. GRIJALVA. Mr. Tancredo.

Mr. TANCREDO. Oh, thank you.

Mr. BISHOP. And if you have time left over, yield to some of the others.

Mr. TANCREDO. Yes. Thank you, Mr. Chairman, I shall try.

Mr. Rey, are you concerned about, or do you see, as I do, that the agency has really become more of a fire-suppressing agency than the forest management agency? I mean, it seems like so much of our efforts are spent in that regard.

To what extent is the analysis paralysis that—I think a former director once coined that phrase—to what extent is it still preventing us from doing what is necessary to move quickly to reduce that fire hazard?

Mr. REY. I guess my response to that is that fire management and fire ecology are part of forest management. We are in a period of extended drought, with decades of fuels treatment work that have backed up. We have to get beyond that.

But we are still doing all of the other multiple-use activities and fulfilling the multiple-use mission that the Forest Service has.

As far as analysis paralysis is concerned, we still have challenges through administrative appeals and lawsuits of fuels reduction projects that are time-sensitive, but we have accelerated the amount of work we have done through the tools in the Healthy Forest Initiative and in the Healthy Forest Restoration Act.

I would note that if you read the budget cross-cuts in our budget request for 2005, 2006, 2007, and 2008, the totality of what we requested to implement the Healthy Forest Restoration Act are above, not below, the authorized levels of HFRA. So we have requested record budgets in those four cycles to do the fuels treatment work.

And we do have a cohesive strategy that we released last July. We in GAO have a fundamental disagreement about the utility of including out-year budget estimates in such a strategy, that being the one thing that they believe needs to be in a strategy for it to be adequate. We don't think that is either relevant or useful. Conditions on the ground are going to change significantly as fuels treatment work is done and fires burn, and those far-out-year estimates are going to be worth about the paper they are printed on five or six years out. So that is not the essence of a good cohesive or tactical strategy for this sort of work.

Mr. TANCREDO. And then just along the lines, don't you think it is a bit perplexing, I guess in a way, disconcerting, that where we used to be able to actually make money from the sale of timber, we now appropriate huge amounts of money in order to actually cut it and treat it? I mean, it is an odd change that has occurred as a result of different philosophies.

Mr. REY. We still make money selling timber, but we don't make enough money to cover our firefighting and other suppression costs, because the timber sale program is about a quarter of what it was at its peak.

Mr. TANCREDO. Right. And just a last question. A comment from anyone.

Today in the Washington Times there is an article about the number of wildfires that have been started in the Coronado and other areas by illegal aliens who have been trespassing there, sometimes started for the purpose of burning out the actual Border Patrol stations.

I visited the Coronado, I guess it was the first year I was in Congress, and problems, there were those kinds of problems then.

To what extent, I guess, are we paying attention to that? What kind of resources are we applying to that particular problem? It is evidently becoming quite serious, where actual—this is according to today's paper—Molotov-cocktail-type explosives are being used to burn out these Border Patrol stations. And thousands of acres have been damaged by fires started—not just those kind, but started by illegal aliens who are coming through in the Coronado, start a fire at night for just warmth, move on, fire takes off.

Mr. REY. There is an incidence of ignitions that are caused by people coming across the border. We have been cooperating with the Border Patrol to try to secure the borders. The forests are fairly remote, so they offer an easy opportunity for border crossing.

In addition, the flip side of that is that those people are in harm's way if a wildfire ignites and they are in the area. We don't know they are there, obviously, unless we encounter them; and so therefore, there is no way to ensure their safety.

Mr. TANCREDO. Yes. And firefighters that go in have to be protected. As people are coming across, illegal aliens are crossing, they are being guarded by people with guns. And the people who we send in to fight the fires have to go in also with protection against the coyotes. So it is an interesting and very dangerous place down there.

Thank you, Mr. Chairman. I yield to whomever.

Mr. GRIJALVA. Thank you. Mr. Kildee.

Mr. KILDEE. I will ask any of you, do we dialogue with other nations that have similar wildfire potential as to best practices?

Mr. REY. We do more than dialogue, Mr. Kildee. We actually have cooperative agreements where we exchange firefighting assets and personnel, particularly with Australia and New Zealand, since their seasons are reversed.

In very bad fire years, we send personnel, particularly leadership personnel, to Australia or New Zealand. In bad years here we will bring some of their people in to assist in firefighting.

The firefighting community is very well organized internationally, so the concept of best practices for both wildland and for structural firefighting are pretty well known. And it is, we benefit from the insights we get when the New Zealand and Australia firefighters come here. We think they benefit when we go down to assist them during our winter and their summer.

Mr. KILDEE. Thank you very much. Does anyone else want to comment on that? I appreciate your very clear answer, and you are on top of the situation. Thank you very much.

Thank you, Mr. Chairman.

Mr. GRIJALVA. Thank you, sir. Mr. Duncan.

Mr. DUNCAN. I yield

Mr. GRIJALVA. Mr. Lamborn.

Mr. LAMBORN. And I thank the gentleman for yielding. And I think this question is best directed to Ms. Nazzaro.

Are you—let me back up a second. The 302nd Airlift Wing is stationed at Fort Peterson, and they have C-130 cargo planes. And they have been outfitted, and in the last five or six years they can be used now, although their military assets are used for fire suppression when there is an active fire.

Have you taken into account their role in all this? And are you aware of how complicated the training is and the support and maintenance that is needed for that kind of airlift capability?

Ms. NAZZARO. I am not familiar with the specific example that you mentioned, but I have been out to a fire camp myself. I mean, we take this very seriously. We understand the complexity of what the agency has to do. This is not easy, and that is why we really feel that this strategy is needed. Because, one, it is costing a lot of money. It is a very complex task, and we think it would be in everyone's best interest to lay out what exactly is it going to take for us to get a handle on it and maybe get out from these escalating costs, if that is even possible. Maybe it is not even possible.

So that is why we would like to see laid out, you know, what is it going to take us. Is there a break-even point where, if we put more money in fuel reduction, that we would be able to get a better handle on the cost of suppression.

So like I say, I am not familiar with that specific example, but we certainly appreciate the complexity of the situation, and what happens when a fire breaks out, and the concerns of the communities, as well as the Federal agencies responsible.

Mr. REY. I am familiar with the C-130H wing, if you wanted to discuss that. We have six C-130H-class models that the military has reconfigured for firefighting use, with mobile aerial firefighting tanks. They are a reserve fleet: when things get very difficult and our other aviation assets are overstretched, the military makes them available for support for firefighting. And they do a good job. It is a very good, cooperative relationship that we have with the military.

Mr. LAMBORN. Well, thank you for that comment, Mr. Rey. I was amazed by the amount of training and support and maintenance that is needed for that. You know, the chemicals are corrosive, the training is the opposite of what you normally trained for in cargo use. You fly into little, narrow valleys, instead of away from them. I mean, everything is the opposite.

And one final question for any one of you, maybe Ms. Tighe or whoever. But is there any direct method that we are using for the destruction and treatment of the pine beetles and the other beetles? Now that the drought has weakened the forests, these beetles find it easier to infest, and that is killing trees in my district in Colorado and in many other places. That is a very unfortunate thing. And that is what will give added fuel to these fires.

It is a difficult problem. Do we have a direct way of dealing with the beetles?

Ms. TIGHE. I am not aware of a direct way of dealing with the pine beetles. I would be happy to defer to Under Secretary Rey.

We would totally agree with you that that is a problem. It was certainly a significant factor in wildfires in California in 2003; the destruction wrought by the pine beetle devastated the forests there. But as far as a direct solution, I am not aware.

Mr. REY. But the beetles do most of their damage under the bark. In fact, they spend most of their life cycles under the bark, with a very short emergence time. That makes the use of pesticides basically ineffective on a forest-wide basis. You can treat individual trees if you have a favorite tree in your backyard that you want

to try to save, but you have to do that with a tree service. That is very time-consuming and resource-intensive, and therefore impractical on a forest-wide basis.

Therefore, the only way to halt a beetle epidemic is to cut down the trees that are infected before the beetles emerge and spread. And if they get into an epidemic or a pandemic situation, then even that is an unrealistic option because the outbreak is too widespread. And that is what we are seeing in Colorado right now.

Mr. LAMBORN. I thank you for your answers, and I yield back.

Mr. GRIJALVA. Thank you. Thank you very much. Ms. Christensen?

Ms. CHRISTENSEN. Thank you, Mr. Chairman. Let me ask this question to Mr. Rey.

You mentioned the Brookings report, and you entered it into the record at the end of your testimony. And it is very much in contrast to the other reports of the GAO and the Inspector General.

But does that report only address the efficient use of funds while you are fighting fires? Or does it also address the strategy coordination and prioritizing?

Mr. REY. The Brookings report addresses only the former. The Brookings report is the result of a Congressional requirement in the Fiscal Year 2005 Appropriations bill. In that requirement, the Congress directed us to charge an independent panel with reviewing cost containment strategies and tactics for every fire that exceeds $10 million in expenditures. And so this would be the third such independent report.

The thing that is notable here is that in reviewing the 17 fires that exceeded that amount, Brookings felt that the Forest Service executed judgment and restraint in containing costs in each of the instances. That, to me, suggests that we are proceeding with strategic and tactical developments, at least for fire cost containment, in an appropriate fashion.

Ms. CHRISTENSEN. OK. But on the prevention side, which is really what this hearing is more about, can you just tell me how you prioritize in the fuel, what is it, fuel management?

Mr. REY. Fuel treatment area.

Ms. CHRISTENSEN. Fuel treatment area. And also in your answer, was the, what are the other areas called, the Okefenokee area in Georgia and Florida? Were they prioritized for this fuel management, fuel treatment?

Mr. REY. Sure. The two things that we use for setting fuels treatment priorities, as laid out in our cohesive strategy, are, first, the community wildfire protection plans authorized to be developed under the Healthy Forest Restoration Act of 2003. There are over 2,000 such plans now out across the landscape. Those plans tell us where fuels treatment work should be done.

Then, in order to prioritize in what order that work is done, we look at five factors. First, wildfire potential. How likely is there to be an ignition, given fire frequency.

Second, the negative consequences associated with an ignition; what are the values that are at risk.

Third, the efficiency of the fuels treatment that is being proposed. Fuels treatment work on a per-acre basis costs anywhere from $50 an acre to $3,000 an acre, depending on what you have

to do and where you have to do it. So efficiency is one criteria in setting priorities.

The fourth criteria is effectiveness; does the proposed fuels treatment have the prospect of being effective.

And then the fifth is are there opportunities for ecological restoration that can be accomplished along with the fuels treatment work.

So as laid out in the cohesive strategy, the community wildfire protection plans tell you where you are going to treat on a community-by-community basis, and these other criteria, our hazardous fuels prioritization and allocation system, tell us in what order, based on those five criteria.

Ms. CHRISTENSEN. So where do southern Georgia and northern Florida fit in in this criteria?

Mr. REY. We do a substantial amount of fuels treatment in the pine areas. We would likely not have done a significant amount of fuels treatment work in the Okefenokee Swamp National Wildlife Refuge.

The circumstances that are occurring there today in this fire season are extraordinary by any measure, because we have a record drought, and that system will burn with the intensity it is burning now about every 100 years.

Ms. CHRISTENSEN. Thank you. In my last couple of seconds, would Ms. Nazzaro and Ms. Tighe just comment on the plan and the strategy that was outlined, versus what you say doesn't exist?

Ms. TIGHE. The strategy that Under Secretary Rey just talked about as far as the use of the community wildlife protection plans and the five factors, when we did our audit, the community-wide protection plans, we looked at as how they related to setting priorities in other ways. And we generally found, and I think we actually looked at a Forest Service study that was done internally, we found that yes, they are good at setting priorities, and they are very useful for that. But they hadn't been integrated into determining nationwide where priorities ought to be set. And whether that is happening now we will look at when we do our follow-up work in Fiscal Year 2008.

The five factors that Under Secretary Rey outlined sound along the lines of what we think they ought to be doing.

Ms. CHRISTENSEN. Thank you. Thank you, Mr. Chairman.

Mr. GRIJALVA. Thank you very much. Mr. Duncan.

Mr. DUNCAN. Thank you, Mr. Chairman. Before the Forest Subcommittee was merged into this subcommittee this year, almost every year we would have a hearing early in the year in which we would be warned about all the millions of acres that were in danger of catastrophic forest fire. One year we were warned that 40 million acres were in imminent danger. I think one year we had 7 million acres burned, with $10 billion worth of damage.

And I was told by Subcommittee staff that in the mid-eighties, that Congress passed a law that environmentalists wanted, that we wouldn't cut more than 80 percent of the new growth in the national forests. And yet, for several years now we have been cutting I think less than one seventh of the new growth. And the head of the Forest Service a few years ago told us that if we want to

really cut down on these forest fires, we simply have to cut more trees.

And six years ago when we were dealing with this issue, I put out a newsletter in which I covered 24 or 25 different unrelated topics. But I quoted from a column by Robert Nelson, a professor at the University of Maryland. And he wrote this. He said, "In fact, over the last decade it was more important to environmental groups to promote wilderness values by creating roadless areas and taking other actions to exclude a human presence. This aggravated last summer's tinderbox forest conditions, and continues to threaten public land."

He said, "Federal policies have produced an enormous buildup of small trees, underbrush, and deadwood that provide excess fuels to feed flames." And then he said that in many Federal forests, tree density has increased since the 1940s from 50 per acre to 300 to 500 per acre, and that these forests are "filled with dense strands of small stressed trees and plants that combine with any deadwood to provide virtual kindling wood for forest fires."

And I know we passed this Healthy Forest initiative, Secretary Rey, in 2003. And yet, one of the later witnesses on the next panel testifies, in addition to increased fuel densities, past management decisions have led to unhealthy forests that are much more susceptible to insect infestation, disease, and catastrophic wildfire.

Are we cutting enough trees? Do we still have many unhealthy forests around the country?

Mr. REY. We are cutting a lot more trees. We have a lot more to cut before we get ahead of this problem. This problem has been a century in the making, since the first organized fire suppression campaigns occurred at the beginning of the last century.

If we knew then, a hundred and some years ago, what we know now, we might have approached fire suppression differently. But you know, that is not, that is hindsight, so it is not terribly helpful.

I think where we are at today is that we have accelerated the work that needs to be done, but there is still a lot left to be done. You don't solve a problem that is 100 years in the making in four or five years; you are going to have to commit more like 15 or 20 years to that task.

I think we have broad agreement that we need to reduce fuel loads in order to restore healthy forests. I think we still have some disagreements about what trees should be cut and where they should be cut, both environmental disagreements about where they should be cut or whether they should be cut in a particular location, as well as disagreements about priorities.

But I think we have broken through. I think most people understand that we have a program of work ahead of us that will probably extend another decade before we get enough fuels treatment work done to affect these fires.

We have had some successes so far. Over 60 percent of the work that we have done since the Healthy Forest Restoration Act passed has been in the wildland-urban interface. Last year we had a record year, because of drought conditions, in terms of the number of acres burned. But we had a relatively successful year in terms of saving homes.

In 2002 and 2003, we lost 3,000 and 2,000 homes respectively, in far less severe fire years. Last year we only lost about 700 homes. That is still tragic, but it is a sign that the fuels treatment work done in the wildland-urban interface is having some effect.

Mr. DUNCAN. All right, thank you very much. A later witness also discusses the relationship between poverty and wildfires in these public-lands areas. And I have noticed that in our part of the country, any county that is more than 50 percent Federally owned seems to be a very lower-income area. And I have noticed that also in many other parts of the country, that where there is 75 percent or 80 percent Federal ownership of land, that county seems to be a lower-income county.

Ms. Nazzaro, have you all ever done a study of anything like that?

Ms. NAZZARO. No, sir, we have never looked at areas to do any relationship between income levels or poverty levels and Federal lands. No..

Mr. DUNCAN. All right. Thank you very much.

Mr. GRIJALVA. Thank you, sir. Mr. Udall.

Mr. UDALL. Thank you, Mr. Chairman. Let me thank the panel again for taking time to come up here and further edify us on this important issue.

Secretary Rey, I wanted to turn to a follow-on my colleague from Colorado, Congressman Lamborn, touched on. And that is the long-term plan for the air tanker fleet. You and I had some conversations about this over the last few years.

Last month Congressman Salazar and I wrote you about the status of the plan. And in response, a Forest Service spokesman was quoted in the press as saying the plan won't be ready for months, maybe longer. We followed up with another letter to you asking if that was accurate, and urging that this be a priority matter. And I had a series of three questions.

Have you received our letter? If so, when could we expect a response? And can you fill us in on what slowed the progress of developing this long-term plan for the air tanker fleet?

Mr. REY. The answer to the first question is I will give you a response now, and we will follow with a written response by the end of the week.

That statement was not entirely accurate. The reason for the delay is that our planning for the large air tanker fleet has been now merged into an overall evaluation of our total aviation force. And that evaluation will be completed no later than December of this year. It will not effect, negatively or positively, firefighting tactics and resources for the 2007 season. We have a full complement of aviation assets that are designed and deployed to continue to achieve a 98 percent rate of success at initial attack. And we are comfortable that the mix of aviation assets, smaller fixed-wing tankers, larger tankers, smaller and larger helitankers, are going to be adequate to the task.

The larger longer-term evaluation involves both the mix of aircraft, as well as, in the case of the larger tankers, what the ideal aircraft model for the next generation of air tankers should be. And as I said, that will be done no later than December of this year, and that will affect what the next generation of large air tankers

looks like. It will also affect the decisions we make for procurement for the other aircraft in the 2008 fire season.

Mr. UDALL. Thank you for that update. What I hear you saying to the committee is that we have your assurances that we are prepared with our air fleet to respond to whatever arises this summer.

Mr. REY. That is correct.

Mr. UDALL. Ms. Tighe, if I might turn to you. You made the point that the number of acres treated doesn't necessarily translate directly to the amount of risk reduction. But wouldn't you agree that work done in the interface areas has a bigger payoff for risk reduction than work done in more remote areas?

Ms. TIGHE. I think you could say that generally, but not absolutely. I think work in the WUI, or the wildland-urban interface, and the fact that in those areas you would clearly give credit for protection of, you know, certain values and structures, and that would have to count in your assessment, there may be times at which you get bang for your buck in remote locations simply because those would be strategically placed fuel reduction sites that could help an overall picture. I just don't know.

But I don't think you can say absolutely, across the board in every case it is the WUI over other parts. I think there are also areas outside of the WUI that also you should look at.

Mr. UDALL. Yes. I would offer an observation. I think in terms of risk to communities, the urban-wildland interface is probably where more emphasis ought to be placed. But I understand there may be specific——

Ms. TIGHE. Exactly.

Mr. UDALL.—unusual circumstances where——

Ms. TIGHE. That is what we would say.

Mr. UDALL. It would also depend on how you define remote.

Ms. TIGHE. Yes.

Mr. UDALL. If it is 50 miles from a community, then I think that is truly remote.

Ms. TIGHE. One can get too remote. I mean, obviously there is, you know, inaccessibility is a big factor to whether you can do anything, strategically or otherwise.

Mr. UDALL. Secretary Rey, I have too many questions today for my time, but I wanted to ask you about your statements about firewise regulations, and perhaps enforcing some discipline on communities that don't have those firewise regulations in place.

But couldn't that be a little bit counter-productive, in that we hold communities hostage in that regard? And then they don't have the opportunity to do the work they need to do to minimize the potential that they have.

Mr. REY. I don't think we have ever advocated penalizing communities that don't have firewise regulations or building codes and ordinances. It is more an exercise in encouraging communities to move quickly to develop those kinds of codes and ordinances.

And I think that the more effective mechanism of seeing that through to a conclusion is not a Federal government regulation, but probably the marketplace. I think you are starting to see a lot of insurance companies now refusing to write policies in areas where building codes don't specify construction with more fire-resistant materials and the creation of defensible space on private lots.

Mr. UDALL. Mr. Chairman, I see my time has expired. I want to, for the record, clarify that I asked Mr. Rey to comment on a GAO point in regards to firewise communities, and I think he gave us essentially what the Forest Service thinks is the way we ought to proceed. So thank you.

Mr. GRIJALVA. Thank you, Mr. Udall. Mr. Pearce.

Mr. PEARCE. Thank you, Mr. Chairman. I was interested by Mr. Lamborn's comments about the differences that pilots train to, if they are flying fires there is a commonality for all pilots. That is, take heed the earth lest it rise up and smite thee. So there are some similarities for pilots training.

Mr. Rey, I was fascinated by your discussions. As you know, our office and your office have had several discussions. It was our district where the Forest Service escalated the grazing problem into one that looked like Ruby Ridge, where you sent them guys, 20 or 30 armed people to take a guy's herd away. It was a little bit overresponsive.

It is my district where a Kopelli fire burned 30 or 40 houses in the village of Ruidoso. It is in our district where we got the Lincoln National Forest, and we are cleaning about 3,000 acres per year. That is in a drought state. And 3,000 acres a year, I was fascinated to hear you talk about when we get through with the fuels treatment, because it is going to take us 330 years to get through the Lincoln National Forest at this rate. Meanwhile, we have the risk of our towns over in the Gila, on the other side of the district, we have the Gila has 3 million acres. And we are likewise just cleaning about 3,000 acres a year over there. It is going to take us 1,000 years to get through this cleaning program. And I was really fascinated to hear your plans for the future, for when we get through with that. I don't think we are ever going to get through with it at the rate we are going.

As you know, we lost about a million trees up around Santa Fe to infestations of some sort. And that brings us to the current period.

The Scott Able fire burned there near Cloudcroft in the Lincoln, and it burned 12 miles at about 2,000 degrees. And it took about five hours.

Now, when it hit the Mescalero Apaches, who have gone in and done tremendous clearing, thousands of acres, the fire simply fell to the ground and ran along the ground like it is supposed to. So we see the process working; that is, the clearing process has a validity. I just don't see the acreage happening in our national forests.

We don't have timber sales any more. Neither the Lincoln nor the Gila have had significant timber sales, and so we are stuck here in the current situation, where the village of Cloudcroft is simply, all the acreage around and in the village of Cloudcroft is dying because of the spruce bud work and the looper.

Now, these are defoliating insects. And the Forest Service watched from 2002 on without taking one treatment, so that now the village, just this last, about a month ago, two months ago, declared an emergency, even though the Forest Service would not declare an emergency. And they said, you know, we are afraid for our

lives, we are afraid we are going to see that same 2,000-degree fire burn through our town that burned through the Scott Able area.

And I wonder what it is going to take to get the Forest Service to actually do some remedial treatment there. Do you have a plan to spray? I know that you have not sprayed; you choose not to spray. But is there a plan at which the situation becomes scary enough to you all in Washington that you will actually do anything to control the infestation of the spruce bud worms and the loopers?

Mr. REY. We have treatments planned for this summer. We have developed some treatments close in, around the community of Cloudcroft, using categorical exclusions to preclude the need for more detailed environmental analysis under the National Environmental Policy Act. So trees will start to fall late this summer and fall in the vicinity of Cloudcroft.

We are also doing a more detailed environmental assessment for a broader array of treatments in infested areas. And those treatments will likely be on line, assuming that the decision is not appealed, which, in Central New Mexico, is not sometimes a reasonable assumption. But assuming the decision is not appealed, those broader treatments will begin to take place next——

Mr. PEARCE. Who will be appealing decisions like that?

Mr. REY. It could be any of a number of groups in that——

Mr. PEARCE. Who in the past have appealed decisions like that?

Mr. REY. The Southwest Center for Biological Diversity, Forest Guardians are probably the two most prominent in New Mexico and Arizona. We don't believe——

Mr. PEARCE. We are going to take treatments in the fall? You are going to give treatments in the fall if you get no appeals?

Mr. REY. Right.

Mr. PEARCE. In the summertime is when the drought is typically the worst in New Mexico. And so it looks like we are going to subject the people of Cloudcroft to the most extreme circumstances with dead trees over 30 or 40 or 50 thousand acres.

The Forest Service made a decision in the Capitan fire about three years ago. It was a 12-acre fire burning on a hillside, and the Forest Service said I think it will be OK. It burned 100,000 acres, and you spent about $6 million before you got it out.

I just hope that the people on the ground there in the Lincoln are not making similar decisions there. By not doing anything back in 2002, nothing in 2003, nothing in 2004, nothing in 2005, nothing in 2006, and we might start doing something in the fall of 2007, I hope, my friend, that we are not putting a whole community at risk. You have done that over in the Ruidoso area to the extreme, and finally we raised enough pressure there to start cutting trees.

I hope that we spray to kill the spruce bud worm. I hope that we spray to kill the looper. And I hope that you begin to cut trees.

Thank you, Mr. Chairman.

Mr. GRIJALVA. Mr. DeFazio.

Mr. DEFAZIO. Thank you, Mr. Chairman. Mr. Rey, first let us put it in perspective. What did we spend on firefighting last year, total?

Mr. REY. We spent about $1.6 billion.

Mr. DEFAZIO. $1.6 billion. And was that an anomaly? Or were we kind of running——

Mr. REY. That was an all-time record.

Mr. DEFAZIO. OK. And what are we projecting this year?

Mr. REY. This year we are projecting somewhere between $1.1 billion and $1.25 billion.

Mr. DEFAZIO. OK. So average fire year these days, we would be lucky to get away with $1 billion?

Mr. REY. Yes. I would say an average fire season has been running about $1 billion. That is pretty fair.

Mr. DEFAZIO. OK. Well, now we have a little context. So let us go to the funding for the Healthy Forest Restoration Act.

You know, I opposed the first version in the House because it did not authorize any money. And we fought very hard over it; worked with the Senate, and we got into substantial authorization. But we have never come near to that amount of money in either the requested budget from the Administration and/or the appropriated budget from Congress consequent to those requests.

And I guess I am puzzled why we wouldn't invest more there. And I would look at—and I know you gave out some numbers, but Dr. Daugherty from Oregon is going to testify subsequently using some very conservative analysis, working with some colleagues, came up that avoided future costs justifies spending $238 to $601 an acre for reduction treatments. And they used a very, very conservative methodology, in my opinion.

So I guess I am wondering why aren't we asking—I realize we are in constrained budget times. But when you look at what we are spending to fight the fires, what the risks are, the avoided costs, why aren't we asking for more and spending more money on HFRA? That is one question.

The second is Mr. Pearce was making a point about appeals. But I would like to know, we had to do quite a bit of work and did put in expedited procedures in HFRA to avoid undue delays for needed fuel reduction work. Are you using those procedures?

Mr. REY. Two questions. The first question is, if you look at the authorization of the Healthy Forest Restoration Act, it authorizes a number of activities that go to the promotion of healthy forests, that go beyond the hazardous fuels account, and include other accounts in the Forest Service budget, and in the Department of the Interior's budget.

If you aggregate all of those accounts, what you will find is that we are asking for and spending in excess of the authorization levels in the Healthy Forest Restoration Act.

Mr. DEFAZIO. I understand. And I see that list every year. But I have to say, when I was helping, from my perspective, work on the bill, I was thinking about that is what we are going to spend on actual fuel reduction, because we had an earlier report from GAO.

I think we are losing ground in terms of where we are at in the western U.S., and GAO might, after you finish commenting on that, in terms of whether or not we are beginning to deal with the backlog, or we are actually seeing the backlog grow. The last testimony we had a couple of years ago was it is growing. We are not getting ahead.

So we may have a different opinion there. I thought, straight up, 760, we are out there reducing fuels. Those other things are nice to do, but—OK.

And then the second part, are you using the expedited procedures?

Mr. REY. The $900 million-plus is all spent on fuel reduction, just from different accounts. We are using the expedited procedures in the Healthy Forest Restoration Act and the Healthy Forest Initiative. But those expedited procedures did not eliminate the opportunity for appeals or litigation. That was a decision that the Administration and the Congress made jointly.

Additionally, some of the expedited procedures have—the effectiveness of some of the expedited procedures have been eroded by subsequent court actions. To whit, the Courts have interpreted our obligations, under the National Environmental Policy Act, to require notice and comment, as well as a right of appeal, for projects that are covered under categorical exclusions from the National Environmental Policy Act.

That makes the Forest Service the only agency, the only agency in the Federal government that has to give notice, comment, and a right of appeal for de minimis projects that are covered by a categorical exclusion under the National Environmental Policy Act, including fuels reduction projects.

Mr. DEFAZIO. OK. But I mean, do we, are you really running up against you can't spend the funds you have on an annual basis on productive fuel reduction because of appeals? Or are you managing to spend the funds that you have, since there is quite a bit of it out there, and some of it——

Mr. REY. We are managing to spend every dollar we invest. But there are some priority fuels treatment projects that are going begging because of the impact on appeals.

Mr. DEFAZIO. Well, since you mentioned priorities, I asked back, I think it was in 2005 at a hearing, about whether or not there was a cohesive strategy for prioritization. And it seems that what I am hearing here is that, as of at least the 2006 analysis, we still didn't have that kind of prioritization; we are still using sort of regional apportionment, and then out to the local forests at the discretion of the regions.

Is this Project Landfire, is that the solution to that problem? Is that what you are talking about, how we are going to finally get to really prioritizing the funds into the regions that need them? And then within those regions, applying them to the highest-risk, highest-benefit areas?

Mr. REY. Landfire is going to give us additional data to make more informed prioritization decisions. But we have released a cohesive fuel strategy during the early fall of last year.

The debate that we should be having today is not whether we have a cohesive fuel strategy; but rather, whether all of the things that each of us thinks are necessary are included in that cohesive fuel strategy. The debate that we should be having between the Forest Service and GAO today are what benefit hard out-year funding predictions really going to provide as part of a cohesive fuel strategy, when in fact those funding predictions are going to, by necessity, change year to year, based on what happens on the ground over the course of time.

Mr. DEFAZIO. So, Ms. Tighe, when you were speaking earlier about the evaluation next year, I mean, so between your 2006 work

and now, do you believe that they have really focused in better on the prioritization of the expenditure of the funds?

Ms. TIGHE. Well, without going in and really looking at it, we can't say. We will be looking at it next year.

Mr. DEFAZIO. So they say they have addressed, they may have addressed your concerns, but you don't know yet. OK.

Ms. TIGHE. We don't know yet.

Mr. DEFAZIO. And, Ms. Nazzaro, on the GAO, I know it has been a while since the GAO did an analysis of the backlog and/or the magnitude of the fuel reduction work in the West. I mean, are you aware that we—are we getting ahead of it, or are we still losing ground, holding even? Do you have any idea?

Ms. NAZZARO. You are correct in that we have not updated our data. But based on data from the agencies, it is my understanding that we have not kept pace; that there are additional fuels, of course, being added every year to that list. So you have a backlog, as was mentioned earlier. You may be treating 2 million acres, you know, right now, but is that really getting to the problem.

And that is why we are saying we need this cohesive strategy to really understand. What is the problem, what is it going to take to address the problem and start a turn-around that is not affecting our fuel suppression costs.

Mr. DEFAZIO. And just one last question.

Mr. GRIJALVA. Mr. DeFazio, we are going to do a second round.

Mr. DEFAZIO. All right. Thank you, Mr. Chairman.

Mr. GRIJALVA. Thank you. Mr. Heller.

Mr. HELLER. Thank you, Mr. Chairman. I appreciate all of you being here, and the discussion that we are having today. I do want to tell Secretary Rey, you are spending money up at Lake Tahoe. Fuels treatment is critical. A very important discussion that has been had up there for many years. I served on the planning committee up there for 12 years, and fire suppression, fuels treatment was a critical issue, and I am glad to see that moving forward.

But I want to talk for a little bit about the rangelands and the fires that we have. You are probably familiar with Nevada and the amount of acres that we burned every year. Just last year in one county we burned over a million acres. And most of these wildfires start on Federal lands. And unfortunately, these fires spread to private lands in Nevada, with obviously devastating results. Some of those results meaning that multi-generational families that have had ranches and farms will be going out of business this year because of these fires, again that are starting on Federal lands.

I want to raise a question of a bill that was introduced this week in the Senate, specifically proposed for rangeland. And it is an incentive program that would pay ranchers or other landowners who carry out conservation practices or other activities, including working on lands that are scorched and refueling them or reintroducing native vegetation, so that we can get rid of some of the cheek grass that is growing instead after some of these burned areas move on.

I just want to get your feedback on that. Are you familiar with this particular piece of legislation?

Mr. ALLRED. Congressman, I am not sure which it is. Is it the cooperative conservation legislation?

Mr. HELLER. The piece of legislation introduced by Senator Reid and Senator Enzi.

Mr. ALLRED. I am not familiar with that. But I would say that much of what we do, both on rangelands and obviously on the national forests, requires that we work in very close coordination with our partners. And the effort we make in initial attack to try to stop those, the efforts that we make in coordinating any kind of sustained attack really depends upon those local resources.

The more we can do in coordination with our partners, whether they be other Federal agencies, local agencies, or private interests, to try to deal with these issues on the front end, is going to benefit us all.

So while I am not familiar with that, I am not sure which legislation you are talking about, you will find, I think, the Administration very much interested in finding ways to leverage the resources the Federal government has with those of our partners as we attack these fires.

Mr. REY. Apropos of that kind of activity, in the Administration's Farm Bill proposal, we propose a significant increase in funding, mandatory funding, for the Environmental Quality Improvement Program, which is a cost share program with private farmers and ranchers. And the Environmental Quality Improvement Program pays for a lot of range improvement work, both general range improvement, as well as post-fire range improvement work. So we are generally supportive of that kind of cost share activity.

Mr. HELLER. I think the landowners and the ranchers and the cattlemen have a high incentive of reintroducing native species, as opposed to the cheek grass that is growing out there, that I believe causes more fire concern. And I think this summer isn't going to be any different.

I am a little concerned also about the shift of funding toward some of the local governments. As I mentioned, most of these fires occur or are started on Federal lands, and then move over to state lands or private lands. And I am hearing more and more about shifting the burden.

And having sat on the Board of Examiners in Nevada for 12 years, and the millions of dollars that Nevada does spend in fire suppression, based on the fact that most of these fires are started on Federal lands, I do have some concern and would like some feedback on the efforts to lessen the burden on some of these local governments and state governments, seeing that the majority of these fires are started on Federal lands.

Mr. REY. Well, the fact that we are the only ones that are responsible for Federal lands goes to the proposition that that is where we have suggested most of our suppression resources be concentrated. So we are not trying to shirk our burden for suppression work on Federal lands. Rather, we are maintaining that that is where we have the greatest responsibility.

Mr. HELLER. Do you have any programs or efforts to compensate some of these private landowners for the damage caused by these Federal fires?

Mr. REY. We have used Emergency Watershed Restoration Program money, through the Natural Resources Conservation Service, to stabilize areas that were affected by fires. The Farm Services

Agency has provided some compensation for crop losses, and for livestock losses. So in the normal course, if they are agricultural producers they are eligible for some of our Farm Bill programs, for either compensation for lost crops, or for assistance in restoring areas that have been affected by fire. Or flood, for that matter, as well.

Mr. HELLER. Thank you, Mr. Chairman, my time is up. Thank you.

Mr. GRIJALVA. Mr. Sarbanes.

Mr. SARBANES. Thank you, Mr. Chairman. I am still trying to get my head around some of the concepts here. And I wanted to ask you if the budgeted appropriated amount of dollars to cover the fire suppression need is not enough in a given year, so that it is exceeded, which apparently it has been on a fairly regular basis, those dollars then come from other parts of the budget, such as from the fuel treatment and reduction programs? Is that essentially the formula?

Mr. REY. The Secretary has the authority to draw funds from any other available account if our fire suppression funds fall short of need because of a bad fire year. And you are correct, we have executed that borrowing authority three out of the last five fire seasons.

What we try to do when we execute that authority is keep in close touch with the Appropriations Committees of the House and Senate, and tell them where we think the least destructive places to draw the necessary funds are. And we try to put fuels treatment work at the very back of the list, for the simple reason that if you are borrowing fuels treatment money to fight fires, you really are borrowing from Peter to pay Paul. So we try not to borrow fuels treatment money for that purpose.

Mr. SARBANES. What is the pecking order, in terms of where you go first to find the dollars?

Mr. REY. Where we go first are trust funds where we have unobligated balances, so that we are not affecting any program delivery in a given year. And then if we exceed the amounts available in all existing trust fund balances, then we look at capital projects with multi-year contracts, where we can still maintain our contract obligations, but maybe take some of the money that won't be allocated in a multi-year contract until an out year. Because Congress then would have the opportunity, as they do, in the next supplemental, to pay those accounts back.

So the pecking order is first, trust fund balances that are unobligated. Second, balances that are sitting in capital contracts that are multi-year in nature. And if we exceed both of those, then the rubber really meets the road, and we have to look at non-essential working programs that we can reduce in order to keep up with the necessary suppression activities.

Mr. SARBANES. Well, how far into the fuel treatment and reduction programs have you had to reach in recent years?

Mr. REY. To my knowledge, we have not yet had to borrow from fuels treatment work to pay for fire suppression.

Now, I say that in terms of funding balances. There is a second impact, though, as well. And that is that some of the people who fight fire are also people who are designing and laying fuels treat-

ment projects. So putting aside the appropriated dollars, there are also staff shortages that occur in a very bad fire year, as people spend more of their time devoted to firefighting on an incident to make sure that they get the fire out, and less of their time designing next year's fuels treatment projects.

So it is not so much money as it is manpower in that regard.

Mr. SARBANES. But certainly it is a distraction of energy and attention, potentially, away from the fuel treatment efforts, that that can happen.

It seems to me that—I mean, it is an unusual kind of budgeting environment, because you are never not going to spend the money you have to to do the fire suppression, right? I mean, by definition, it is not a situation where you say we just won't spend money on that program, so we won't deliver that program this year. You have to put the fires out, you have to suppress the fires.

So there is a kind of charade-like quality to knowing or being able to predict, it seems, that the amounts you are going to need for fire suppression are here; and yet, the appropriated dollars are consistently here. You are going to have to go rob Peter to pay Paul, almost on a consistent basis, it seems.

Mr. REY. It is not a charade. It is a formula-based allocation. We request, and Congress typically appropriates, the 10-year average for suppression costs. And what we have been doing is exceeding the 10-year average in several of the last fire seasons.

So, I mean, nobody is playing games with it. The fact is you propose a budget two years out before you are into a fire season, and Congress appropriates that budget a year before the fire season. So absent any better mechanism to predict the future two years out, using a 10-year average is, you know, about as good as you can do.

Now, in the 2003 budget cycle, the Administration proposed an alternative means of funding firefighting activity. And that is we proposed a contingency account for emergencies, including wildfire suppression. And that would then obviate the need to execute the borrowing authority. But for whatever reason, the Appropriations Committees weren't that enthusiastic about that contingency fund proposal, so it didn't go anywhere.

But we are more than happy—in fact, willing—to work with Congress to look at alternative mechanisms for fighting, for funding firefighting. Because you are right; you are not going to stop fighting the fires because you run out of money.

Mr. SARBANES. Thank you.

Mr. GRIJALVA. Thank you, sir. Mr. Bishop.

Mr. BISHOP. Thank you, Mr. Chairman. Mr. Rey, I noticed in your testimony you talked about you have treated 2.6 million acres in 2006, about 20 million acres in the last seven years. Do you or anyone else there have a handle on the number that would be the backlog, or the total need that is out there for treatment as far as fuel suppression?

Mr. REY. In our judgment, there are 180 million Federal acres that are at risk to wildfire, based on fuel loads. Not all of those acres should be treated. There is probably about 80 million acres of high-priority fuels treatment work that needs to be done on Federal lands.

When I say that a lot of that acreage doesn't need to be treated, because a lot of it is very remote, in areas where the fire is going to have no appreciable ecological or economic negative consequence. You know, we burn a couple million acres in the interior of Alaska most summers, and there isn't a lot of effort spent on suppression work there, because you are in the middle of the interior of Alaska.

Mr. BISHOP. What we are still talking about is, you have 80 million acres you have identified as high priority. We are doing 2 to 3 million acres a year.

Mr. REY. And we are doing, both agencies, both departments combined, in excess of 4 to 5 million acres a year now.

Mr. BISHOP. OK. That still doesn't come close to the total need that is there.

If you had all the money you could want for right now, would there still be a problem with manpower in implementation of your plan and program?

Mr. REY. I think there would still be problems with manpower and with public acceptance of the program. We have made great inroads at getting the public to accept the proposition that you have to cut trees to save the forest, but that is still a debatable proposition in a lot of specific contexts with a number of people who want to have the debate over whether that is the right tree to cut, in the right place to cut it.

Mr. BISHOP. Well, as I am looking at just the numbers here, if we are dealing with like 5 percent of the total need that is out there, is it feasible to say that we can solve this problem without using some kind of outsourcing, or without involving the private sector, in helping us to deal with forest management?

Mr. REY. I think the greatest use of the private sector is to make greater use of the material that we have to pull off of these forests in order to do the thinning. Much of that material is low value; it is not suitable for being converted into lumber. It is suitable for low-value engineered wood products, biomass energy, or ethanol.

So our greatest point of focus is to try to get greater utilization of that material. Because if we can do that, it will reduce the unit costs of pulling it off the forest. Instead of paying somebody $300 an acre to move it off, maybe we can get them to do it for free in exchange for owning the material, to convert it into a useable product.

Mr. BISHOP. I am just an old schoolteacher. I am assuming the answer was yes?

Mr. REY. You would have to remind me exactly what the question was.

Mr. BISHOP. That is what I was afraid of.

[Laughter.]

Mr. BISHOP. If we are going to meet the 80 million acres, and we are only doing three to five right now a year, we are obviously going to in some way, as creative as you wish to be, have to involve either outsourcing of this material, or involving the private sector in helping us to do this work.

Mr. REY. We would have to involve the private sector in harvesting this material, or involving the private sector in helping us to do this work.

Mr. BISHOP. We would have to involve the private sector in harvesting and utilizing the material. We can fund up the ying-yang, and with the manpower problems and the funding problems, we are not going to do it unless we involve the private sector. And I think that is one of the bottom lines that I am seeing.

You have talked a great deal already about the problems you are having with offering and completing sales. I think we will probably have a chance to talk about that later.

Can I also ask one other question? You know, the OIG has given you a report, the recommendations by July 31 of this year to be set, to be hit. Is the agency going to meet those deadlines?

Mr. REY. Yes.

Mr. BISHOP. It is a simple enough question. Can I ask some of you there—oh, crud. I have 40 seconds. Give me a really brief definition of what a WUI would be. How do you define that?

Mr. REY. The wildland-urban interface?

Mr. BISHOP. Yes.

Mr. REY. It is an area adjacent to a community that treating will reduce the risk to the community. Its distance from the most distant house varies, depending on topography, vegetation mix, and a lot of other variables.

Mr. BISHOP. I think I was hearing you saying you don't have a standard definition of size distance or anything like that. We just kind of do it on a case-by-case basis.

Mr. REY. That is correct.

Mr. BISHOP. All right. My time is up here. Let me let these others have a chance at it, and I will come back, if that is OK.

Mr. GRIJALVA. Thank you, Mr. Bishop. Mr. Shuler.

Mr. SHULER. Thank you, Mr. Chairman. Mr. Rey, last month we lost about nine homes in my home county due to wildfire. What emphasis does the Department do in the way of community wildfire protection plans? You know, relationship with the states, relationship with each one of the communities.

Mr. REY. As I indicated in my testimony, since the authorization for the development of community-based wildfire protection plans, we have cooperated with communities around the country, and have developed in excess of 2,000 of those plans. We have another 450 that will be developed this year.

And in almost every instance where a group of community leaders, local elected officials for the most part, has indicated they wanted to work with us to draw out a community wildfire protection plan, we have made staff available for that purpose. And as I indicated earlier, that governs where we do the treatments.

You know, generally speaking, where there are community wildfire protection plans, those plans lay out on the ground, in a map-based format, what areas need to be treated. And we don't deviate very much from those once we have them.

Mr. SHULER. So it is basically left up to the elected officials in those communities, or the community itself, to actually get with the Department to be able to come up with a plan.

Isn't there a way that we can be more proactive and look at some of the areas, because of my district's 53 percent public lands? It seems like that would be much more incentive to those commu-

nities that have—every community, all 15 counties, to actually have a plan.

Mr. REY. You know, we could go off and do that ourselves. But one of the things we have found since we started working with communities to develop these plans is that the effort on the part of local elected officials and local community leaders to work with us to develop these plans usually results in less environmental appeals over the activities that we conduct in concert with or in conjunction with those plans. Because that local community buy-in gets everybody oriented toward the idea that we really have to do this work. It is not an abstract question of, you know, whether we should hug this tree or cut this tree. It is stuff that needs to be done if we are going to protect our own homes and our neighborhoods and our communities.

Mr. SHULER. Very good. Ms. Nazzaro, the fund for the Forest Land Enhancement Program in the last Farm Bill was used for fire borrowing. This year, how much do you expect to borrow from that particular bill? Those funds from the Forest Land Enhancement Program. It is in the Farm Bill.

Ms. NAZZARO. I don't have an estimate. I don't know. Maybe Mr. Rey does.

Mr. REY. The authority for the Forest Land Enhancement Program expires with this Farm Bill, so we won't be borrowing any money from that account.

Mr. SHULER. This year.

Mr. REY. This year. We are hoping that Congress reauthorizes the Farm Bill, including our proposal for the Forest Land Enhancement Program. If they do, then we will try not to borrow that money next year.

Mr. SHULER. Very good. Thank you, Mr. Chairman. I yield back.

Mr. GRIJALVA. Thank you. Mr. Pearce, just a question.

Mr. PEARCE. Thank you, Mr. Chairman. Mr. Rey, the county of Otero and the village of Cloudcroft have expressed alarm that the Forest Service has a sense of a lack of urgency on this problem around the community. Can you tell me the priority that you have established for that particular area?

Mr. REY. This is going to be one of our highest-priority treatments to get done this year and next.

Mr. PEARCE. OK. The complaint is that there is no time to develop an EIS. And I guess your office there, the Forest Service, and the city, the village of Cloudcroft have gone to the Council on Environmental Quality. I guess it begs the question why we didn't do something last year or the year before on back.

But forgetting that, what are the chances that we are going to get this approval to do this spraying work? You all are going to spray, right?

Mr. REY. We are going to do some spraying, but we are going to do mostly harvesting.

Mr. PEARCE. So what are the chances we are going to get approval to do that, since we have not done the EIS? We let this thing drift through six years now, so we have kind of a crisis going. What are the chances we are going to get approval to do the work?

Mr. REY. I think the chances are going to be good, because we are going to do it under a categorical exclusion. So we——

Mr. PEARCE. OK. You are going to clear, I am reading, a 500-feet buffer zone.

Now, the last vision I have in my mind is driving up to my home town, where a fire was burning across New Mexico. And the fire, the 50-knot winds were pushing it almost 50 miles an hour.

Now, when I see a 50-mile-an-hour fire running, and I see a 500-foot gap, is 500 feet going to be enough to protect the community, given the nature of the winds that always blow in New Mexico?

Mr. REY. We think 500 feet, along with work to remove fuels and flammable materials on the private lands, will give us a pretty good chance to be able to save those communities, should they be confronted with an active fire.

Mr. PEARCE. OK. Your categorical exclusion you are talking about. And that is subject to this appeal by Southwest Center for Biological Diversity and Forest Guardian, is it not——

Mr. REY. They have a right of appeal, that is correct.

Mr. PEARCE. And I think you have adequately stated that it is common to assume that they are going to block anything that we try to do there.

Now, you said that one of the problems that we have is getting public acceptance. Does the Forest Service give the same weight to people who live in the town and are worried about their houses? There is one road that goes through Cloudcroft. When the forest catches on fire, there is not going to be a way out of town; we are going to lose a lot of people.

Now, public acceptance, do you give the same weight of public acceptance to the people who are at risk of losing their families, their homes, their livelihood, than some guy based out of—excuse me, Mr. Chairman, but I think the Center for Biological Diversity is out in your area, in Arizona somewhere. Do you give the same weight to public acceptance, I think was your term?

Mr. REY. Well, first a clarification. I did not say that we expect that these particular categorical exclusions will be appealed. We think that we have designed the fuels treatment work that needs to be done here in a way that will likely minimize——

Mr. PEARCE. Well, fine. Let me reclaim the words and put them in my mouth. I think they will be appealed, because they have blocked everything else in the district. So those are people who did not want to cut trees for any reason. And I am asking, does public acceptance from someone outside the area, whose life is not at risk, weigh the same as public acceptance? You said that is the problem, that public acceptance of cutting trees or hugging them is the problem.

There is no problem in the minds of people in Cloudcroft and Otero County. So do you weigh it the same, inside and outside the county?

Mr. REY. I think the best way to answer your question is, we give the greatest weight to people whose concerns are backed up by——

Mr. PEARCE. That tells me that the people in Cloudcroft have a great reason to go ahead and fear. I mean, I am telling you that the greatest fear over anything that we have felt in the district is these. Because they saw the Scott Able fire, they saw the Kopelli fire in Ruidoso. They have seen us burn hundreds of thousands of

acres to the ground, while we do not clean anything up. And they see a 500-foot buffer zone.

Finally, when you talk about, to Mr. Bishop, using private firms, biomass, are you aware that the Forest Service in New Mexico will not give 20- or 30-year contracts in order that these private firms would come in and harvest for you? That we have had biomass firms appealing to us, can you help get us a contract, and the Forest Service will not grant those.

So how are we going to get this stuff cleaned up? You are going two to three thousand acres yourselves, and it is obvious you are not going to put more there, because evidently, and according to your five different things, there is not enough negative consequences, I think was your second thing. So there is not enough life to be lost in New Mexico, so we do not evidently rank very high on the priority list.

I know we are one of the driest states. We have about as much national forest as any state. We don't rank high on the list. So what are we to tell our people back home?

Mr. REY. I said earlier that these are high-priority treatments.

Mr. PEARCE. They are high-priority treatments, but we haven't done anything for seven years, and we are not going to do anything until the fall. And we put ourselves not having an EIS in place, so that you still stand the risk of getting appeals.

And I will tell you that the risk is extremely big that the appeals will happen, and we will hear one more time I am sorry, we are not going to do anything. And that is not a very suitable answer for me to go back and tell these constituents, with one road through the town, that have no way to get out if a fire starts.

I am stunned at——

Mr. REY. That is not an acceptable answer. We are going to do something. We are going to do these treatments this year. And if appellants show up and try to block them, we will defend our decisions aggressively, and see if the courts will agree with us about the immediacy of what needs to be done.

One other clarification is the Forest Service cannot grant 20-year contracts. The longest contract length that we are statutorily able to grant is 10 years, and we do and have granted 10-year contracts to biomass energy facilities, including a couple in Arizona.

Mr. PEARCE. But none in New Mexico. And I do appreciate it. And we will work with you any way we can to try to get rid of the problem there, because the people in both Ruidoso, Ruidoso towns, Cloudcroft, and the other mountain communities are extraordinarily concerned, as they are out in the West. We have talked mostly about the Lincoln, but the Gila. We have five national forests in our district, and they all have the same problems.

But I appreciate your hard work, and appreciate that you are in difficult circumstances.

Mr. Chairman, I have talked too long. I apologize.

Mr. GRIJALVA. No problem. Mr. DeFazio.

Mr. DEFAZIO. Thank you, Mr. Chairman. Numerous hearings, Secretary Rey, the issue of a longer term for those sorts of contracts as have come up—you just mentioned in response to the gentleman from New Mexico that you are limited to 10 years. And yet

I think you indicated previously that you didn't feel it was necessary. Do you still hold that position?

Mr. REY. I would like to get a little bit more experience in writing a larger number of 10-year contracts, to see whether 10 years is too short for the amortization of new infrastructure. Because that is the real issue.

It is a question of how much capital an investor has to have in order to turn the ground to start constructing a biomass energy facility, or a cellulosic ethanol plant. So far we have had some luck with investors who have come in and, with access to 10-year contracts, have gone ahead and broken ground and built facilities.

So I am not sure that the contract length is the impediment. What I need the opportunity to do is to get more 10-year contracts out on the landscape, and then see, in another year or two, what that looks like.

Mr. DEFAZIO. What if we gave you the flexibility to make an exception; go to 20 years to get people to locate in high-risk areas, and engage in fuel reduction in those areas?

Mr. REY. I don't think we would find that objectionable. I would need to talk with the contracting experts in the Federal government to make sure that we write sufficient protections into those contracts, so that the government's interest is maintained, which is always the concern with a longer-term contract.

Mr. DEFAZIO. You mentioned at one point in the first round there ecological restoration, along with fuel reduction. I believe I mentioned this to you. But there is a proposal on the Wallowa-Whitman Forest up in Northeast Oregon in Representative Walden's district, an east-side dryer forest, where there is a need for both some thinning and fuel reduction. A gentleman came by my office to talk about the possibility of doing, you know, going in there with a cellulosic plant. And what it was contingent upon was both the fuel reduction over a long term, and doing it in conjunction with the thinning, because he would also utilize the tops and limbs from the commercial thinning that would be done.

I mean, would that be the kind of innovative approach you are talking about in doing ecological restoration along with fuel reduction?

Mr. REY. Yes. In fact, that is an area we are looking at for a potential 10-year contract, [inaudible].

Mr. DEFAZIO. All right. And then just a last point, and I think we have had discussion of this before. The 10-year average on the fire, on your estimates for fire costs.

I mean, there is nothing magic about 10 years, right? It is not required.

Mr. REY. No.

Mr. DEFAZIO. And/or there might be an outlier year that you would drop, or something like that. I mean, if it is leading us to making proposals that are insufficient, it seems we might reconsider the standard we are using there.

Mr. REY. We have looked at that in terms of going to a five-year average, or just dropping the highest and lowest years to rationalize the longer-term average.

I think this is sort of a good news, bad news observation, but I think we have now got enough high-cost years in the rolling 10-

year average that what we are going to find is that our borrowing needs are going to be significantly reduced. That, combined with the cost containment work that we are doing, may put us in a position this year where we don't end up borrowing.

Mr. DEFAZIO. OK, well, hopefully. Thank you.

Mr. Chairman, thank you for holding this hearing. I appreciate it, because this is a critical—well, you live in the West, too, but obviously a critical issue.

Mr. GRIJALVA. Thank you very much. Let me ask a couple of questions second round, and then finish up with Ranking Member, Mr. Bishop.

For Assistant Secretary or Under Secretary, if you wouldn't mind, gentlemen. The Appropriations Committee has requested that the agencies deliver a joint report to the committee indicating how hazardous fuel funds are allocated among bureaus, agencies, regions, states, and make it available publicly. It appears from your testimony that you are moving in that direction.

When can we anticipate that report or that communication to Congress?

Mr. REY. Of course, it will depend on whether they ask for it in our budget request, or whether they would just like to see it after we get our final appropriation.

In our budget request, we generally submit supporting information that shows how we propose to allocate what we have requested. I think the nature of their request, if I understand it right, is that they would like to see a re-spin of that, based upon what we actually get appropriated. And if that is the request, then what we will try to do is turn it around within a couple weeks after the Appropriations Bill is signed.

Mr. GRIJALVA. OK. Following up on Appropriation Committee requests, I think we are going to hear from the second panel about the need to redefine the wildland-urban interface.

The Appropriations Committee has directed the agencies to reevaluate those existing definitions and criteria. How do you feel about that request, in terms of that redefinition process, or redoing the criteria, or looking at it differently?

Mr. REY. I think what we will propose to the Appropriations Committee is, rather than struggling through a redefinition, let us give them an analysis of what the combined, what the outlook is for the combination or the aggregation of the community wildfire protection plans.

You know, we have now over 2,000 community wildfire protection plans in which there is a great deal of local agreement about what needs to be treated within the wildland-urban interface to protect the community. I would hate to walk backwards from that agreement, and start spitting out a new definition of the wildland-urban interface. I think I would rather take a pass at seeing if I can aggregate the results of that work, so that it is available to somebody to look at on a more landscaped scale, and then discuss whether it is adequate or whether there are changes that need to be done.

Mr. GRIJALVA. Let me see if I can construct your answer for myself. Evaluate and report on what has been done up to this point?

Mr. REY. Correct.

Mr. GRIJALVA. And then, based on that, make a decision about redefining or changing criteria.

Mr. REY. Correct.

Mr. GRIJALVA. OK. And the last question——

Mr. REY. I should get you to answer my questions more often. It goes a lot better that way.

[Laughter.]

Mr. GRIJALVA. Well, I tend to get confused easily, so I have to ask them.

Mr. Under Secretary, the last question. And I was interested in the discussion that you had with Congressman Sarbanes about the pecking order, robbing Peter to pay Paul, and how the need to respond to suppression activities is priority A. And regardless of what is budgeted, that has to be done.

Given that whole commentary, I mentioned the $96 million cut in wildfire preparedness in this year's budget request from the Administration. Given the severe wildfire seasons that we have had the last three, four, five years, that we have been experiencing, how does the Administration justify that cut? If it is not being—is it being redirected to suppression?

Mr. REY. We actually are seeing an increase in suppression, in part because we are following the 10-year average.

But we have been engaged in four years of cost containment work. And I will submit for the record at this hearing a list of 41 separate cost containment initiatives that we have underway. I will also submit for the record at this hearing our testimony before the Appropriations Committees, which summarize some of the major cost containment initiatives.

Looking forward into 2008, we believe that it is, we will see the fruits of some of that kind of, of that labor in different tactical approaches to both preparedness and suppression.

Even this year, in 2007, as this fire season unfolds, we believe we will see savings in the neighborhood of $130 to $150 million, as a consequence of some of the cost containment initiatives that we have underway, some of the very initiatives that were recommended by our Inspector General or by the Government Accountability Office.

So that $96 million reduction in suppression that we proposed for 2008——

Mr. GRIJALVA. Preparedness.

Mr. REY. Preparedness, I am sorry—for 2008 is a reflection of savings that we think we will incur as a result of these efficiencies.

Now, if we are wrong and it doesn't manifest, we still obviously have time to make some changes. We also have the authority from the Appropriations Committees to take money from suppression to boost preparedness if we find ourselves in a severity situation that we didn't anticipate early in the fire season.

So we think we have flexibility to cover that, but we think that those are real savings resulting from the work that we have done that has been recommended.

[NOTE: The list and testimony submitted for the record have been retained in the Committee's official files.]

Mr. GRIJALVA. Thank you. Given the reality of suppression activities will occur, regardless if there is a line-item limit to it. And

I don't see that as an either-or between suppression and preparedness. And I would think that additional resources directed in preparedness that are categorically committed to that activity doesn't set up the question of either-or. I think it creates what I think is a necessary balance.

But with that, I have gone over time. Mr. Bishop.

Mr. BISHOP. Thank you again. I might suggest, Mr. Rey, that if five years for a rolling average is enough to be actuarially sound in a public retirement system, it might be good enough for you.

I did have a question for the Inspector General. We have talked and heard people talking about how fires that take place on public lands have an impact on private land and private forest land. Do we have any numerical data as to what the cost is to either state, local government, or private consumers that have to deal also with the fires that start on Federal lands, and then turn to private lands?

Ms. TIGHE. I don't know that we have that information.

Mr. BISHOP. Does anyone on the panel have a numerical value as to what it costs?

[No response.]

Mr. BISHOP. OK. So I don't have the answer. I might presumptively argue that that may be a good reason why land acquisition should be at a minimum in the future, but we will deal with that.

And actually, these guys have been on the hot seat for quite a while. I have some others, but they are not that vital. If there is anything more I have, I will submit them in writing. I just thank you, all of you, for taking the time to be with us here today.

Mr. REY. I think we may be able to get some of the data you just asked for. I don't have it at the tip of my tongue, but if we have calculated it in conjunction with the firefighting community, I will poll the system. And if we have it, I will submit it for the record.

Mr. BISHOP. If you have that, I would be appreciative. Thank you, sir.

Mr. GRIJALVA. Let me join Mr. Bishop in thanking the panel. Thank you for your time and for your very important testimony today. Your full written testimony will be made part of the record, in addition to other materials you may submit.

Thank you again. And let me call the second panel, please.

Mr. REY. Thank you.

Mr. GRIJALVA. Let me as well thank you today. I appreciate it very much. That was a rather lengthy first panel, and so I appreciate your patience. Some of you have traveled a long way, some of you from the great State of Arizona, and I appreciated that very much, as well.

Let me begin with Supervisor Elizabeth Archuleta, Coconino County. Thank you for being with us. And testimony will be limited to five minutes, but all materials will be made part of the record. So thank you very much.

Supervisor.

STATEMENT OF ELIZABETH C. ARCHULETA, SUPERVISOR, COCONINO COUNTY, ARIZONA

Ms. ARCHULETA. Thank you, Mr. Chairman and Ranking Member Bishop and Members of the Subcommittee. I appreciate the op-

portunity to testify on behalf of the National Association of Counties and Coconino County on wildfire preparedness.

I am the Chairman of the National Association of Counties Public Land Steering Committee, and a supervisor from Coconino County. Coconino County is located in one of the largest strands of Ponderosa pine in the world. The county spans almost 19,000 square miles, and is the second largest in the lower 48.

Coconino County contains Grand Canyon, the cities of Flagstaff, Williams, Page, and other unincorporated communities. It is also only 13 percent private land.

As many of you know, the State of Arizona has learned some real lessons in the last few years on wildfire preparedness. Five years ago the Rodeo Chediski fire in the White Mountains burned nearly half a million acres, and cost the taxpayers more than $400 million.

Last year the Woody fire immediately threatened the city of Flagstaff, and nearly escalated into a catastrophic wildfire. However, local forest treatments in the WUI protected the city from a loss of structure and lives.

The Brins fire in Oak Creek Canyon outside Sedona burned more than 4,000 acres, and the aftermath is still being felt today. Potential rock slides, soil degradation, and an impact on water quality are serious problems that Coconino County and its communities will be addressing for years to come.

While wildfires are a very real danger in Northern Arizona, Coconino County has created plans to prepare for catastrophic wildfire prevention. With the passage of HFRA, communities across the county were urged to create community wildfire protection plans to be eligible for Federal hazardous fuel reduction funding.

Coconino County has implemented and provided funding for these plans, in collaboration with cities, the Greater Flagstaff Forest Partnership, the Ponderosa Fire Advisory Council, and the Forest Service Nature Conservancy and many other groups. The result has been prioritized hazardous fuels reduction and collaborative planning efforts.

Also, Coconino County is currently exploring the adoption of specific codes and ordinances related to developments in the WUI areas.

In addition, our Governor has created the Governor's Forest Health Advisory Council to develop a statewide strategy for managing Arizona's forests.

Let me just talk about the benefits of HFRA on a national level. It has benefitted the counties in major ways: three, to be exact. It has enabled counties across the Nation to create collaborative wildfire protection plans. Over 100 counties have developed these plans.

It has encouraged the development of partnerships with Federal land management agencies, state agencies, cities, counties, universities, and scientists, and environmental groups to create strategies to mitigate and reduce the risk of catastrophic wildfire.

And three, it has provided streamlined compliance work under NEPA for fuel management projects, which has been very helpful.

An important point I would like to stress today, though, is that we believed funding would come from this Act for the development of the CWPPs, and to support fuels management through the

Forest Service and the State Fire Assistance Program. But that has not happened, to the extent that was anticipated or is needed.

Coconino County has taken a very proactive approach, as well as the State of Arizona. And this has been nurtured across the West by a partnership between NACo and the Sonoran Institute based in Pima County, Arizona. We know that open space, natural beauty, recreational opportunities, and a desirable quality of life are some of the driving forces behind the growth and development in the WUI areas throughout the West.

For local elected officials, this period of growth and change presents real challenges. In 1999, NACo and the Sonoran Institute partnered to create the Western Communities Stewardship Forum, to provide training and support to assist more than 300 rural county officials from eight western states to effectively manage growth through innovative community-based land-use decisions and solutions.

Counties are taking responsibility for growth in the WUI areas. Counties are considering land-use codes and ordinances. And we want to stress this.

Contemplating a similar model, the National Association of Counties is currently working with the USDA, Forest Service, and the Bureau of Land Management on a similar program that would strengthen the capacity of counties to reduce wildland fire risk in the WUI area.

Let me just tell you, though, that we want to advocate today for a paradigm shift, to move from suppression to prevention. We encourage Federal land management agencies in the state to create the capacity for forest restoration treatments. We encourage Federal agencies to emphasize preventative treatments through active management over suppression efforts when setting priorities.

We encourage Congress to use the appropriations process to change the emphasis from suppression to treatment. We also encourage the stimulation of stewardship contracts to bring wood utilization industries to forested counties to help pay for fuel reduction efforts, and look to the Federal agencies in Congress to help with this effort.

We also would like to encourage you to continue to seek ways to fully fund PILT and to secure rural schools, because many of the community wildfire protection plans and the fuel reduction efforts are funded by these two funding sources.

Thank you, Mr. Chairman.

[The prepared statement of Ms. Archuleta follows:]

Statement of The Honorable Elizabeth Archuleta, Supervisor, Coconino County, Arizona, on behalf of The National Association of Counties

INTRODUCTION

Chairman Grijalva, Ranking Member Bishop, and members of the Subcommittee, I appreciate the opportunity to testify on behalf of the National Association of Counties and Coconino County on wildfire preparedness.

I am Elizabeth Archuleta, Chairman of the National Association of Counties Public Lands Steering Committee and a Supervisor from Coconino County, Arizona. Coconino County is located in one of the largest stands of ponderosa pine in the world. The County spans almost 19,000 square miles and is the second largest in the lower 48. Coconino County contains the City of Flagstaff, the Grand Canyon, the City of Williams, the City of Page and other unincorporated communities.

As many of you know, the State of Arizona has learned some real lessons in the last few years on wildfire preparedness. In 2002, the Rodeo Chedeski fire in the White Mountains burned nearly half a million acres and cost the taxpayers more than $400 million. The February Fire in northern Gila County started in February 2006 and taught us that with extreme drought conditions, fire does not always occur in the summer months. The February Fire burned more than 4,000 acres and cost the taxpayers more than $3 million.

Last year, the Woody Fire immediately threatened the City of Flagstaff and nearly escalated into a catastrophic wildfire. However, local forest treatment efforts in the wildland urban interface protected the City of Flagstaff from a loss of structures and lives. The Brins Fire in Oak Creek Canyon, outside of Sedona, burned more than 4,000 acres and the aftermath is still being felt today. Potential rockslides, soil degradation and impact on water quality are serious problems Coconino County communities will be addressing for years to come.

With the passage of the Healthy Forests Restoration Act of 2003 (HFRA), communities across the country were urged to create collaborative Community Wildfire Protection Plans (CWPP) to be eligible for Federal hazardous fuels reduction funding. Coconino County and the City of Flagstaff, in collaboration with the Greater Flagstaff Forest Partnership (GFFP) and the Ponderosa Fire Advisory Council (PFAC), developed the Community Wildfire Protection Plan for the City of Flagstaff and surrounding communities. The USDA Forest Service is a member of both the GFFP and PFAC. The result of these efforts has been collaborative planning efforts and prioritized hazardous fuels reduction.

In addition, the Governor of Arizona has created a Governor's Forest Health Advisory Council to develop a statewide strategy for managing Arizona's forests. With the recent release of the draft statewide strategy, the State is holding public hearings throughout the state. The goal of the draft strategy is to present scientific and policy recommendations to the Governor on forest health, unnaturally severe fire and community protection.

While the dialogue in the State of Arizona and Coconino County has changed from a reactive approach to a proactive approach, more work needs to be done. Today, I would like to focus on a few key points to demonstrate how HFRA has helped counties and what additional tools we need to be more effective. First, I will focus on the community partnerships developed to address fire mitigation. Second, I will describe how counties are taking responsibility for growth and development in the Wildland Urban Interface. And finally, I would like to explain the real cost of wildfire suppression on the ground and encourage a paradigm shift from funding fire suppression to funding prevention and forest restoration through active forest management.

PARTNERSHIPS, PLANNING AND FOREST HEALTH

The National Association of Counties believes there is a clear and imminent danger to our public forest resources and adjacent communities stemming from years of fire suppression and other management decisions. In addition to increased fuel densities, past management decisions have led to unhealthy forests that are much more susceptible to insect infestation, disease, and catastrophic wildfire.

Federal land management agencies should focus management efforts on high-risk forests utilizing an array of appropriate forest management practices, including thinning and harvesting, and prescribed burning. In addition, Federal land management agencies should increase private, state, and local contracts and partnerships for more effective fire suppression and pre-fire management of federal forest lands.

Locally, our forest ecologists tell us that when a forest is healthy it will support low intensity ground fires every 2-20 years. One of the best defenses against catastrophic crown fires is landscape adaptation to historical fire types. Evidence suggests that a treated area is vital for effective fire suppression. Proactive community-based approaches to wildland fire management combines cost-effective fire preparedness with fire suppression to protect communities and the environment. In 1996, Coconino County experienced several fires within and on the edge of the WUI that clearly focused the public's attention to the risk posed by a catastrophic wildfire and the plight of the forests. As a result, an instrumental partnership was established to comprehensively address fire mitigation in the greater Flagstaff area. Further discussion on the success of this partnership is described below.

Partnerships

For a variety of reasons, partnerships between the Federal government, State and local government, and private organizations are vital to the development of local wildfire management strategies, fuels reduction and management projects, as well as the continuation of local community collaboration on all levels of government.

Both Congress and the Administration have pushed for collaborative community management strategies through the Department of the Interior Collaborative Conservation and Healthy Lands Initiatives, as well as Congressional direction through PL 106-291 directing the Secretaries of Agriculture and Interior to develop a strategy that requires "close collaboration among citizens and governments at all levels," including a diverse group of people representing all levels of government, tribal interests, conservation and commodity groups, and community-based restoration groups.

NACo Partnership with Sonoran Institute

The proactive approach we have adopted in Coconino County has been nurtured across the West by a partnership between NACo and the Sonoran Institute, based in Pima County, Arizona. We know that open space, natural beauty, recreational opportunities, and a desirable quality of life are some of the driving forces behind the growth and development in the wildland urban interface of communities throughout the West. For local elected officials, this period of growth and change presents real challenges. In 1999, NACo and the Sonoran Institute partnered to create the Western Community Stewardship Forum (WCSF) to provide training and support to assist rural county officials effectively manage growth through innovative, community-based land use decisions and solutions.

Since the Forum's inception, more than 300 officials from counties in eight western states have participated in WCSF. Participants receive practical, innovative land-use tools and strategies that have stimulated healthy economies, while preserving local identity and the cultural assets of the community. Through a competitive application process, WCSF selects teams of up to six county officials responsible for local growth-management strategies to participate in an intensive three-day training workshop to explore solutions to community land-use issues, effective growth management plans to balance environmental, economic, and community concerns through locally-led decisions, and fostering collaboration among participants on a variety of growth issues.

Future NACo Partnership with BLM & Forest Service

Contemplating a similar model, the National Association of Counties is currently working with the USDA Forest Service and the Bureau of Land Management (BLM) to develop a program that would strengthen the capacity of counties to reduce wildland fire risk in the wildland urban interface. Specifically, the project would assess the current status of county development and implementation of Community Wildfire Protection Plans. County officials will be provided with technical assistance, training, and tools to build their capacity to proactively reduce wildland fire risk and contain associated costs in the wildland urban interface. The first goal of the proposal is to help local officials better understand how their decisions in the wildland urban interface influence public health and safety in their communities.

In addition to capacity building on the local level, the second goal of the proposal would be the development and distribution of a Best Practices Guidebook for local officials and the development of training workshops. NACo would create a guidebook outlining practices and strategies in land use planning and fuels management policies for wildland fire protection. The publication would serve as a tool for communities seeking to develop new wildland fire plans.

Coconino County serves as an excellent example of how communities can create successful partnerships to develop and implement Community Wildfire Protection Plans CWPP). Three key partnerships exist in Coconino County that actively plan and execute existing wildfire protection plans. A brief description of each partnership is below:

Greater Flagstaff Forests Partnership

After several near misses with fires in the wildland urban interface in 1996, the Greater Flagstaff Forests Partnership (GFFP) was formed. The GFFP is an alliance of more than 20 environmental, governmental, research and business organizations dedicated to researching and demonstrating approaches to forest ecosystem restoration in the ponderosa pine forests surrounding Flagstaff, Arizona. The Partnership's three primary goals are to, (1) restore natural ecosystem structures, function, and composition of ponderosa pine forests, (2) manage forest fuels to reduce the probability of catastrophic fire, and (3) research, test, develop, and demonstrate key ecological, economic, and social dimensions of restoration efforts.

Ponderosa Fire Advisory Council (PFAC)

Created after the Yellowstone fires in 1988, PFAC is comprised of members of local fire departments, rural fire districts, emergency services, law enforcement, and the USDA Forest Service. PFAC focuses on ensuring that all agencies are properly

prepared, trained in Incident Command System (ICS), share operating guidelines, operate under mutual aid contracts, and participate in interoperable communications planning. In addition, PFAC is committed to public fire wise education and community preparedness in the event of a wildfire emergency. PFAC is also actively involved in implementing the CWPP for the greater Flagstaff Area.

Wildfire Advisory Council (WFAC)

Similar to PFAC, WFAC is comprised of local representatives from the greater Williams area, including representatives from local fire departments, rural fire districts, the Kaibab National Forest, Coconino County Sheriff's Office and the Department of Arizona State Lands. WFAC developed and is implementing the community wildfire protection plans for the community of Tusayan (gateway community to the Grand Canyon) and the City of Williams.

The County participates in all of the collaborative forest partnerships discussed above to promote and facilitate forest restoration and fuels reduction throughout the County.

Planning

Community Wildfire Protection Plans

Community Wildfire Protection Plans are authorized in the Healthy Forests Restoration Act (HFRA) enacted in 2003. The HFRA provides communities with a tremendous opportunity to influence where and how federal agencies implement fuel reduction projects on federal lands and how additional federal funds may be distributed for projects on non-federal lands. A CWPP is the most effective way to take advantage of this opportunity. Additionally, the HFRA directs the Forest Service and BLM to give preference to communities with CWPPS when allocating hazardous fuels reduction funding.

The partnerships outlined above have created Community Wildfire Protection Plans (CWPP) in Flagstaff, Williams, and Tusayan. The County was actively involved in the development of the CWPPs and has provided funding for their development. In addition, plans are currently being developed for the Blue Ridge and Forest Lakes areas of the County, and the County has contributed funds to the development of these plans. The partnerships developing the CWPPs include a variety of interests from federal and state land management agencies to homeowner associations to environmental organizations. Collaboration and interagency cooperation is essential to addressing wildfire protection issues because wildfire and forest health issues do not respect jurisdictional boundaries. The goal of the CWPPs is a community-based approach to wildland fire issues, which combines cost-effective healthy forest mitigation, fire preparedness and suppression to protect communities with a proactive approach to achieving a healthy forest ecosystem.

Some examples of the fire mitigation projects resulting from the partnerships' CWPP efforts include:

- Clint's Wells Fuels Reduction—Target 2/2008
- Elk Parks Fuel reduction In progress
- Munds Parks fuel reduction 10/2007
- GFFP eastside fuel management 5/2007
- Oak Creek Canyon fuel reduction 6/2007
- Grand Canyon Airport Fuel reduction 12/2007 Tusayan Community (gateway to Grand Canyon)
- Bill Williams Mountain Communication/Electronic Site Hazardous Tree Reduction 9/2007

In addition, the City of Flagstaff is implementing a number of fire mitigation projects in the wildland urban interface adjacent to Flagstaff.

Coconino County Hazard Mitigation Plan 2006

In addition to the CWPP work done by the forest partnerships, Coconino County developed a County Hazard Mitigation Plan, which was approved by FEMA in 2006. The Hazard Mitigation Plan identified wildland fire as the most significant risk to the communities within Coconino County. Potential economic loss due to a catastrophic fire could exceed $2.5 billion. A primary goal of the County Hazard Mitigation Plan is to promote public understanding, support, and demand for hazard mitigation—In addition, the plan aims to educate the public; promote partnerships between states, counties, local and tribal governments, and to identify, prioritize and implement mitigation actions.

Creative Implementation Strategy

Coconino County established the Coconino Rural Environment Corps (CREC) in 1997 to promote environmental stewardship and youth job development skills. Over

the past several years, CREC has become a key organization for implementing hazardous fuel reduction projects identified by the forest partnerships. In most cases, CREC assists USDA Forest Service and local fire districts with fuel management projects. In 2006 alone, CREC conducted forest fuels reduction projects on over 1,200 acres in Coconino County, most of which are in the wildland urban interface. CREC also tackles other environmental improvement projects, such as clearing riparian areas of tamarisk, planting trees in burned areas, and restoring grassland habitats.

Public Education, Outreach

In addition to planning and implementing Community Wildfire Protection Plans, the partnerships, and in particular PFAC and the County, led public fire wise education efforts throughout the County. Each year the County provides fire wise information and emergency preparedness planning to residents through our annual County Newsletter, which is mailed to all county residents. In addition, the partnerships support the development and dissemination of an annual Survival Guide, which is an insert in our local newspaper. The guide provides residents with information on fire wise actions they can take to reduce fire hazards on their property as well as emergency preparedness tips.

DEVELOPMENT IN THE WILDLAND URBAN INTERFACE

Wildland fires continue to threaten lives, structures, infrastructure, watersheds, community parklands, and other vital community assets, particularly in the wildland urban interface (WUI). The National Association of Counties has adopted national policy calling on counties to enact better local land use ordinances and local fuels management policies for wildland fire protection in and around communities at risk of wildland fire. NACo supports Federal, state and local efforts to collaborate and cooperate on efforts to mitigate fire in the wildland urban interface. Coconino County again serves as a good example of community development planning that takes into consideration fire reduction within the WUI.

Land Ownership Patterns in Coconino County

Approximately 13% of Coconino County is private land. The remainder is owned by the USDA Forest Service (28%), National Park Service (7%), Bureau of Land Management (5%), State of Arizona (9%), and Indian Reservations (38%). Most of the private land in the County encompasses very large ranches that have been historically subject to minimal development. The counties forested areas (which are subject to the greatest fire risk) are predominantly owned by the USDA Forest Service. While development occurs in small private inholdings that prevent growth from spreading very far into the forest, these developments, in effect do expand the wildland urban interface zone. However, the reality in Coconino County is that the vast majority of development exists in the greater ponderosa forest of Northern Arizona. One could consider the communities of Flagstaff, Williams, Parks, Kachina Village, Mountainaire, Fort Valley, Doney Park, Blue Ridge, Pinewood, and Forest Lakes as "pockets" of development within the forest.

Coconino County's Response to Development in Forested Areas

Coconino County is exploring the adoption of a specific WUI code or ordinance. However, there are many aspects of fire risk reduction that have been incorporated into the County's planning and development process already. Coconino County has taken a multi-pronged approach to addressing development in the wildland urban interface. This issue is addressed in the form of goals and policies in the Coconino County Comprehensive Plan, as well as local Area Plans for unincorporated communities. The WUI issues are addressed in the development review process in the form of conditions or stipulations that are placed on subdivisions and conditional use permits. In addition, fire prevention is addressed through the County's participation in collaborative partnerships and interagency cooperation. Lastly, the County's Community Development Department actively promotes public education and outreach regarding fire wise building and development. One of our approaches to public education is to provide informational materials to all persons seeking building permits. We provide handouts on Firewise landscaping and construction techniques, prescribed fire, tips for homeowners on reducing wildfire danger, and even a citizen's guide to evacuation procedures.

Comprehensive Plan—Goals & Policies Related to the WUI

The current version of the Coconino County Comprehensive Plan was adopted September 23, 2003. It is a conservation-based plan that recognizes that we have an ethical obligation to the land, that we all, collectively and individually, have a responsibility for the health of the land. The concept is that the health of the land

is the foundation of the health of the human community. The Coconino County Comprehensive Plan includes a Natural Environment element that addresses forest ecosystem health in a general way, but the Public Safety element more specifically addresses the "Wildland Urban Interface."

The Wildland Urban Interface goal is simply to: "[r]educe the threat of catastrophic wildfire in the wildland urban interface." There are three policies related to this goal:

1. A forest stewardship/fuels mitigation plan is required for major developments and subdivisions in the interface;
2. Fire wise landscaping and building design and materials is encouraged in the interface; and
3. Property owners and developers are encouraged to consult with adjacent land management agencies when they are developing fire mitigation plans to ensure compatibility between adjacent owners and land managers.

In addition, the County regularly consults with and seeks input from the USDA Forest Service when we have development proposals adjacent to National Forest land. Community Development usually accommodates Forest Service concerns and issues through stipulations attached to development approval. Likewise, where rural fire districts exist, we seek their input and address their concerns through conditions of approval.

Development Approval—Subdivisions and Conditional Use Permits for Development in the WUI

For over ten years, Coconino County has required developers of subdivisions in forested areas to include a forest stewardship/fuels mitigation plan as a condition of approval of their preliminary plat. In some of the earliest cases, the Forestry Division of the State Land Department assisted the developers in writing these forest stewardship plans. More recently, developers have hired forestry consultants to write the forest stewardship plans. The stewardship plans have to be completed and accepted by the County prior to approval of the final plat. If the plan calls for thinning and burning (or other fuels mitigation measures are required), then the developer is responsible for completing that work prior to final plat approval, or it must be bonded as with other required improvements. Similar requirements are attached to conditional use permits where appropriate.

Example of a Development with Fire Protection Requirements in Place

An excellent example of a subdivision that developed a fuels mitigation plan is the Flagstaff Ranch development southwest of Flagstaff, which consists of 525 housing units along with a clubhouse and community center on about 480 acres of land. The plan called for thinning of the entire property, use of fire-resistive construction throughout the development, the formation of a fire district to provide fire protection for the subdivision, and use of fire sprinklers in every building.

FUNDING SOURCES VITAL FOR WILDFIRE PREPAREDNESS

Mr. Chairman, as Congress and the Administration struggle to find a way to contain the skyrocketing costs of wildland fire suppression, I urge you to pause and take a look at the cost containment issue from outside the beltway, on the ground in one of America's public lands counties.

As I have tried to make clear earlier in my testimony, Coconino County, Arizona Counties, NACo and many other counties across the country, are finding ways to reduce the risks—and the costs—of wildland fire in the WUI. We worry, however, that there may be a movement afoot in some quarters to force states and local governments to shoulder a greater share of the costs of suppression in the WUI. We believe that this would be a very costly mistake.

First of all, please remember the enormous footprint the federal estate has in counties like mine. The United States is, by far, the largest and wealthiest landowner in so many of our counties, not only in the West, but also in places like Pocahontas County in Chairman Rahall's district in West Virginia. For our public lands county governments to maintain basic public services—not to mention enhanced wildland fire suppression capacity—we depend on the federal government fulfilling the promise of the Payments in Lieu of Taxes (PILT) Act and the Secure Rural Schools and Community Self Determination Act.

We are grateful that you and your colleagues in Congress were able to extend the latter for one year in the Supplemental Appropriation sent to the President in April. This "stay of execution" will allow us to continue to maintain essential transportation infrastructure and keep our rural schools open. It will also continue authorization of the Resource Advisory Committees (RAC's) formed under Title II. Nationally these 15 person stakeholder committees have studied and approved over 2,500 projects on federal forestlands and adjacent public and private lands using

funds that are approved by Forest County Boards of Commissioners for these purposes. These projects have addressed a wide variety of improvements drastically needed on our National Forests, including fuels reduction and reforestation projects.

Many forest counties have also invested Title III funds in developing fire prevention strategies and educating citizens in fire safe actions. Since the passage of the Healthy Forest Restoration Act, over 100 counties have been actively engaged in developing Community Wildfire Protection Plans using Title III funding, including Coconino County. These same counties will be investing Title II funds through the RAC process to implement their community wildfire protection plans through HFRA. Reauthorization of PL 106-393 is vital to the continuation of fire prevention strategies and forest health projects in our communities.

With the expiration of this fiscal year just around the corner, NACo respectfully asks that the Subcommittee continue to explore ways to provide stability and security for the citizens of America's public lands counties, including by fully funding PILT and reauthorizing the Secure Rural Schools and Community Self Determination Act on a multi-year basis. Only with a stable, predictable bottom line will rural public lands county officials be able to be the kind of leaders for forest health and community safety that we ought to be.

Costs of Fire Suppression versus Fire Prevention

Last December, Northern Arizona University researcher Gary Snider published an article in the Journal of Forestry that examined our current investment in fire suppression versus inadequate investment in reducing fire risk by implementing hazardous fuel reduction treatments. The researchers found that by spending $238-601/acre for hazard reduction treatments in the southwest today, these treatments will more than pay for themselves by avoiding the future costs of fire suppression. The economists concluded that current federal policy that inadequately invests in hazard reduction treatments does not represent rational economic behavior, because funding hazard reduction can pay for itself by lowering future fire suppression costs.

Taking this research and applying it to the Rodeo-Chediski Fire that burned over 469,000 acres you can see the fiscal wisdom of a prevention approach. A full cost accounting of all costs associated with the fire shows costs over $400 million. This includes $43 million in suppression costs, $75 million in lost timber and $120 million in private insurance payments to cover losses of over 490 residences, as well as many other damages.

Research shows that if you strategically treat 1/3 of the landscape you can effectively reduce extreme fire behavior. If we had invested in treating 150,000 acres at a representative cost of $500/acre, then it would have cost us $75 million to reduce the probability of this catastrophe. Although this initially appears expensive, it is dwarfed by what the fire ultimately cost the federal, state and local governments, the White Mountain Apache Tribe and the citizens who were victims of this tragic event.

In addition to this research, the General Accounting Office determined that from 2000 to 2004 the Forest Service and Department of Interior transferred more than $2.7 billion from other programs to cover fire suppression costs. GAO indicated that the agencies "repeatedly underestimated how much money would be needed to pay for fire suppression" (GAO 2004).

Post Fire Costs

In many cases the costs that occur after a fire is suppressed can be significant and are generally the responsibility of the County or local jurisdiction. For example, the Brins Fire adjacent to Sedona and Oak Creek continues to create hazardous flooding and debris flow risk for the residents of Oak Creek Canyon due to the loss of ground vegetation from the intense fire behavior. Beyond the physical mitigation efforts, the County has implemented public education, awareness, rapid emergency notification and coordinated emergency response. A task force of Federal, state and local resource managers, geologists, public safety, ADOT, and National Weather Service personnel have partnered to provide for a safer and better informed Oak Creek Canyon community.

FUTURE OPPORTUNITIES

Opportunity for Stewardship Contracting and Sustainable Forest-Based Enterprises

Stewardship contracting can achieve forest management while meeting local and rural community needs as well as create renewable energy businesses. Forests can be a source of renewable biomass energy, a less-polluting energy source that can reduce dependence on foreign fossil fuels. Biomass utilization of materials from restoration treatments can create jobs and support local economies while assisting the complementary goals of community protection and forest restoration. Some costs of

restoration would be offset, because forest and wood-product enterprises would pay for harvested material such as saw logs, small-diameter trees, and woody biomass. There would be no need to pay for dead tree removal and disposal.

The stewardship contracting procedure allows forest administrators to take factors other than bid price into consideration when awarding the contract. Issues such as local job creation, how the material would be utilized, and the use of local subcontractors are important aspects of the decision. This allows smaller local businesses to outbid larger timber companies for the contract. Western communities and public land managers have been struggling for years to develop markets for the small diameter material that results from fuel reduction activities. Stewardship contracting would create the market for small-diameter wood. Markets for a sustainable small diameter industry are dependent on government commitments through long-term contracting agreements.

Example of Stewardship Contract

The White Mountain Stewardship Contract on the Apache-Sitgreaves National Forest is designed around the goal of building a small-scale woody biomass industry based on the need for hazardous fuel reduction treatments following the devastating 486,000 acre Rodeo-Chedeski Fire of 2002.

This contract is the largest of its kind and covers fuel reduction and treatment of up to 15,000 acres per year for the next ten years. The contract was awarded to Future Forest, which is a partnership between a wood contracting business and a wood pellet manufacturing company that produces pellets for heating wood stoves. A local bio-energy plant also purchases 50,000 tons of limbs, tree tops, and small trees from Future Forest every year. A power plant that is being constructed in the area to produce green power credits for Arizona power companies is also expected to buy 170,000 green tons of biomass annually. Other businesses that are taking advantage of the woody materials that Future Forest can provide include a custom log home business, a post & pole operation, a chemical wood hardening company, and a small-diameter sawmill. The Contract supported 15 firms with total expenditures of almost $16 million. The forestry firms employ 245 full time employees with an additional 85 created through the multiplier process.

Increased Funding for Hazardous Fuels Reduction

There is an opportunity to reduce treatment costs by increasing the value of small trees thinned. Strategic planning of treatment types and sequencing can reduce per-acre costs by positioning relatively costly mechanical treatments in a way that facilitates wildland fire use, comparatively less expensive across broader landscapes. Reduced treatment costs would create increased funding for hazardous fuels reduction. This will provide assistance to community property owners for vegetation reduction on property sites, which create a fire hazard for the community. Ultimately, hazardous fuels reduction treatments will ensure a safer community for residents with protection from and prevention of wildfires.

Paradigm Shift from Funding Fire Suppression to Funding Fire Prevention

Public awareness and support can lead to social changes in thought patterns that would encourage a proactive approach in preventing catastrophic wildfires through long term restoration, community protection and fire management. From my County's perspective, a proactive approach is far more responsible than a reactive approach in dealing with the social, economic, and environmental damages following catastrophic fires in our community.

CONCLUSION

Coconino County has successfully used the Healthy Forest Restoration Act to create collaborative Community Wildfire Protection Plans to assist our communities in prioritizing fuel management projects. The County developed partnerships with Federal land management agencies, state agencies, cities, adjacent counties, universities, scientists and environmental groups to create strategies to mitigate and reduce the risk of catastrophic wildfire. Importantly, HFRA has provided streamlined compliance work under the National Environmental Policy Act (NEPA) for fuel management projects.

As we move forward, Coconino County encourages increased funding to federal land management agencies and to the state to create the financial capacity for significant forest restoration treatments. We support increased funding to enable communities, stakeholder groups, and tribes to collaborate in land management activities. These points are consistent with the Governor's Forest Health Advisory Council's Statewide Strategy.

Coconino County encourages federal agencies to emphasize preventative treatments through active management over suppression efforts when setting priorities.

For example, the FY2006 enacted level for the USDA Forest Service included $282 million for hazardous fuels treatment compared to $690 million for fire suppression. In addition, Congress should use the appropriations process to change the emphasis from suppression to treatment.

Coconino County is excited at the possibility of bringing a wood utilization industry to Northern Arizona and look to the federal agencies and Congress to help with this effort. Stewardship contracting is crucial to successfully implementing this critical economic development opportunity and to re-establishing a healthy forest ecosystem.

Mr. GRIJALVA. Thank you very much, Supervisor. And let me turn now to the Forester from the State of Georgia, Mr. Farris.

STATEMENT OF ROBERT FARRIS,
ACTING GEORGIA STATE FORESTER

Mr. FARRIS. Good afternoon. On behalf of the Southern Group of State Foresters and the State of Georgia, I am pleased to present you with our views related to wildfire preparedness and funding. Thank you, Mr. Chairman and Members of the Subcommittee, for your invitation to participate.

I would like to start with a comment on Mr. Bishop's comment about the relative humidity here in Washington. In Georgia over the past several months, with relative humidities in the 20 percent range and winds blowing 20 to 30 miles per hour, you would have felt right at home if you had been down visiting in Georgia.

Our firefighters have been very thankful for the recovery of some of the relative humidity that we have seen recently here.

The South is in the middle of the worst fire season in modern history. So far in 2007, the southern region has had over 28,000 fires that have burned over a million acres and 404 structures. Just this past month, four fires merged together in Georgia and Florida to create the largest fire in recorded history in the Southeast.

As far as values, currently our preliminary estimates are $48 million of timber loss in Georgia, $33 million of timber loss in Florida. And this will be impacting the local economy for years to come, the forestry-dependent economy.

We have had real problems with smoke impacting not only Georgia and Florida, but also Alabama and Tennessee. These fires have impacted the infrastructure, resulting in numerous highway closures, closures of airports, railroads, school closures, disrupting utility services, as with any natural disaster. Numerous evacuations have occurred in Georgia, with over 10,000 home evacuation days in Georgia.

Georgia alone over this past fiscal year has had over 9,000 wildfires that have burned more than 550,000 acres. To put that in perspective, typically, on a 10-year average in Georgia, we have about 8,000 fires that burn approximately 40,000 acres. So our losses this year are 13 times normal.

Even after as much as six inches of rain from tropical storm Barry, some of our fires continued to burn in the organic soils throughout Southeast Georgia. These fires come on the heels of the horrendous fire activity in Texas and Oklahoma last year that burned over 1.7 million acres of forest land.

Fire is certainly not anything new to the South. Typically, the southern region experiences more than half of the wildfires in the

nation, and conducts the vast majority of the prescribed burns in the country.

For example, the southern region averages about 40,000 wildfires per year, and conducts over 225,000 prescribed burns on more than 6 million acres. In Georgia alone, we average prescribed burning about a million acres per year.

As opposed to the West, over 90 percent of the forested land in the South is in private ownership. The ability to effectively suppress and minimize losses from large-scale wildfire is becoming increasingly difficult to the WUI that we keep mentioning here. The divestiture of industry lands is also significantly impacting our ability to respond to wildfires, with the loss of over 500 industry-equipped tractors that were once an integral part of our fire response.

Again, to refer back to Georgia, back in 1989 we had 180 industry tractors equipped with fire plows that assisted us with the fire control. Today, we only have 20.

The South has 50 percent of the wildland-urban interface in the nation. Again referring back to Georgia, Georgia has 23 of the 100 fastest-growing counties in the nation. Virtually every fire in the South is a threat to homes and communities.

I know that it is not possible to be 100 percent prepared to address the kind of fires we have been experiencing this year and last year; however, preparedness can help reduce the impacts to homes, infrastructure, and help protect the public and firefighter safety.

There are several areas that I believe are key to being adequately prepared. One is early detection and rapid response. In the South we use single-engine airplanes to quickly detect fires and guide crews to those fires. Well-trained and equipped firefighters are critical, in addition to cooperative agreements that we have with the Federal fire agencies, the South also has two interstate compacts that prove critical to mobilizing over 3,000 firefighters and cooperators into the state this year, from 44 different states across the Nation to assist Georgia.

Homeowner education is important. The development of community wildland protection plans and the use of Firewise are important to educating homeowners.

Fuel treatments are important. Treating forest-reduced fuels around communities and constructing fire breaks is of paramount importance. Prescribed fire is by far the most cost-effective and efficient means of reducing fuels in the South.

State fire assistance funds which come to the states through the U.S. Forest Service are extremely important for state wildfire preparedness. The Southern Group of State Foresters and the National Association of State Foresters are part of a national coalition advocating expansion of the State Fire Assistance Program to adequately address wildland fire in the U.S.

It is estimated that $145 million is needed in the Fiscal Year 2008 appropriation for wildfire control. Budget constraints may not support this much increase; however, these figures do accurately reflect the true funding needs.

Attached to my written comments is a briefing paper from the State Fire Assistance Coalition that provides further details.

Thank you, Mr. Chairman and Members of the Subcommittee, for the opportunity to present our thoughts.

[The prepared statement of Mr. Farris follows:]

Statement of Robert Farris, Acting State Forester of Georgia

On behalf of the Southern Group of State Foresters and the State of Georgia, I am pleased to present you with our views related to wildfire preparedness and funding. Thank you Mr. Chairman and members of the Subcommittee for your invitation to participate.

The South is in the middle of the worst fire siege in modern history. So far in 2007, the Southern Region has had over 28,000 wildfires that have burned more than a million acres and 404 structures. In late May four fires burned together in Georgia and Florida creating the South's largest fire in recorded history. Smoke has impacted air quality not only in Georgia and Florida but also in Alabama and Tennessee. These fires have impacted infrastructure resulting in numerous highway closures including interstates, disrupted power and telephone service and caused airport, railroad and school closures. Numerous evacuations have been ordered resulting in over 10,000 home evacuation days in Georgia. Georgia alone has had over 8,900 wildfires that have burned more than 550,000 acres. Even after as much as six inches of rain from Tropical Storm Barry, some of the fires continue to burn in organic soils of the Okefenokee area. Obviously these fires are unimpeded by land-ownership and political boundaries. One of these large fires started on private lands in Georgia and burned into the Okefenokee Wildlife Refuge. Another fire started inside the refuge and burned on a state forest, private land, and the Osceola National Forest. These fires come on the heels of the horrendous fires in Texas and Oklahoma last year in which 5,700 fires burned more than 1.7 million acres in those two states.

Fire is certainly nothing new to the South. Typically the Southern Region experiences more than half the wildfires in the nation and conducts the vast majority of the prescribed burns in the country.

For example the Southern Region averages about 40,000 wildfires per year and conducts over 225,000 prescribed burns on more than 6 million acres. The vast majority of these prescribed burns are conducted by private non-industrial landowners. Over 90 percent of the forested land in the South is in private ownership.

The ability to effectively suppress and minimize losses from large scale wildfire has become increasingly difficult due to the extension of Wildland Urban Interface development into the forested landscape. Fragmentation of the forest and expansion of multiple ownerships has made fire management more complex. The divestiture of industry lands has also significantly reduced the availability of firefighting resources—over 500 industry tractor plow units that were once an integral part of initial and extended attack capabilities in Southern Region are no longer available. The large number of fires in the South is compounded by the fact that according to a study done by the University of Wisconsin—Madison, the South has over 50 percent of the wildland urban interface (WUI) in the nation. The recently completed Southern Wildfire Risk Assessment identified over 50,000 communities or other populated areas at high or very high risk from wildfires in the South. Virtually every fire in the South is a threat to homes and communities.

I am not sure that it is possible to be 100 percent prepared for the kind of fires that we have experienced this year with fire spotting up to a mile in advance of the flaming front. However, preparedness can help reduce the impacts to homes and infrastructure and help protect public and fire fighter safety. There are several areas that I believe are key to being adequately prepared to deal with fires. Such as:

- Rapid detection—States in the South use single engine airplanes to quickly detect new fire starts and to guide fire crews to the fires.
- Well trained and equipped fire fighters—In addition to using cooperative agreements with the federal wildland fire agencies, the South has two interstate forest fire compacts that were approved by Congress in 1954. These compacts provide a legal means for states to share fire fighting resources. During the period June 2006 through June 2007 the two southern forest fire compacts provided:
  - 79 Dozers/Tractor Plows
  - 65 Engines
  - 3 Helicopters
  - 2 Single Engine Aircraft
  - 237 Miscellaneous Equipment

○ 9,323 Personnel Days of Assistance

These resources are largely available for national deployment and for support of federal jurisdiction fires because the southern states have prepared to handle wildfires on private lands. SFA plays a major role in this preparedness.

- Homeowner education—Educating and encouraging home owners to protect their property by providing defensible space. The development of Community Wildfire Protection Plans and the use of programs such as Firewise are important elements in educating homeowners as to the need to take responsibility for taking measures to protect their homes from wildfire. State forestry agencies are the heart of the national Firewise program.
- Fuel Treatments and Pre-constructed fire breaks—Treating forests to reduce fuels around communities and constructing fire breaks is paramount to home and community protection. Prescribed burning is by far the fastest and most economical way to reduce fuels in the South. Because of the long growing season, fuel treatments in the South must be repeated every three to five years to remain effective.

Some of the areas of concern related to wildfire preparedness include:

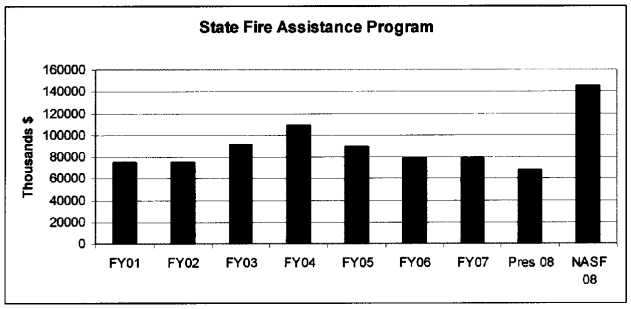
- A shortage of heavy airtankers and heavy helicopters on national contracts.
- Shortages of key wildfire management personnel such as safety officers, which may be related to concern over liability or other issues.
- Air quality issues related to prescribed burning for fuel reduction. As the Environmental Protection Agency (EPA) issues evermore stringent air quality standards, prescribed burning for fuel reduction becomes more difficult.

State Fire Assistance (SFA) Funds which come to the states through the U.S. Forest Service are extremely important for state wildfire preparedness. The State Fire Assistance Program is the fundamental federal assistance program to states for developing preparedness and response capabilities for wildland fire. Improved response efficiency also reduces fire size and subsequent suppression costs. Since FY 02 about 165,000 wildland firefighters have received training through SFA that has also enhanced interagency coordination on federal lands. Moreover, approximately 65 percent of the funds have been used to mitigate high-priority hazard fuel situations on 470,000 acres within wildland-urban interface areas.

State Fire Assistance is an essential funding source for the development of Community Wildfire Protection Plans and directly helped over 19,000 communities in FY 2005 to prioritize their preparedness and mitigation efforts; however, much remains to be done.

The FY 2001 Interior and Related Agencies Appropriations Act directed the Secretaries of Agriculture and Interior to develop a joint public and private sector 10-year strategy for reducing wildfire risk and improving forest health nationwide. The Strategy was recently updated (December, 2006) and calls for increased interagency coordination and close partnerships with communities to improve fire prevention and suppression, reduce hazardous fuels, restore ecosystems and promote community assistance. Such goals are only achievable through appropriate and sustained levels of funding for the State Fire Assistance Program.

The Southern Group of State Foresters and the National Association of State Foresters are part of a national coalition advocating expansion of the State Fire Assistance Program to adequately address wildland fire in the U.S. It is estimated that $145 million is needed in the FY 08 appropriation for State Fire Assistance to develop and maintain sufficient preparedness and protection capabilities. Extraordinary measures will also be needed to assist landowners with recovery, reforestation, and fire mitigation efforts to replace damaged forestlands.



Attached to my written comments is a briefing paper from the State Fire Assistance Coalition.

Thank you, Mr. Chairman and members of the Subcommittee, for the opportunity to present our thoughts.

State Fire Assistance

Fact Sheet

American Forests

Idaho Conservation League

National Association of Counties

National Association of State Foresters

Society of American Foresters

The Nature Conservancy

The Wilderness Society

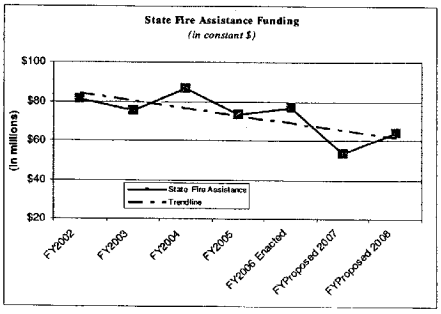
Western Governors' Association

In 2001, the U.S. Forest Service and the Department of the Interior identified over 11,000 communities adjacent to federal lands that are at risk from wildland fire. Beyond these borders, State Foresters conservatively estimate 45,000 communities at risk. Over 80% of all wildland fires in the last five years have occurred on state and private lands. Population pressures in these wildland-urban interface (WUI) communities will continue to grow with the expectation of approximately eight million additional homes built in the WUI by 2010.

With increased funding, State Fire Assistance (SFA) is the federal program that will facilitate successful wildland fire preparedness and management by integrating private lands into landscape-scale fuel mitigation and planning. The proactive planning and preparedness assistance provided by State Fire Assistance is key to the long-term reduction of wildfire suppression costs.

- SFA was developed in the Cooperative Forestry Assistance Act of 1978 to provide financial and technical assistance to states and communities for wildland fire management. It is funded under State & Private Forestry and Wildland Fire Management.
- SFA helps ensure preparedness of state and local firefighting resources, enabling them to effectively address all hazard events as well as respond to wildland fire situations.
- SFA is the only federal fire program that is designed to provide funding for fuel reduction on non-federal lands, regardless of their proximity to federal lands – a crucial part of achieving the goals of the 10-Year Comprehensive Strategy and the Healthy Forests Restoration Act.
- SFA helps communities develop Community Wildfire Protection Plans (CWPPs) – key tools in helping communities prepare for wildland fire.
- SFA educates homeowners on fire safety, particularly through the FIREWISE program.

Fire funding began increasing in FY01 with the initiation of the National Fire Plan. However, funding for State Fire Assistance has been on a downward trend since FY02 (shown by the dotted line), with the largest decrease since FY04. In fact, in FY05-FY07, the President's Budget recommended cuts of over $20 million to this program. For FY07, this equated to a proposed 30% reduction. The FY08 budget proposes a 14% reduction (from $78.7 million to $68.1 million).



Even with the federal funds matched dollar-for-dollar, this downward funding trend makes the program increasingly difficult to implement.

- **SFA helped 19,000 communities in FY05, only a fraction of the communities-at-risk across the country. At current funding levels, with the conservative estimate of 45,000 communities, each community would receive approximately $1,700.**

- **Due to budget constraints in FY04, Western State Fire Managers were only able to fund 86 of the 204 applications. Double the western funding allocation, $30 million instead of $15 million, would have been needed to meet the demand.**

Examples of Accomplishments Using State Fire Assistance Funding:

- Since FY02, 470,000 acres of hazardous fuels have been treated in and around communities. These treatments help achieve the goals of the 10-Year Comprehensive Strategy and the Healthy Forests Restoration Act by reducing hazardous fuels where most necessary – in the WUI – and making it safer for firefighters.

- Over 1,100 Community Wildfire Protection Plans covering over 3,300 communities have been completed to help prioritize wildfire mitigation efforts.

- The Southern Wildfire Risk Assessment was developed by the Southern Group of State Foresters to prioritize projects – allowing scarce resources to be used where needed most.

- Since FY 02, 165,000 wildland firefighters have received training, enabling them to work seamlessly with firefighters from the federal land management agencies.

- In 2005 State Fire Assistance funds assisted the Southern State Forestry Agencies in responding to over 35,900 wildfires that burned 600,000 acres.

In these fiscally constrained times, effective wildland fire management requires partnerships between agencies and communities. Funding hazardous fuels reduction on federal lands is critical, especially where these lands are in a WUI, and decisions about fuels reduction on federal lands needs to be done in conjunction with affected communities, including state and local agencies. An exclusive focus on federal lands, however, is an incomplete solution and will ultimately undermine mission success. State and private lands must be considered through a landscape-scale approach to planning and implementing hazardous fuels reduction projects if we are to effectively meet the highest priority of federal fire policy[1] – protecting communities threatened by wildland fire. The recently updated Implementation Plan for the 10-year Strategy demonstrates the needed investment in SFA. SFA is the primary federal vehicle for community fire assistance - Goal IV of the Strategy - which is the most important aspect of creating wildfire-ready communities in fire-adapted landscapes.

Effective wildland fire management requires successful partnerships and cooperation between agencies and communities, which can only occur with increased funding for State Fire Assistance and clearly coordinating efforts for fuels reduction activities on federal, state and private lands. The National Association of State Foresters estimates SFA funding needs for FY 2008 at $145 million. While budget constraints may not support this much of an increase over previous years, the number should be considered as an accurate reflection of funding needs.

[1] The 1995 Federal Wildland Fire Management: Policy and Program Review and its 2001 Update both recognize "...public safety is the first priority in every fire management activity" and the 2000 Report to the President states "As a first priority, the Departments will continue to provide all necessary resources to ensure that firefighting efforts protect life and property."

Mr. GRIJALVA. Thank you very much, sir. Let me now turn to Michael DeBonis, Southwest Region Director, Forest Guild. Sir.

STATEMENT OF MICHAEL DEBONIS, SOUTHWEST REGION DIRECTOR, FOREST GUILD

Mr. DEBONIS. Good afternoon, Mr. Chairman and Members of the Subcommittee. Thank you for the opportunity to testify on the subject of wildfire preparedness, and specifically the relationship between wildfire and poverty.

The Forest Guild is an organization of more than 500 foresters and allied professionals who manage our country's forest lands and advocate for ecologically sound forest practices.

This testimony focuses on three key points for Congress to consider when evaluating the Federal levels of assistance necessary to ensure that low-capacity communities at risk to wildfire have the resources to reduce their risk.

First, many rural communities at risk to wildfire are also areas with significant poverty. Many of these communities have lower capacity to cope with fire-related disruptions of economic activity and social services, and risk losing more of their assets when their homes or their communities burn.

Second, Federal agencies need better monitoring systems and performance measures for fuel reduction and forest restoration treatments to direct resources and track impacts in rural low-capacity communities.

Third, a designation for low-capacity communities will increase the ability of Federal agencies and Congress to identify, assist, and monitor impacts in communities that need the most help.

Each year the increasing risk of wildfires is illustrated by catastrophic fires affecting communities all across the United States. While the impacts to the general public are most often illustrated by images of large homes destroyed by wildfire, the significant and long-term effects on low-income communities often go unnoticed.

The 2005 study by Resource Innovations and the National Network of Forest Practitioners investigated whether communities most at risk from wildfire are able to access and benefit from Federal programs established to serve these communities. In other words, are the dollars, assistance, and fuels reduction projects hitting the ground in areas that are most at risk.

The report showed a higher percentage of poor households are located in inhabited wildlands, areas which are not considered part of the Federally defined wildland-urban interface, the areas that Federal agencies and Congress have prioritized to receive the majority of wildfire preparedness funds.

Excluding inhabited wildlands from the Federally defined wildland-urban interface is one example of how well-meaning policies and programs can exclude low-income communities. The Federal government needs to ensure that rural low-income communities are not overlooked in hazardous fuel reduction programs.

Mr. Chairman, Federal agencies need better monitoring systems and performance measures for fuel reduction forest restoration treatments for the direct resources and tracked impacts of rural low-income communities.

Current performance measures use traditional input-output approach, such as acres treated and cost per acre. These measures incur short-term actions that rely on the quickest and cheapest way to treat the easiest acres, an approach that does not prioritize community watershed or socioeconomic health.

Yet there are opportunities for Federal agencies to work collaboratively with non-governmental community partners to develop performance measures that direct capacity and poverty in the context of wildfire preparedness.

Finally, Mr. Chairman, I recommend establishing the designation for low-capacity communities, so Federal agencies can identify and direct appropriate resources to those communities that need the most help. Such a designation should be used in assessing com-

munities to target financial and technical assistance, wildfire risk assessments at a state and local level, and monitoring outcomes and performance measures for a range of Federal land management agency programs.

The agencies should engage in a collaborative process with community-based forestry organizations to develop a designation and a strategy for its use.

In closing, I offer the following recommendations for the Subcommittee as they explore responses to these issues. Recognize that some communities have a lower capacity to cope with fire-related destruction, and risk losing more when their homes and assets burn.

Establish a designation for low-capacity communities that fire agencies can use to identify and direct appropriate wildfire preparedness resources, and design performance measures to ensure that assistance is applied in an equitable and appropriate way.

Thank you for the opportunity to comment on wildfire preparedness and the relationship between wildfire and poverty. The Forest Guild supports your work to increase wildfire preparedness in our nation's public lands, and your efforts to ensure that all communities, regardless of financial resources and social capital, have access to Federal assistance and resources.

I welcome any questions that you have.

[The prepared statement of Mr. DeBonis follows:]

Statement of Michael DeBonis, Southwest Region Director, The Forest Guild, Santa Fe, New Mexico

Good morning Mr. Chairman and Members of the Subcommittee. Thank you for the opportunity to testify on the subject of wildfire preparedness and specifically the relationship between wildfire and poverty.

My name is Michael DeBonis and I am the Southwest Region Director of the Forest Guild. The Forest Guild is a national organization of more than 500 foresters and allied professionals who manage our country's forestlands and advocate for ecologically sound forest practices. The mission of the Forest Guild is to practice and promote ecologically, economically, and socially responsible forestry—excellent forestry—as a means of sustaining the integrity of forest ecosystems and the human communities dependent upon them. The Guild engages in education, training, policy analysis, research, and advocacy to foster excellence in stewardship, support practicing foresters and allied professionals, and engage a broader community in the challenges of forest conservation and management. The Forest Guild's Southwest program is built on 20 years of experience developing and managing forestry-related programs with rural, forest-based communities and partners in the region. The Forest Guild is also a member of the Rural Voices for Conservation Coalition (RVCC). RVCC is a coalition of western rural and local, regional, and national organizations that have joined together to promote balanced conservation-based approaches to the ecological and economic problems facing the West.

This testimony focuses on the programs and levels of assistance necessary to ensure that low-income communities at risk to wildfire have the resources to reduce their risk. This testimony presents critical information about the relationship between wildfire and poverty and three key points for Congress to consider:

1. Many rural communities at risk to wildfire are also areas with significant poverty. These communities have lower capacity to cope with fire-related disruptions of economic activity and social services, and risk loosing more of their assets when their homes or their communities burn.
2. Federal agencies need better monitoring systems and performance measures for fuel reduction and forest restoration treatments to direct resources and track impacts in rural, low-income communities.
3. A designation for low-capacity communities will increase the ability of federal agencies and congress to identify, assist, and monitor impacts in communities that need the most help.

1. Many rural communities at risk to wildfire are also areas with significant poverty.

Each year, the increasing risk of wildfire is illustrated by the catastrophic wildfires affecting communities all across the United States. In 2006, over 96,000 wildland fires in the U.S. burned approximately 10 million acres, according to estimates from the National Interagency Fire Center. While the impacts to the general public are most often illustrated by images of large homes destroyed by wildfire, the significant and long-term affects on low-income and underserved communities often go unnoticed.

A 2005 study by Resource Innovations and the National Network for Forest Practitioners, Mapping the Relationship between Wildfire and Poverty, (Lynn and Gerlitz 2005) examined the relationship between wildfire and poverty. The study used socioeconomic and ecological data to investigate whether communities most at risk from wildfire are able to access and benefit from federal programs established to serve these communities. In other words, are the dollars, assistance, and fuels-reduction projects hitting the ground in the areas that are most at risk? The study resulted in a series of maps, illustrating the relationship between poverty, federal land ownership and Wildland Urban Interface (WUI) classification—the areas that federal agencies and Congress have prioritized to receive the majority of funds under the national fire plan.

The research indicated that a higher percentage of poor households are located in inhabited wildland areas, which are not considered part of the federally defined WUI. The report also showed that there is a relationship between poverty and federal land ownership, with more poor households located in close proximity to federal lands. The study indicated that the federally defined WUI is based on residential density that excludes many inhabited forest areas. Expanding the analysis to include wildland intermix, the less densely populated areas that are not included in the WUI, which we refer to from here on as "inhabited wildlands", allowed the researchers to include significant portions of rural, inhabited land in areas vulnerable to wildfire.

Results from the Wildfire and Poverty study indicate that, in general, there are more households in poverty in inhabited wildland areas than there are in the WUI or in areas outside of the vegetated wildlands. The federally defined WUI is one example of how well meaning policies and programs can exclude low income communities. The map of the United States (Attachment 1) illustrates the data described above and provides a visual representation of the relationship between wildfire and poverty. The map illustrates areas where 20% of households or more are low-income households in WUI and inhabited wildland areas. The map indicates a tremendous amount of inhabited wildland, particularly in the western United States, that is not considered part of the WUI under the Federal Register definition. This inhabited wildland area also has relatively high level of poverty.

State scale analyses echo the national scale findings of the Wildfire and Poverty study. For example, more than half of the communities at highest risk from wildfire in Oregon are low income. The Oregon Communities at Risk assessment identified and assessed the relative risk to wildfire in over 560 communities (Oregon Dept of Forestry 2006). The assessment assigned each Oregon community at risk from wildfire with a low, moderate, or high risk rating for hazard, risk, values, protection capability and structural vulnerability. Preliminary findings from Resource Innovations, in the University of Oregon's Institute for a Sustainable Environment, indicate that of approximately 155 communities at high risk to wildfire, 54% are communities where over half of the population are very-low income.

Not only are many rural communities at risk from wildfire and limited by poverty, but they can be excluded from the current definition of WUI. The federal government needs a broader definition for WUI to ensure that rural low-income communities are not overlooked when agencies prioritize areas for hazardous fuels reduction.

2. Federal agencies need better monitoring systems and performance measures for fuel reduction and forest restoration treatments to direct resources and track impacts in rural, low-income communities

Wildfires and the related government roles and responsibilities for federal wildland management are prominent today because of the increased severity of fires on and around public lands. In recent years, numerous laws, strategies, and implementation documents have been issued to direct federal efforts for wildfire prevention, firefighting, and recovery. Reliable national-level information and monitoring are essential to ensure good decision making, agency accountability, and to assist communities in reducing wildfire risk.

Current performance measures developed by the agencies use a traditional input-output approach, such as "acres treated" and "cost per acre." These measures encourage short-term actions that rely on the quickest and cheapest way to treat the "easiest" acres, an approach that does not prioritize watershed or community socio-economic health. Furthermore, current measures do not gauge agency progress towards collaboration, rural wildfire protection, or other actions necessary for inclusive and integrated forest stewardship. Consequently, current measurements fall short of responding to actual performance of restoration goals. The Rural Voices for Conservation Coalition developed a performance measure issue paper in 2006 that provides recommendations for performance measures related to low-capacity communities, collaboration, and capacity building (www.sustainablenorthwest.org/pdf/policy/monitoring/perfmeasures.pdf).

In September 2006, the Office of the Inspector General issued an audit report on the implementation of the Healthy Forests Initiative. The report found that USFS lacks a consistent analytical process for assessing the level of risk that communities face from wildland fire and determining if a hazardous fuels project is cost beneficial. The report concluded that without uniform, national criteria, there is no way to allocate funds to the most critical projects. (USDA Inspector General 2006).

The findings of the OIG report hold true when analyzed at the regional scale. A recent study by the Forest Guild reviewed the legal and administrative hurdles facing fuel reduction projects on the U.S. Bureau of Land Management's Medford Oregon District and the Rogue River-Siskiyou National Forest (Evans and McKinely 2007). The report concluded that, overall, the federal government needs to improve its record keeping and increase public participation in planning fuel reduction treatments.

A crucial element of monitoring fuel reduction projects is their effect on low-income communities. However, federal agencies currently lack adequate monitoring systems and performance measures to gauge the benefits of Forest Service programs in low-income and low capacity communities. In fact, in some cases, assistance has been given to wealthier communities to the detriment of less well off communities. During the Fiscal Years 2001 and 2002 in New Mexico, all of the $685,000 awarded for private land went to reduce fuels in wealthier, bedroom communities of Albuquerque rather than the predominantly economically distressed and forest-dependent communities of the Manzano Mountains (Morton 2003).

Though there are challenges to efficiently treating the fire threat in our nations forests, there are also opportunities for the federal agencies to work collaboratively with non-governmental, community partners to develop performance measures that address capacity and poverty in the context of wildfire preparedness. These opportunities include the annual budget allocation process for the Forest Service and BLM (tied directly to the PART process), the fire allocation process (related to LANDFIRE and Fire Program Analysis), and efforts underway by agencies and partners to address the implementation tasks and performance measures in the revised 10-year comprehensive strategy (WFLC 2006).

3. A designation for low-capacity communities will increase the ability of federal agencies and congress to identify, assist, and monitor impacts in communities that need the most help.

Rural Voices for Conservation Coalition recommends the establishment of a designation for low capacity communities that federal agencies can use to identify and direct appropriate resources to those communities that need the most help. A low capacity community may be defined as a community that lacks:

- the financial resources to invest in wildfire preparedness;
- the social capital, leadership, or governance structure to participate in collaborative processes;
- the experience and/or education to understand the dynamics at play in a restoration effort, the environmental factors at risk, and or the need for either restoration work or collaboration as a resolution and the human resources to dedicate to participating in a collaborative restoration effort.

Indicators to identify low capacity communities that agencies could use include poverty, population size (to ensure that rural communities are targeted), governance, and special needs (RVCC 2007, Evans et al. 2007). Creating a low-capacity designation will assist agencies in directing reduced cost-shares, set-asides in grants, technical assistance, training, or other types of help to communities that require the most assistance to protect themselves from wildfire.

In the past, federal programs such as the National Fire Plan and Economic Action programs have provided rural community assistance grants that are aimed at increasing community opportunities to engage in forest health, fire protection, and economic development opportunities. While these programs have been effective in

providing community assistance, there has been no systematic effort to ensure that low-income or underserved communities benefit form these and other programs.

There are ongoing efforts to identify and provide assistance to low-capacity communities at risk to wildfire. The Federal Emergency Management Agency uses a designation for small and impoverished communities. Communities within this designation have a reduced cost-share requirement for pre-disaster mitigation grants. Several counties in Oregon have integrated poverty data within their wildfire risk assessments to illustrate high risk, high poverty areas in Community Wildfire Protection Plans. Similarly, the Forest Guild in New Mexico has used a Community Capacity Index within community fire planning efforts in two separate communities, Taos County and the greater Cuba area (Evans et al. 2007).

The low capacity designation should be used in 1) assessing low capacity communities to target financial and technical assistance, 2) wildfire risk assessments at a state and local level, and 3) monitoring outcomes and performance measures for a range of federal land management agency programs. The agencies should engage in a collaborative process with community-based forestry organizations to develop the designation and a strategy for its use.

Recommendations and Conclusion

Thank you for the opportunity to comment on wildfire preparedness and the relationship between wildfires and poverty. Your bi-partisan work to increase wildfire preparedness on our nation's public and private lands is commendable.

I would like to provide several recommendations for the Subcommittee as they explore alternative responses to these issues. These recommendations are based both on my own experience and on discussions with community-based forestry partners and the Rural Voices for Conservation Coalition:

- Recognize that some communities have lower capacity to cope with fire-related disruptions of economic activity and social services, and risk losing more of their assets when their homes or their communities burn.
- Expand the federal definition of WUI to include the inhabited wildlands to ensure rural low-income communities are not overlooked.
- Establish a designation for low capacity communities that fire agencies can use to identify and direct appropriate resources.
- Design measurement criteria and performance measures to ensure that assistance is applied in an equitable and appropriate way.

The Forest Guild supports the work of this Subcommittee and hopes our comments will help ensure that all communities, regardless of financial resources and social capital, have access to Federal wildfire preparedness assistance. I welcome any questions that you may have.

References

Evans, A. M., M. DeBonis, E. Krasilovsky, and M. Melton. 2007. Measuring Community Capacity for Protection from Wildfire. Forest Guild, Santa Fe, NM. http://www.forestguild.org/publications/ICCPW__07.pdf

Evans, A. M., and G. McKinley. 2007. An evaluation of fuel reduction projects and the Healthy Forest Initiative. Forest Guild, Santa Fe, NM. http://forestguild.org/publications/Evaluating—HFI—07.pdf

Lynn, K., and W. Gerlitz. 2005. Mapping the Relationship between Wildfire and Poverty. National Network of Forest Practitioners, Resource Innovations at the University of Oregon, and the United States Department of Agriculture Forest Service State and Private Forestry, Portland, OR. http://hdl.handle.net/1794/2417

Morton, J. 2003. An Evaluation of Fuel Reduction Projects in the Eastern Cibola National Forest. National Community Forestry Center, Working Paper 8, Forest Guild, Santa Fe, NM. http://theforesttrust.org/images/swcenter/pdf/WorkingPaper8.pdf

Oregon Department of Forestry. 2006. Statewide Risk Assessment. http://www.oregon.gov/ODF/FIRE/docs/PREV/06CAR.pdf

Rural Voices for Conservation Coalition. 2007. Performance Measures Issue Paper. http://www.sustainablenorthwest.org/pdf/policy/monitoring/perfmeasures.pdf

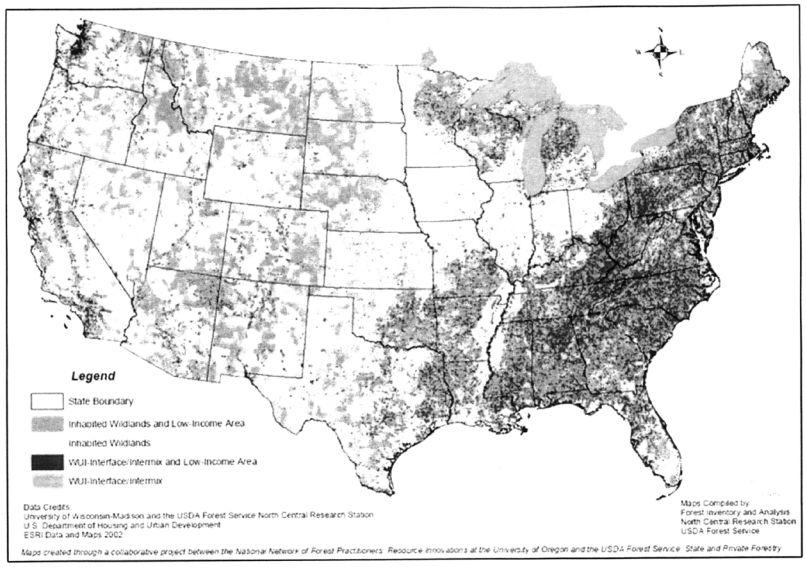
USDA Inspector General. 2006. Implementation of the Healthy Forests Initiative. 08601-6-AT, U.S. Dept of Agriculture Office of the Inspector General, Southeast Region, Washington, DC. http://www.usda.gov/oig/webdocs/08601-6-AT.pdf

Wildland Fire Leadership Council. 2006. A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment 10-Year Strategy: Implementation Plan, December 2006 http://www.forestsandrangelands.gov/plan/documents/10-YearStrategyFinal__Dec2006.pdf

Attachments

1. Map: Poverty and Wildland Urban Interface / Inhabited Wildlands http://ri.uoregon.edu/publicationspress/map—3.pdf
2. Executive Summary: Mapping the Relationship between Wildfire and Poverty.
3. Executive Summary: Measuring Community Capacity to Resist and Respond to Wildfires

Poverty and Wildland Urban Interface / Inhabited Wildlands
http://ri.uoregon.edu/publicationspress/map_3.pdf



Mapping the Relationship between Wildfire and Poverty

A collaborative project between the National Network of Forest Practitioners, Resource Innovations at the University of Oregon, and the United States Department of Agriculture Forest Service State and Private Forestry, Cooperative Programs and Research and Development

Executive Summary

Wildfires and the related government roles and responsibilities for federal wildland management are prominent in our national consciousness because of the increased severity in the last decade of fires on and around public lands. In recent years, numerous laws, strategies, and implementation documents have been issued to direct federal efforts for wildfire prevention, firefighting, and recovery. Reliable national-level information and monitoring are essential to ensure good decision making and agency accountability.

Social and economic information about communities at risk from wildfire is critical to these decisions. Despite the indispensable nature of this information for understanding communities, wildfire risk, and cooperative efforts, there is a void in policy direction within the federal agencies to collect, understand, and utilize social and economic information in wildfire management programs.

This research project uses the concept of community capacity – a community's ability to protect itself, respond to, and recover from wildfire – and examines socioeconomic indicators (one component of community capacity) as elements of wildfire risk. Utilizing socioeconomic information, as well as ecological factors, this study set out to investigate, through a geographical-information-systems approach, whether communities most at risk from wildfire are able to access and benefit from federal programs established to serve these communities. In other words, are the dollars, assistance, and fuels-reduction projects hitting the ground in the areas throughout the country that are most at risk?

This research project found that federal agencies do not have the information and data necessary to answer this question. Spatial data to inform every aspect of this research – including data regarding the ecological conditions of federal lands, wildfire protection capability in and around communities, and the federal expenditures under the national fire plan – are unavailable and/or inadequate.

Using the limited data that are currently available, this research focused primarily on the relationship between poverty and populated areas at risk to wildfire. Our research indicates that there is a relationship between poverty and federal land ownership, and that more poor households are located in close proximity to federal lands. Perhaps more significant, the research shows a higher percentage of poor households in inhabited wildland areas that are not considered part of the Wildland Urban Interface – the areas that federal agencies and Congress have prioritized to receive the majority of funds for activities under the national fire plan. The research also indicates that, in the one state analyzed, poor households are more likely in areas with low or no fire response capabilities than are non poor households.

This research should be seen as a first step to document the importance of social and economic information and community capacity in wildfire policy and implementation. The lack of information about wildfire risk, including ecological conditions, socioeconomic indicators, and resource allocation convinced us to focus our recommendations on improving federal agency understanding and use of social and economic factors through national inventory and monitoring efforts. Specific recommendations include developing a method for measuring community capacity in the context of wildfire and using this methodology to redefine the concept of risk for implementation priorities at the national level and in state, regional, and local planning and risk assessment. Federal land management agencies must also improve systems for monitoring national fire plan expenditures and the datasets that support the prioritization of these funds.

Understanding the social and economic dynamics of communities is critical for providing federal assistance that will help communities protect themselves from wildfire and respond to and recover from an event. We encourage others to build on this effort to understand the complex social, economic, and ecological factors that influence wildfire risk. Specifically, we encourage federal agencies to take steps to understand the social and economic indicators that are necessary to in understand and serve our nation's communities.

The report includes a series of recommendations to improve federal agency understanding and use of social and economic factors through national inventory and monitoring efforts, and to increase and improve assistance for low-income and low-capacity communities. A summary of these recommendations follows. The final section of the report includes a description of each recommendation and specific actions.

1. Redefine the areas prioritized for federal assistance to include rural areas with lower residential density (e.g., inhabited wildlands).
2. Improve systems for monitoring and evaluating the National Fire Plan and other federal fire-related program implementation by including social and economic, as well as ecological, information.
3. Immediately develop nationally consistent standards for monitoring National Fire Plan expenditures that will enable assessment of outcomes over time.
4. *Develop a method for measuring community capacity in the context of wildfire.*
5. Provide clear direction to federal and state land management agencies for determining "at risk" communities, giving equal consideration to social and economic factors. Target assistance and federal programs, based on community needs.
6. Integrate indicators of community capacity into state, regional, and local planning and risk assessment.
7. Increase federal support and funding to programs that target assistance to "at risk" communities.
8. Conduct case studies in high wildfire risk areas to gain more in-depth knowledge about the relationship between wildfire, poverty, and community capacity.

Study Maps

This report includes maps that illustrate poverty data, wildland urban interface and inhabited wildlands data, protection capability data, and federal land ownership boundaries. The analysis seeks to provide information on a national scale. Spatial information included in this report is provided at the county and census-block level. Therefore, the visual analysis is, in many cases, more meaningful on a state level. Consequently, the researchers have included more detailed maps and analysis for the states of Washington and Oregon as state-level examples. More information about data selection and analysis is included in the methodology and findings sections of this report.

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Measuring community capacity to resist and respond to wildfires

Wildfires have a disproportionately negative impact on those households and communities lacking adequate resources to prepare for, respond to, and recover from catastrophic events. While all communities risk tremendous losses in the face of wildfires, some communities have lower capacity to cope with fire-related disruptions of economic activity and social services, and risk loosing more of their assets when their homes or their communities burn.

Community capacity is the collective ability to prepare for, respond to, and recover from disasters. Community capacity in the context of wildfire is the ability to respond to wildfire threat through fuel reduction efforts, creating defensible space around structures, improving fire suppression facilities, and restoring forest ecosystems.

The Forest Guild developed an "Index of Community Capacity for Protection from Wildfire" (ICCPW) as a quantitative measure to rank communities according to their ability to prepare for, respond to, and recover from wildfire events. The ICCPW is designed to integrate social, human, financial, and political capital indicators into a single measure. The following 9 indicators are combined to create the ICCPW.

- Social Capital
  - Vulnerable populations (Age Dependency Ratio)
  - Vulnerable populations (Percent without disabilities)
  - Vulnerability of minorities (Female only headed households)
- Human Capital
  - Education (Percent with high school diploma)
  - Employment (Percent employed)
  - Cultural diversity (Percent of population employed)
- Financial Capital
  - Income (median income)
  - Poverty (percent of community below the poverty line)
- Political Capital
  - Political participation (voter turn out)

The community capacity index coupled with biotic and abiotic measures of fire risk can be a valuable tool in identifying communities most at risk to wildfire and the highest priority uses for available financial and human resources. As no index of community capacity can exactly measure all facets of a community's strengths or weaknesses, it is critical to balance all assessments and quantitative measures against local knowledge and qualitative information. A full report on the use of the ICCPW in Taos County, New Mexico is available at: http://www.forestguild.org/publications/ICCPW_07.pdf

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Mr. GRIJALVA. Thank you very much. Let me turn now to the Forester for the State of Arizona. Mr. Rowdabaugh, your testimony, please. Thank you.

STATEMENT OF KIRK ROWDABAUGH, ARIZONA STATE FORESTER

Mr. ROWDABAUGH. Yes, sir. Thank you, Chairman Grijalva, Members of the committee, for this opportunity to testify on behalf of the Western Governors Association and the State of Arizona.

America's fire environment has changed. The recent adverse trends in fuels, weather, and demographics are projected to continue unabated in the foreseeable future. More than half the na-

tion's forests are unhealthy, and are now subject to frequent outbreaks of insect and disease and extreme fire behavior. Prolonged drought and global climate change have exacerbated these forest health conditions and wildfire concerns. Forest fragmentation and the rapid expansion of the wildland-urban interface have complicated our ability to manage the landscape and to manage the fires that burn across them.

For these reasons, effective wildfire preparedness will be even more essential in the future for protecting the thousands of communities at risk, the forest-based industries that support our rural economies, and the critical watersheds that sustain our cities.

In 2002, the Western Governors Association, at the request of Congress, and in collaboration with the Departments of Interior and Agriculture, developed a 10-year comprehensive strategy for reducing wildfire risks. Congress adopted the collaborative approach developed in the 10-year strategy in its Healthy Forest Restoration Act of 2003.

Since then, the 10-year strategy has formed the basis for forest health efforts across the nation. And in December of 2006, the Western Governors and their Federal, tribal, and local partners completed an update of the implementation plan. And it called for a long-term commitment to maintaining the essential resources needed for full implementation of the 10-year strategy.

The Governors believe it is more effective and efficient and safer to thin forests and protect communities in advance of a wildfire than it is to control the fires and repair the damage after the fact.

State and local governments are doing their fair share, as well. In Arizona, Governor Janet Napolitano created both a Forest Health Advisory Council and a Forest Health Oversight Council shortly after taking office to address the state's rapidly deteriorating forest health and fire environment.

These councils have just completed a 20-year strategic plan for restoring Arizona's forests, for reducing wildfire potential, and increasing community protection. Its recommendations require action from Congress and the Federal land management agencies, as well as the Governor's office and her state agencies, county and local governments, and private citizens.

While this 20-year plan is specific to Arizona, many of its recommendations are appropriate on a national scale, especially those directed at Congress and the Federal management agencies.

The Arizona plan calls for, among other things, increasing funding for forest restoration on Federal and tribal lands, and the implementation of community wildfire protection plans.

It is important to recall that in much of the West, the Federal and tribal agencies manage the vast majority of forested lands. In Arizona, it is over 80 percent. And therefore, Federal funding is not only essential, it is also appropriate for reducing the threats to our rural communities.

Wildfire suppression costs have received a lot of attention. We know that large fire costs are highly correlated with large fire size, and that large fires represent less than 2 percent of all fires, but account for almost 95 percent of all suppression expenditures.

We know that the potential for large fires increases with adverse fuels, weather, and topography. And we know that the potential for large fires decreases with effective initial and extended attack.

Practically speaking, there isn't anything we can do about the weather or the topography. But we can manage the fuels, and we can support effective firefighting forces. This is why pre-suppression activities are so critical to controlling wildfire suppression costs.

It is imperative that sufficient investments in community assistance, restoring fire-adapted ecosystems, reducing hazardous fuels, and deploying effective firefighting resources are made to contain suppression costs and minimize losses.

Unfortunately, the increase in fire suppression costs in recent years has resulted in decreased funds available for the very pre-suppression programs that are essential to continue future suppression costs. Western Governors support proposals for a new funding mechanism to be provided to the Forest Service and Interior agencies for paying extraordinary suppression expenditures, along with implementing strict cost management controls.

We believe that Congress must resolve these critical funding issues in order to maintain effective wildfire preparedness programs.

Again, Mr. Chairman, I thank you for this opportunity.

[The prepared statement of Mr. Rowdabaugh follows:]

Statement of Kirk Rowdabaugh, Arizona State Forester, on behalf of The Western Governors' Association and the State of Arizona

Thank you Chairman Grijalva and Committee Members for this opportunity to testify before the National Parks, Forests and Public Lands Subcommittee. This testimony is presented on behalf of the Western Governors' Association (WGA) and the State of Arizona.

My testimony today will focus on perspectives from the great State of Arizona and the west at-large on the current status of wildfire preparedness and the changes needed to fully realize the benefits of preparedness relative to long-term suppression costs. My discussion points will start with progress made, or in some cases lack there of, on implementing the 10-year Comprehensive Wildfire Strategy. I will then move to discuss how we have adapted the collaborative efforts outlined in the 10-year Strategy at home, in Arizona, by discussing our comprehensive strategy which details how to deal with current and future threats to the public and private forestland within the state. And then I will conclude with a number of thoughts from a west-wide perspective on cost containment measures, firefighting needs, fuels treatments, and funding concerns.

As this hearing commences, there have been 42,628 fires that have burned over 1,475,775 acres this year. This wildfire season is forecasted to be severe and may result in a large amount of acres burned. When the Forest Service exhausts their suppression budget it has a direct impact on the agency's programmatic abilities. Fire seasons are increasingly longer and wildfires are occurring with higher frequency and these trends are projected to continue in the future.

The long range wildfire projections show that this trend of increased frequency and severity of wildfire in the West will continue into the future. For this reason, wildfire preparedness is very important to the federal agencies and state and local entities. Insect infestations, invasive species, fragmentation of forestland, increasing development in the wildland urban interface, loss of timber markets, prolonged drought and climate change all exacerbate our forest health problems and the need for increased wildfire preparedness.

10-year Comprehensive Strategy

The Western Governors' Association's Implementation Plan to the 10-Year Comprehensive Strategy *"A Collaborative Approach for Reducing Wildland Fire Risks to*

Communities and the Environment"[1] is important to discuss when speaking about wildfire preparedness. The Strategy was requested by the Congress in 2000. Since then, the Strategy and its Implementation Plan have formed the basis for forest health efforts across the nation and significant progress has been made on the ground in using locally-driven collaboration and in undertaking landscape-level planning and treatments. Congress adopted the collaborative approach developed in the Strategy in its Healthy Forests Restoration Act of 2003.

The action items agreed to in the first plan that the Governors signed with the Secretaries of the Interior and Agriculture in May 2002 have, for the most part, been completed. At the urging of WGA's Forest Health Advisory Committee, which conducted a review of the original plan in 2004, the Governors updated the plan with the federal agencies, counties, state foresters, fire chiefs and stakeholders. The goals of the plan remain the same as in the 10-year Strategy.

A collaborative approach is necessary to:

- Improve Prevention and Suppression of Wildfires
- Reduce Hazardous Fuels
- Restore Fire-Adapted Ecosystems
- Promote Community Assistance

The Implementation Plan puts additional emphasis in the following areas:

- Information sharing and monitoring of accomplishments and forest conditions to improve transparency;
- A long-term commitment to maintaining the essential resources for the plan;
- A landscape-level vision for restoration of fire adapted ecosystems;
- The importance of using fire as a management tool; and
- Continuing improvements in collaboration

The Implementation Plan was endorsed and sent to the Congress by WGA, the Secretaries of the Interior and Agriculture, the National Association of Counties and the National Association of State Foresters in December 2006[2]. WGA's 60-person Forest Health Advisory Committee, comprised of national experts on fire fighting, forest health treatments and communities' role helped draft the implementation plan.

When fully implemented, the 10-Year Strategy and the Implementation Plan will use proactive measures to improve the health of our forests as a means to prevent catastrophic wildfires. As noted above, but to reinforce, these efforts require cross boundary work, full involvement of states and stakeholders, and, most importantly, a long-term commitment of time, resources and manpower. With large fires eating up the resources that are appropriated for suppression, full implementation, with adequate funding, of all four goals of the 10-Year Strategy is a wise and economical cost-containment strategy. The efforts to date have not lived up to expectations and needs. Yes, much progress has been and continues to be made in implementing the tasks under the 10-year Implementation Plan, but the funding proposed by the Administration and subsequently funded via Congress has not reinforced all four goals of the 10-year Strategy. If one looks at funding since the inception of the 10-year Strategy, the vast majority has gone to goal one, suppression and prevention. And rightly so in many regards, as protection of life and property is first and foremost. However, without balanced and proportionate investment in the other three goals of the 10-year Strategy, we will not make the on-the-ground progress the public expects, nor get ahead of the wildfire curve.

The bottom line is that the 10-year Strategy represents a proactive and comprehensive way to address wildfire and forest health issues. Funding needs to follow the same proactive, comprehensive philosophy. More investment needs to be made in fuels reduction (goal 2), rehab and restoration (goal 3) and community assistance (goal 4). It is more cost effective and efficient to thin forests and protect communities in advance than to put out fires and repair their damage after the fact.

10-year Comprehensive Wildfire Strategy: An Arizona Evaluation

I would now like provide a good example of what we are talking about. I want to demonstrate how we in Arizona are translating the 10-year Strategy in landscape scale, comprehensive action at the state level. Governor Janet Napolitano created an Arizona Forest Health Advisory Council and the Forest Health Oversight Council in 2003 to address the increasing number, frequency and intensity of wildfires in the State of Arizona. The Councils established a subcommittee to draft a 20-year strategy and develop policy recommendations on forest health, the increase in wildland fire and community protection. The strategy has been developed by busi-

[1] http://www.westgov.org/wga/pulbicat/TYIP.pdf
[2] http://www.westgov.org/wga/press/tyip12-6-06.htm

ness people, environmentalists, ranchers, academics, elected officials, and federal, state and tribal land managers.

The Statewide Strategy for Restoring Arizona's Forests was developed with public input and sets the stage for the next 20 years of strategic and efficient restoration work. The Strategy takes into account the scientific information, the community collaboration and the economics of forest health needed to identify the future steps needed for forest restoration in the State of Arizona. As solutions are going to require everyone acting cooperatively, the Strategy recommends actions for Congress, Federal Land Management Agencies, the Governor and Executive Branch Agencies and Counties and Local Governments. All of the recommendations are based on five strategies for successfully restoring forests including:

- increasing the human and financial resources dedicated to restoring Arizona's forests and protecting communities,
- coordinating and implementing action at a landscape-scale so that limited dollars go further,
- increasing efficiency of restoration, fire management and community protection activities by prioritization,
- encouraging ecologically sustainable, forest-based economic activity by working to engage and encourage the private sector, and
- building public support for accomplishing restoration, community protection and fire management across the state

This strategy is specific to the State of Arizona but many of the recommendations can be examined at a national scale, especially the State's recommendations for Congressional action and the Land Management Agencies. The Strategy recommends increased funding to both federal land management agencies and to the state in order to increase capacity for collaborative work on restoration projects. This includes a focus on Community Wildfire Protection Plan (CWPP) implementation and fuels treatment funding which will in turn reduce national suppression costs.

Relative to the Land Management Agencies, the Strategy recommends collaborative planning and implementation across the board as well as specific items such as updating the annual Fire Management Plans. Also noted is the importance of CWPPs and the need for priority status for the implementation of projects identified by the CWPPs.

The Statewide Strategy for Restoring Arizona's Forests is an Arizona-specific document with national significance. This strategy will help guide Arizonans to use their resources in the most effective way possible and highlight the need for Congressional action and the Land Management Agencies to examine their current way of doing business. This document provides a landscape-level view that would be beneficial for the federal agencies and their partners to examine for complimentary strategies.

Cost Containment

As a starting point in any discussion of wildfire preparedness, the Forest Service and the DOI, and all wildland fire suppression entities, must be accountable for how much they are spending and how it is spent relative to wildfire suppression. The State of Arizona believes that it is important for both the Forest Service and the DOI to adopt necessary cost containment solutions in order to facilitate a decrease in wildfire suppression costs. The costs of wildfire are increasing every year and soon the 10-year average will be more than 45 percent of the total Forest Service budget.

The Forest Service and the Department of the Interior (DOI) have many recommendations from numerous internal and external sources in front of them on how to reduce suppression costs and increase fire preparedness. There are several reports that have focused on the need for increased cost containment and management practices by the federal agencies. I will touch on the two most recent reports that include recommendations that will help the agencies remain accountable for wildfire suppression costs. An additional note should be made that the Implementation Strategy for the 10-year Plan includes many important goals and strategies that will result in reduction of the suppression costs, both over the short and long-term. This is another good reason to focus on its full implementation.

The most recent and definitive assessment of cost containment was completed by the Wildland Fire Leadership Council (WFLC) in 2004 (www.fireplan.gov/reports/2004/costmanagement.pdf). On behalf of WGA, I co-chaired the Strategic Issues Panel on Fire Suppression Costs that facilitated the drafting of the report Large Fire Suppression Costs—Strategies for Cost Management. The report was endorsed by Western Governors and the WFLC. The report's recommendations provide a good

starting point for ways to provide productive rewards for good cost decisions on the ground. [3]

The Strategic Issues Panel recommended seven primary actions to contain federal fire suppression costs. The first recommended action, to increase the level of accountability for large fire costs and their impacts by allocating suppression funds on a regional or equivalent basis, was intended to provide incentives to federal agency administrators for controlling costs. It was this single recommendation that the Panel believed would provide the greatest cost savings to the federal government because wildfire costs are driven by management decisions on the ground. The recommendation has yet to be adopted in any meaningful manner although it could lead to the greatest cost savings.

Another important report offering cost containment recommendations was just completed by the Brookings Institution in May 2007. The Brookings Institution recently released a report titled Towards a Collaborative Cost Management Strategy—2006 U.S. Forest Service Large Wildfire Cost Review Recommendations. This report examines 20 fires that burned 1.1 million acres across 17 national forests in 2006. This report, conducted by an independent panel, determined that the agency had been fiscally diligent when managing the suppression activities related to these fires.

Along with reporting on the agency's fiscal diligence, the panel recommended areas for improvement related to fire suppression costs. Of import, the panel found that at best, implementation of cost containment actions could potentially result in around a 10% savings in wildfire suppression costs. It is obvious that cost containment alone will not solve our problem, but it is important to note that there are many actions the federal agencies could and still must take to improve the savings, notably incorporating and delegating cost containment considerations closer to the regional levels of the agencies.

It is worthwhile to note that the federal agencies have taken cost containment seriously and have undertaken several self-initiated cost containment measures including transitioning to risk-informed management. This measure allows for flexibility in the field and increased application of wildland fire use, a fire management method where natural fires are allowed to burn under monitored parameters. Further, the Forest Service and other agencies are moving to a centralized oversight system in order to better model fire behavior and cost. These efforts are a step towards lessening the demand on suppression dollars, but more changes are necessary to eliminate the drain on the federal agencies' budget for other programs.

Wildfire preparedness is the ability to prepare for wildfire before it happens and respond to a wildfire in the most effective and efficient manner when it happens. It is vitally important that preparedness be looked at across the spectrum of wildfire responders, federal, state and local, especially related to initial attack. Too often the focus is only on the federal preparedness level. Advancements need to be made for minimal investment in local and rural fire departments in general. This will result in significant costs savings as successful wildfire preparedness results in a reduction of the wildfire threat itself.

Suppression Costs and Related Factors

Wildfire suppression costs are increasing with every fire season. These costs will continue to rise as forest health declines. It is very important to recognize that cost containment is not the sole solution to this issue. That is not to say that the federal agencies do not have steps they can take to ensure the most efficient federal wildfire suppression apparatus. But the real story here is that a solution is needed for our current suppression budgeting crunch as explained below.

Within the Forest Service budget, suppression costs are allocated based on a 10-year average. Due to the increase in catastrophic wildfire, this 10-year average allocation increases every year. A problem arises as the Forest Service operates under an overall flat budget. Basically, their budget does not increase along with the rise in the 10-year average, meaning that all other programs under the agency get squeezed, eventually having suppression funds eat away at all the other Forest Service programs. One branch of the USFS, State & Private Forestry (S&PF), is of particular concern here as these programs provide necessary fuels treatment work, Community Wildfire Protection Plans in high-risk communities and other benefits that contribute to the reduction of suppression costs and an increase in prepared-

[3] See Testimony of Kirk Rowdabaugh, State Forester of Arizona (Co-Chairman, Strategic Issues Panel on Fire Suppression Costs) on behalf of the Western Governors' Association before the Senate Committee on Energy and Natural Resources, January 30, 2007. http://www.westgov.org/wga/testim/fire-cost1-30-07r.pdf

ness. These S&PF programs have been eroded over the years due to the ever increasing cost of suppressing large wildfires.

The astronomical suppression costs impact both types of preparedness; fire fighting and fuels treatment. As these costs continue to rise, if a solution is not found, successful initial attacks and the ability to reduce dangerous fuel levels before fires start will become a thing of the past. As suppression costs draw down the funding available for fuels treatment and preparedness activities, the ability for the agencies and other entities to work on pre-suppression activities is limited. These pre-suppression activities accomplished though numerous State & Private Forestry programs help to reduce the future suppression costs.

It is important to note that 1% of fires burn upwards of 95% of the acres and consume 85% of the total suppression costs[4]. These figures demonstrate that much of our suppression expenditures could truly be treated as emergency funding. We propose that a new fiscal funding mechanism, with strict cost management controls, needs to be found for suppression.

The National Association of State Foresters has proposed a solution to reduce suppression costs and change the current budget formula to reduce the borrowing of funds from other Forest Service programs. The National Association of State Foresters (NASF) proposes a partitioning of the Forest Service budget by introducing a budget set-aside for a flexible suppression spending account that would be linked to rigorous cost containment management controls and agency line officer incentives.

As budget pressures and cost savings are realized in this process, it needs also to be realized that those monies should be reinvested into USFS programs that reduce wildfire threat and help to further reduce suppression costs. We believe that Congress should facilitate a resolution of this funding issue in order to promote the use of appropriated dollars for the original intent of those moneys. The need for a reevaluation of wildfire suppression budgeting and the effect that the current budgeting format has on the other Forest Service programs is a crucial step in increasing the Forest Service's wildfire preparedness in the State of Arizona and throughout the West.

We believe that a solution to the ever increasing suppression costs is crucial to the future of the Forest Service. If no solution is found, the Forest Service will become the "Fire Service" and will not have a programmatic offering, just a fire fighting service.

Preparedness

As suppression costs eat up more of the federal agencies budget, the ability for the agencies, and States and locals to fight wildfire at their current success rate is impossible. Suppression costs have pulled funds from programs that enable improved initial attack, such as Volunteer Fire Assistance and Hazardous Fuels treatment. The more successful the state and local firefighters are, the larger the reduction in federal suppression costs. As the wildfire capacity of the federal agencies diminishes and the maturation and skills of the state and local firefighters increase, the need for programs that provide funding to prepare for fire and fire fighting becomes more important.

Related and of note, the recent House Interior Appropriations Subcommittee markup of the FY08 spending bill has some very insightful language relating to state and local preparedness under the Cooperative Fire Programs that we are supportive of. Allowing state and locals to pilot preparedness and suppression responsibilities on federal lands will demonstrate and prove their efficiency and effectiveness in relation to federal resources. This is not to say that a sole shift to state and local preparedness is in order, because wildland firefighting is only successful in full, cooperative partnership between the federal, state and local agencies. But it is to say that we should be experimenting with our traditional approaches to the issue of preparedness.

Another important factor essential to reducing catastrophic wildfire is community planning. CWPPs allow communities to set priorities for treatment and reduce their risk. Over 1,100 CWPPs have been completed nationally covering more than 3,300 communities and there are at least 450 plans moving towards completion. A significant problem here is that there are many fuels treatment projects that have been identified by CWPPs that are unable to be completed due to lack of funding. In Arizona alone, we have 300,000 acres identified by communities, National Environment Policy Act (NEPA) approved and in need of treatment, but implementation is slowed

[4] See NASF Federal Wildland Fire Suppression Costs: Budget Reform issue paper, May 29, 2007 http://www.stateforesters.org

by funding. These important projects hang in the balance due to the ever increasing suppression costs siphoning money from other Forest Service Programs.

The federal agencies have been partnering with state and local fire fighting departments and communities for fire fighting and for completion of work on the ground. Programs such as State Fire Assistance (SFA), which is the only federal program that supports work on private lands, are crucial to decreasing the suppression costs. The SFA program funds CWPPs, fuels treatment work on private lands, education and preparedness and in turn reduces wildfire suppression costs. NASF estimates an accurate reflection of funding needs for this program is $145 million per year. The current funding proposal from the Administration included only $68.1 million for SFA. Luckily the House FY08 Interior appropriations bill markup restored funding to last year's level.

As I explained earlier in my testimony, wildland firefighting is only successful when it occurs in full, cooperative partnership among the federal, state and local agencies. Federal agencies partner with state and local fire departments and communities for fire firefighting activities. This partnership has been damaged by the recent and unprecedented legal proceedings associated with the fatalities that occurred during the 2001 Thirtymile Fire in the State of Washington.

The legal proceedings that followed the Thirtymile Fire resulted in threats to firefighter morale, recruitment and retention, and safety; and the impacts are being felt at all levels of the national fire community. The issue of "firefighter liability" will continue to impact the ability for federal agencies and state and local fire departments to work together to fight wildland fire.

The ability for firefighters on the front line to share information during safety investigations with the agencies is paramount. This information must be candid and complete in order to improve firefighter safety and enhance risk management practices during wildland fire events. When the internal safety investigations are no longer internal documents, the ability for the agencies to conduct "lessons learned" investigations is eliminated. Along with information sharing, the scope of duty for firefighters is very important when discussing firefighter liability as well as the availability of information and resources (such as liability insurance).

The House Interior Appropriations Subcommittee markup of the FY08 spending bill included a directive that the Forest Service should report to the Committees on the "firefighter liability" situation and suggest appropriate remedies. The Committee expressed their concern about recent reports that fire fighters may be subject to personal liability for on-the-job activities during emergencies.

Individual firefighter civil and criminal liability, in the absence of obvious criminal intent, needs to be resolved on a national level. Until a solution is found that limits the civil and criminal liability of wildland firefighters, wildfire preparedness will continue to be compromised. The issue of firefighter liability impacts firefighting manpower and the ability to be prepared to fight wildland fire.

Another issue impacting wildfire preparedness is the need for an aviation strategy that addresses the current wildland firefighting needs. A significant portion of the National Interagency Aviation Strategy, especially the section on large air tankers, focuses on the past rather than the future role of aviation needs. The strategy uses the 2002 large air tanker capacity as one of the benchmarks for future aviation needs. There are opportunities to explore additional criteria for aviation needs in today's changing world of wildland fire. This should be explored in conjunction with the Blue Ribbon Panel recommendations on aviation as Phase 3 of the National Interagency Aviation Strategy is developed.

Wildfire risk within the WUI is becoming more complex and dangerous due to many factors, including drought, climate change, forest fragmentation and increasing human population. Fuels treatment and community-based stewardship projects to help restore forest health are important aspects of reducing the wildfire risk to WUI communities.

The Forest Service and DOI treated four million acres of land in 2006. Two million of those acres were in WUI areas. There are millions more acres that are in dire need of treatment. The number of acres that receive treatment will decrease as the funding for hazardous fuels reduction is diverted to fund suppression activities. Improving fuel conditions and ecosystem health on the landscape is an important part of limiting the spread of wildfire. We believe that the four million acres treated in 2006 is a commendable start, however, in the future, acres need to be treated based on priority. The current funding for hazardous fuels treatment does not allow for the treatment of priority acres, often the acres treated are the ones that cost the least to complete. For this reason, the use of "acres treated" as a metric for success does not tell the full story. The relevance of this metric should be re-examined.

Mr. Chairman, thank you for the opportunity to present the views of the great State of Arizona on wildfire preparedness.

Mr. GRIJALVA. Thank you very much, sir. And our last witness, Dr. Peter Daugherty, Oregon Department of Forestry. Sir. Doctor.

STATEMENT OF PETER J. DAUGHERTY, PhD, PRIVATE FOREST PROGRAM DIRECTOR, OREGON DEPARTMENT OF FORESTRY

Mr. DAUGHERTY. Chairman Grijalva, Ranking Member Bishop, and Members of the committee, my name is Peter Daugherty, and I am currently the Oregon Department of Forestry's Private Forest Program Director.

I am pleased to have the opportunity to testify today on an issue that is critical to the sustainability of our nation's forests. And if you don't mind, I will acquiesce to your dress code; it is quite warm in here.

I am going to briefly summarize a study I did, a peer-reviewed study I did with my colleagues, graduate student, PhD candidate Gary Snider and Professor Emeritus Brent Wood. I will then relate these study results to the situation in Oregon, and then I will conclude with three recommendations.

Prior to summarizing real briefly the study, I have a full copy, and I will respectfully submit it for the record.

Mr. GRIJALVA. Without objection, sir.

[NOTE: The study has been retained in the Committee's official files.]

Mr. DAUGHERTY. Basically, we are all aware of the worsening conditions of the forests, and so I won't belabor that point.

We were asked to look at the economics of doing restoration treatments. And now we look at the previous literature, and they are saying well, it is a very complicated problem; you have to look at the cost of fuel treatments, the values of non-market and market benefits.

But given the severity of the problem, we decided to take a much more simple approach. After all, you don't need to know the exact mass and velocity of a freight train to know that it is good policy not to continue to stand on the tracks.

So what we did is, and let us just get rid of all values except the avoided cost of large fire suppression. So let us just compare. We know we can treat these forests and save on future fire suppression costs. And we did some relatively simple avoided-cost analysis to say how much could we spend per acre to avoid the cost of these large fires.

We only included the variable costs associated with large fires. We didn't include the fixed costs of preparedness. We assumed that costs and the size of fires would remain constant, which has not turned out to be true. We also didn't include any loss to infrastructure in the wildland-urban interface, and we didn't include any loss for ecological values. We essentially assumed that a burned and an unburned forest had the same value.

And using these really conservative costs, we compared the cost with treatment and fire suppression to the cost of fire suppression without treatment. And using these conservative values, we came

up with that we could spend anywhere between $238 to $600 per acre to avoid the future cost of fire suppressions.

We conclude that the underfunding, the current underfunding of hazardous treatments do not represent an economically rational choice.

In Oregon we are facing an analogous situation, as in the Southwest. We have about 13 million overly dense acres on Federal land that are in need of high-priority treatment. In Oregon we are having these Federal fires and insect outbreaks spill over onto private lands, and that is a real issue. We are beginning to have impacts on the private lands to the point that one of our legislators suggested putting in a fire break between all Federal lands and private lands in the State of Oregon.

The lack of current investment in treatments of our Federal lands indicates that we have a lack of a clear national policy on forest sustainability and what we need to do to maintain sustainable forests.

In closing, I recommend that we need to significantly increase the investment in active forest management to achieve healthy and sustainable ecosystems for our children and grandchildren. We need to increase active management on Federal forest lands, in collaboration with state and private forest lands, to promote sustainable forestry.

And finally, we need to develop a national policy on sustainable forests to clarify and enhance the role of Federal, state, and local governments in relation to sustainable forests, promoting regional collaboration, joint planning, and coordinated action.

Thank you very much, and I will be glad to answer any questions.

[The prepared statement of Mr. Daugherty follows:]

Statement of Dr. Peter Daugherty, on Behalf of
The Society of American Foresters and The Oregon Department of Forestry

Chairman Grijalva, Ranking Member Bishop, and Members of the Committee, my name is Peter J. Daugherty, and I am the Director of the Oregon Department of Forestry's Private Forests Program. I am pleased to have the opportunity to provide testimony on an issue critical to the sustainability of our Nation's forest. I am providing this testimony on behalf of the Society of American Foresters, the Oregon Department of Forestry (ODF), and myself. The Society of American Foresters (SAF) is the national scientific and educational organization representing the forestry profession in the United States. It is the largest professional society for foresters in the world. The mission of the Society includes advancing the science, education, technology, and practice of forestry to ensure the continued health and use of forest ecosystems and the present and future availability of forest resources to benefit society. The Oregon Department of Forestry serves all Oregonians by practicing and promoting sustainable forestry intended to produce a wide range of benefits. The department offers on-the-ground guidance and other services to private landowners, helping them to improve and maintain forest health and productivity. ODF protects 16 million acres of private and public forestlands from wildfire.

Historical practices have created vast areas of unhealthy forest ecosystems in the western United States. The overly dense conditions, exacerbated by drought, have increased bark beetle mortality and the size and frequency of stand-replacing crown fires. These interconnected symptoms warn society of the jeopardy of losing these forest ecosystems. Although it has become increasingly apparent that an ounce of prevention activity is worth a pound of suppression funds, federal land-management agencies continue to allocate vastly more funds to suppression activities than to prefire hazard reduction. Without large-scale implementation of fire-hazard reduction treatments, the costs of uncharacteristic crown fires in western forests will continue to increase.

In a study conducted with Ph.D. candidate, Gary Snider, and Dr. Brent Wood, we examined the economic rationality of continuing the policy of emphasizing fire suppression activities over restoration-based fire-hazard reduction treatments. We conducted an avoided-cost analysis to answer the question of how much can we invest in prevention to avoid the continued cost of large fire suppression and rehabilitation.

We compared treatment plus fire suppression costs to the cost of fire suppression without treatments over 40 years for southwestern forests. This avoided-cost analysis estimates the amount one could invest in treatments to avoid future suppression costs for large fires. We only included the variable costs directly associated with large fire suppression; we assumed that fixed preparedness cost would continue. We assumed no increase in average number and size of large fires or in average per-acre fire suppression cost. We did not include losses and damages associated with structures, private land value, and other infrastructure associated with the wildland-urban interface in the avoided costs. We did not include changes in ecological and social values associated with restoration-based treatments. We essentially assumed that there is no difference between the value of a burned and restored forest.

Using these very conservative economic values, we found that avoided future costs justifies spending $238-$601/acre for hazard reduction treatments in the southwest. We conclude that the policy of under funding hazard reduction treatments does not represent rational economic behavior, because funding hazard reduction would pay for itself by lowering future fire suppression costs.

In Oregon, the current policy has resulted in analogous conditions. On federal lands, there are 13 million acres of over-dense forests outside of wilderness and inventoried roadless areas that are a high priority for treatment in Oregon. The majority of these acres are now outside their historic range of variability in terms of stand density and fuel loads, and are at risk of losing key ecosystem components to uncharacteristically severe wildfire or uncharacteristic vegetation succession. The current forest conditions constitute an extremely large problem that continues to get worse with time.

The lack of active management on federal lands is also putting many private forestlands at risk. Fires and insect outbreaks are moving from federal forestland into private forest and associated communities. The current conditions in Oregon's forests are not sustainable with respect to fire and insects, and can only be corrected with active management. The lack of active management allows current conditions in these forests to worsen, leading to a train wreck that will affect many ecological, economic and social values.

There are no risk-free management actions. Indeed, under present forest conditions, the no-action or go-slow alternative may very well be the most risky of all. Our results indicate that the ever-increasing ecological and economic costs resulting from high-severity, ecosystem scale fires in the southwest far exceed the cost to society of proactive restoration-based thinning treatments. The current sociopolitical condition of continuing to spend dollars on fire suppression while implementing limited treatment of high-risk forest areas represents an irrational ecological and economic decision.

We no longer face the question of whether society will spend the money or not. We are going to pay, one way or another, unless we make the unlikely choice not to spend money trying to fight and contain unnatural crown fires. We now face the choice of how we are going to spend the money and what are we likely to obtain from that expenditure.

If we invest in restoration-based hazardous fuel treatments, we invest in the future; we invest in healthy, sustainable ecosystems for our children and grandchildren. By not investing in restoration-based fuel treatments, we continue the depreciation of our forests, increasing the risk of radical shifts in their structure and function because of uncharacteristic crown fire. This lack of investment indicates that our nation lacks a clear vision and policies that promote the sustainable management of the nation's public and private forests as an integrated and high priority.

Given these choices, it makes a great deal of economic sense to conduct forest restoration on a large scale today to retain future ecological and economic values. Our analysis shows that the fire suppression costs that can be avoided in the future are sufficiently large by themselves to justify restoration-based fuel treatment expenditures today.

Recommendations

Significantly increase the investment in active forest restoration and management to achieve healthy, sustainable ecosystems for our children and grandchildren.

Increase active management on Federal forestlands in collaboration with state and private forest lands to promote sustainable forestry.

Develop a national policy on sustainable forests to clarify and enhance the roles of federal, state, and local governments in relation to sustainable forests, promoting regional collaboration, joint planning and coordinated action.

Mr. GRIJALVA. Thank you, sir. Let me, to begin the questioning, turn to our colleague, Mr. Inslee, for any questions he might have.

Mr. INSLEE. Thank you. I appreciate the Chair and Ranking Member's courtesy in that regard.

I want to ask you about insect infestation and its causes. It is not exactly the exact subject matter, but I want to ask you your review of that.

My understanding is there are some causes of these terrible infestations. I am from the State of Washington; we are experiencing them in Eastern Washington, as well.

I guess the question I have, I have heard of the sources of stress being drought, being temperature change, and being overly dense forests that can perpetuate or lead to these infestations.

I would just have a broad question to the whole panel, to the extent you can help us understand those causes, or tease out their respective contributions to these infestations. I would be interested in any of your even opinions about what part, what cause is responsible for what percentage of these infestations, or any guidance you can give us on that.

Mr. ROWDABAUGH. Representative, what you describe would certainly be appropriate for the situation in Arizona's forests, as well.

What we do know from history is that drought is cyclic in the Southwest, about every 50 years; and that the last time Arizona experienced this sort of epidemic explosion of bark beetle, the primary insect of concern in Arizona, it was also 50 years ago.

What is different about this episode than the one 50 years ago is the forests in Arizona are tremendously overstocked now, and that wasn't the case 50 years ago. And global climate change seems to have already identified one of its signatures, and that is early snow melt, not just in Arizona, but all the western states are now seeing early snow melt.

The normal environmental controls for bark beetle in the West is cold weather. The beetles over-winter just under the bark. And if we had typically hard, cold freezes during the winter, that would hold the beetle populations in check.

We are not having hard, cold winters in the Southwest any more. And in fact, because of the early snow melt, instead of having one or two generations of beetles during the active summer season, we are seeing now we have four or maybe five generations of beetles emerge, because the beetle active season is so much longer than it used to be.

We also know that en masse, these overstocked trees are competing for a very scarce resource: that is water. And because of that, none of them have sufficient access to water to repel bark beetles. The normal response for a pine tree when it is attacked is to form pitch, and to pitch the beetle out. And that requires sufficient water to do that. And these drought-stressed, overstocked, highly competing trees don't have enough water available to form pitch to actively repel the beetles.

Mr. INSLEE. Anyone else want to add to that?

Mr. DAUGHERTY. I would just add that the treatment for those bark beetles that are density-dependent, where increased stand density is the cause of their outbreaks, and the treatment of thinning for fuel reductions is analogous to the treatment that you would do for bark beetle reduction. So thinning the forest prior to attack would increase the vigor of the trees and increase their resistance to attack.

Mr. INSLEE. Thank you. So it really sounds like a triple play hitting us all at the same time, then, between drought, which removes the ability to respond; density, which reduces the resources available; and the underlying global climate change that is decreasing the cold snaps that would kill the beetles.

And it may be impossible to tease out the exact percentages, but they all sound, in combination, potentially catastrophic. Is that a fair statement? Anyone can field that.

Mr. FARRIS. There is all those statements are true, with the exception of one thing. In Georgia we don't have the cold snaps to kill our bark beetles. They are cyclic.

And one of the things that we are really working hard on to try and address overstocking in the state is ensuring that we provide markets for our landowners. And one of our focuses is to see Georgia become the silicone valley of bio-energy. So we are promoting the development of woody cellulose to ethanol in our state, and have the proposed first woody cellulose for ethanol production plant opening up in Georgia breaking ground in July.

Mr. INSLEE. I am meeting the fellow who is doing that, Bernard Colson, in about three hours here. So I will tell him you are on the job.

Ms. ARCHULETA. I would like to address the near catastrophe that you were talking about. On Saturday we escaped a near-catastrophic wildfire in Coconino County that was 60 feet from a subdivision of homes, and that was because the forested area that was adjacent to it was 90 percent destroyed by bark beetle, and had not been treated by removing those trees.

The reason the subdivision didn't burn and the fire didn't spread to the subdivision is because that private subdivision had been treated, and fire-wise implementation of defensible space was implemented in that subdivision.

And so that is part of the problem that we are having, is that we can work with private property owners to create fire-wise space, but the adjacent Forest Service property needs to be treated and make sure that we——

Mr. INSLEE. Well, congratulations to local leaders. I will just lead to one comment. We are having a serious discussion for the first time about a response to global warming here. Your knowledge base, if it is shared with Members of Congress, could be useful on that.

I don't think Members to date, because they haven't gotten to serve on this committee, all the Members, understand the correlation between global warming and these catastrophic fires. And to the extent that you can help educate Members, it probably wouldn't be such a bad thing.

Thank you very much.

Mr. GRIJALVA. Thank you, Mr. Inslee. Mr. Bishop.

Mr. BISHOP. Thank you. I appreciate you all being here. Let me see if I can get some simple questions.

Ms. Archuleta, first of all, what percent of your PILT money do you spend actually on fire?

Ms. ARCHULETA. In terms of Coconino County specifically?

Mr. BISHOP. Yes.

Ms. ARCHULETA. We spend in Coconino County, we have had a severe reduction, of course, in our PILT. We get about $938,000. And of that money, we spend I would say a third of it in activities to begin to address community preparedness and wildfires.

Mr. BISHOP. OK, thank you. Mr. Farris, I appreciate your comments. I have to tell you, though, anything above 5 percent humidity is too much.

When you were talking about the devastation that is taking place on private and public land, you were saying that about 90 percent of the forests you have in Georgia are private. Is that about the same number that is being consumed by fire?

Mr. FARRIS. No, sir, not with this particular fire. The large Okefenokee Swamp fire? About 87,000 acres of that, approximately 600,000 acres are on private lands. The remainder burned through the swamp, and then also into U.S. Forest Service property in Florida.

Mr. BISHOP. So the bulk was Federal.

Mr. FARRIS. Yes.

Mr. BISHOP. Something about a fire going through swamps says something about wetlands, doesn't it? I appreciate that.

The same thing with Mr. DeBonis. When you were coming up with the concept of areas in poverty, and you identified those areas, do you have any kind of data of how many of those areas are getting rural school emergency aid funds? Do you have any correlation between those two numbers?

Mr. DEBONIS. Mr. Bishop, I don't have those numbers at this time, but I will say generally that there is a lack of data, a lack of information about where these resources are going. It is one of the challenges.

Mr. BISHOP. Thank you, I appreciate that. Mr. Rowdabaugh, when you were talking about the cyclical nature of the drought that is also producing the problem with harvests, you no longer have the freeze, I am assuming that tree removal is still the only other option you now have as far as controlling infestation.

Mr. ROWDABAUGH. Yes, sir, that is absolutely correct. The only factor that we have any hope of managing is forest density.

Mr. BISHOP. You know, it is not in my district, but Dixie National Forest in Utah is one of those that was not in one of those cycles, but it did have that infestation that took place. And even with the best analysis of the professionals in the field who wanted tree removal, they were prohibited from doing that. And what it did cause is greater destruction of the forest, as well as fires then took place with that. So I understand that.

Mr. Daugherty, I appreciate you being here. When you wrote and said increased active management on Federal forest lands, what did you mean by that?

Mr. DAUGHERTY. Treatment of high-density forest stands to lower the risk of stand-replacing fires in ecosystems that is uncharacteristic for them. So active management by thinning the forest using prescribed fires, using all the tools, as opposed to not treating the forest.

Mr. BISHOP. OK. How long would you estimate it would take before a hazardous fuels reduction policy would pay for itself by lowering the future fire suppression costs?

Mr. DAUGHERTY. That is a really good question, and it really depends on the rate at which we treat.

We had assumed kind of fairly aggressive treatment, treating about 15 percent of the problem per year. And so if you treat 15 percent in a given area of the problem, the high-hazard areas, you should have a significant reduction in cost after 10 years, depending on the lag effect.

Mr. BISHOP. So if we heard that we are basically treating about 5 percent of the identifiable area, so we would be talking about either 15, what did you say, 20 years at 15 percent?

Mr. DAUGHERTY. It would be, yes, 15 to—we ranged it between 15 percent and 30 percent treatment per year. And I think realistically, to get a handle on this problem we do need to be treating 15 percent to 20 percent of the high-hazard areas per year.

Mr. BISHOP. So anything to be done to help solve this problem in my lifetime, which isn't all that much any more, needs to have a significant increase in either what we are doing by the government, or we have to bring the private sector in to assist in that, if we are actually going to get our hands on the situation.

Mr. DAUGHERTY. Yes, sir.

Mr. BISHOP. Thank you. I appreciate all of you for being here, and for your time and patience.

Mr. GRIJALVA. Thank you, Mr. Bishop. Some quick questions.

Mr. Rowdabaugh, can you give me an estimate of acreage about, in Arizona, how many NEPA-approved hazardous fuel projects and treatments are approved in the State of Arizona, and that are awaiting some level of Federal funding to implement those?

Mr. ROWDABAUGH. Yes, sir. It is sometimes hard to tease that out of our Federal partners. But they do put in the National Fire Plan Reporting System their program of work for the next few years.

And for Fiscal Year 2007 and 2008, what is in the NFPR's database indicates more than 240,000 acres of NEPA-approved projects, which would take an additional $33 million to fund. So we know at a minimum that that is the magnitude of what is already available, and perhaps there is quite a bit more.

Mr. GRIJALVA. Thank you very much. The Supervisor, if I may, tell us a little bit more about NACo's policy calling counties to enact better local ordinances, wildland-urban interface issue, how this policy affects Coconino County. And you also talked about the role that Federal land management agencies play in helping counties address that wildland-urban interface, besides funding, which you made that point very clear. What other needs do you think the Federal government needs to address to help with that policy initiative that NACo has?

Ms. ARCHULETA. Thank you, Mr. Chairman, I appreciate the question.

N.A.C.O. has enacted national policy calling on counties to enact Federal land use ordinances and local fuels management policies for the WUI areas in and around the communities. And one of the ways that they have been doing that is through some training and development they have provided county staff and county supervisors. And we want to continue that effort, of course, and develop a best practices guide.

Coconino County in particular, we are exploring an ordinance at the local level for development in the WUI area. Absent that at this particular time, we do have policies in our county, comprehensive plans specific to the wildland-urban interface. Those particular three policies call for the immediate fuels reduction firewise application around homes to create a defensible space. We encourage the use of materials that are fire-retardant building materials. And we also encourage landowners to meet with the adjacent property owners, the Federal land managers, to make sure that they get their input as to what they could do to create a firewise community.

We also support a collaborative initiative to enact land ordinances. And we would encourage other counties to do the same.

In terms of what the Federal land managers can do, we have several areas that are ready for fuels reduction, that we have gone through the NEPA process. And what we have been told is it is because of a lack of funding that those applications have not transpired on Forest Service property.

One specific example in my district, we have a rural fire district who is willing to work with the Forest Service, to go out and get rid of the bark beetle trees, and to reduce the fuels on Forest Service property. And they have had difficulty. Just in the past five years they have been trying to develop an MOU with the Forest Service, and the rural fire department, summer fire department, has not been able to get the Forest Service to agree to an MOU.

They have the personnel to be able to reduce the fuels on the Forest Service property, but the Forest Service has not given them the permission to do that. And so we would appreciate any help in that regard, because communities do want to work together with the Forest Service.

Mr. GRIJALVA. Yes. The example, painful to me, is Summerhaven in Arizona, that burned to the ground awaiting a $1 million allocation of an already-approved fuels reduction and thinning proposal. And while they were waiting, that occurred.

Mr. Farris, I am certainly interested when you said your state is 50 percent of the wildland-urban interface in the country, I think is the percentage you used.

Mr. FARRIS. That was the South.

Mr. GRIJALVA. The South in general, OK.

Mr. FARRIS. Yes, sir.

Mr. GRIJALVA. In the administrator's budget there is a cut, about $11 million, on the State Fire Assistance Program. That assistance program, how critical is it to the work in your state?

Mr. FARRIS. State Fire Assistance funds are critical in the South. We believe one of the best ways to keep fires small, and all fires

do start small, is through early detection and rapid response. And those funds assist the states in the South, retaining and matching the resources to perform that service.

Mr. GRIJALVA. Thank you very much. Mr. DeBonis, I am out of time, but I am very interested in the issue of designation for communities at risk and low-capacity rural communities in particular. I think that designation for the Forest Service would be very, very useful. So as you prioritize, as you said, you go to the greatest need. And any additional information you would like to submit on that issue of the designation would be very much appreciated by the committee.

Mr. DAUGHERTY. Thank you very much, Mr. Chairman. I think creating a designation is really the key. The designation includes information on the social, economic, and cultural values in communities that can help identify communities that are most at risk.

We have applied designations on a local scale in New Mexico through the Community Wildfire Protection Plan process. So applying similar designations in collaboration with state, Federal, and non-governmental groups can help create the——

Mr. GRIJALVA. I agree, particularly with the testimony earlier today by the Under Secretary and the Assistant Secretary that they are in the process of working to implement solutions to hazardous fuels prioritization and allocation. It would be particularly important to have to be dealing with the designation issue, as well.

I have run out of time. Mr. Bishop, any other questions?

[No response.]

Mr. GRIJALVA. I don't have any more. And I appreciate your patience and your information. Very useful. Thank you so much.

The meeting is adjourned.

[Whereupon, at 12:50 p.m., the Subcommittee was adjourned.]

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