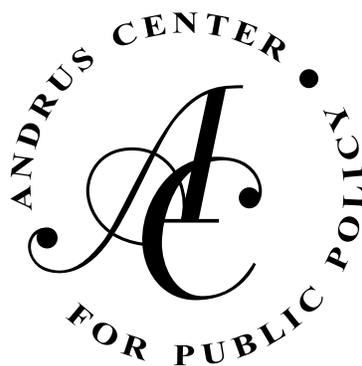


THE FIRES NEXT TIME TRANSCRIPT



The Idaho Statesman
www.IdahoStatesman.com

THE FIRES NEXT TIME

December 7, 2000

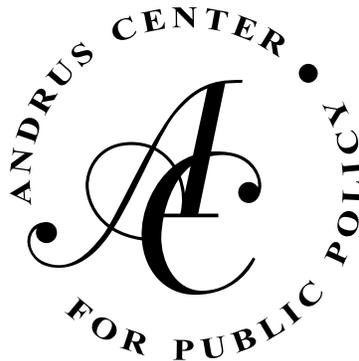
Boise State University

Boise, Idaho

Presented by

The Andrus Center for Public Policy

The Idaho Statesman



The Idaho Statesman
www.IdahoStatesman.com

THE FIRES NEXT TIME

Thursday, December 7, 2000
Boise State University, Student Union
Boise, Idaho

SCHEDULE

- 8:15 AM** WELCOME: Margaret E. Buchanan, President and Publisher
The Idaho Statesman
- 8:20 AM** OPENING REMARKS AND INTRODUCTIONS: Cecil D. Andrus, Chairman
The Andrus Center for Public Policy
- 8:30 AM** KEYNOTE ADDRESS: Stephen Pyne, Arizona State University, Tempe
Professor of Biology and Society Programs, author of a dozen books, including *Fire in America* and *Worldfire*
- 9:00 AM** FIRE SCIENCE PANEL: Moderated by John Freemuth, Senior Fellow
The Andrus Center for Public Policy
- Ross Gorte, Congressional Research Service, Washington, D.C.
Senior policy analyst at CRS, a Ph.D. in forest economics, an expert on the economics of wildfire prevention and suppression
- Robert Nelson, University of Maryland, College Park
Professor of Environmental Policy, a Ph.D., author of five books on public lands management and property rights, an expert consultant on using market options to solve resource management issues
- Leon Neuenschwander, University of Idaho, Moscow
Professor of Forest Resources, Ph.D., nationally-recognized expert on fire and restoration ecology
- 10:30 AM** STAKEHOLDERS PANEL: Moderated by Marc Johnson
Board Member of the Andrus Center for Public Policy, partner in The Gallatin Group
- James B. Hull, Texas Forest Service, College Station
State Forester, Director of the Texas Forest Service, and Chair of the Fire Committee of the National Association of State Foresters
- Darrell Knuffke, Vice President, The Wilderness Society, Washington, D.C.
Vice President for Regional Conservation, experienced in western resource issues from both the land agency and environmental perspectives
- Brad Little, Little Land and Livestock, Emmett, Idaho
Owner and operator of a farming and ranching operation in southwestern Idaho, well known for his ability to work with everyone around the table and to articulate the cause of responsible use of public lands
- Jaime Pinkham, Nez Perce Tribal Executive Committee, Lapwai, Idaho
An effective negotiator, a respected consultant, a trained and eloquent spokesman for resource issues on Native American lands
- James S. Riley, Intermountain Forest Association, Coeur d'Alene, Idaho
Executive Director of IFA, articulate speaker, consultant to members of Congress on issues that advance active resource management compatible with environmental stewardship

SCHEDULE, continued

Jim Smalley, National Fire Protection Association, Quincy, Massachusetts
Senior Fire Service Specialist, Director of the National Wildland/Urban Interface Fire Program, former manager of a national technical assistance program for the U.S. Fire Administration

Gary Wolfe, Rocky Mountain Elk Foundation, Missoula, Montana
President and CEO of RMEF, Ph.D. in wildlife biology, a respected leader on issues affecting wildlife management

12:30 PM LUNCHEON: Speaker: Richard T. Gale
Chief of Fire and Aviation Management, National Park Service
Jordan Ballroom, BSU Student Union

2:00 PM POLICY-MAKERS PANEL: Moderated by Marc Johnson

Larry Hamilton, Bureau of Land Management
Director of BLM's National Office of Fire and Aviation, former BLM State Director for Montana and the Dakotas, a Ph.D. from the University of Denver

Dirk Kempthorne, Governor of Idaho
Current Chairman of the Western Governors' Association, former U. S. Senator, former mayor of Boise

Lyle Laverty, USDA-Forest Service
Regional Forester, USFS Region II, 30-year veteran of the Forest Service, recently named to head the implementation of the Forest Service's national fire plan

Marc Racicot, Governor of Montana
Currently serving his second term, the governor has achieved statewide popularity and a national reputation for his progressive approach to issues involving use and management of public lands

Mike Simpson, U.S. Representative
Second-term congressman from Idaho's Second Congressional District, member of both the Agriculture and Resources Committees, a 14-year veteran of the Idaho Legislature, three-term Speaker of the Idaho House

Tom Udall, U. S. Representative
Former Attorney General, currently Congressman from New Mexico's Third Congressional District, member of the House Resources Committee, member of a distinguished political family

3:30 PM QUESTION AND ANSWER FORUM: Moderated by Cecil D. Andrus and John Freemuth

4:30 PM CLOSING REMARKS: Cecil D. Andrus

THE FIRES NEXT TIME

Thursday, December 7, 2000

Boise State University

Boise, Idaho

CONTENTS

WELCOME:	Margaret E. Buchanan, President and Publisher	Page 1
	<i>The Idaho Statesman</i>	
OPENING REMARKS:	Cecil D. Andrus, Chairman	Page 2
	Andrus Center for Public Policy	
KEYNOTE ADDRESS:	Dr. Stephen J. Pyne	Page 2
	Professor of Biology and Society Programs Arizona State University	
FIRE SCIENCE PANEL:	Dr. John C. Freemuth, Moderator	Page 8
	Senior Fellow, Andrus Center for Public Policy	
Panelists:	Dr. Ross W. Gorte, Senior Policy Analyst	Page 9
	Congressional Research Service	
	Dr. Robert H. Nelson, Professor of Environmental Policy . . .	Page 11
	University of Maryland	
	Dr. Leon F. Neuenschwander, Professor of Forest Resources .	Page 15
	University of Idaho	
QUESTION FORUM:	Dr. John C. Freemuth, Moderator	Page 17
STAKEHOLDERS PANEL:	Marc C. Johnson, Moderator	Page 20
	Andrus Center Board Member Partner, The Gallatin Group	
Panelists:	James B. Hull, State Forester	Page 21
	Texas Forest Service	
	Darrell R. Knuffke, Vice President	Page 21
	The Wilderness Society	
	Brad Little, Owner.	Page 21
	Little Land and Livestock Co.	
	James C. Smalley, Senior Fire Service Specialist	Page 21
	National Fire Protection Association	
	Jaime A. Pinkham, Executive Committee	Page 22
	Nez Perce Tribe	
	Dr. Gary J. Wolfe, President and CEO	Page 22
	Rocky Mountain Elk Foundation	
	James S. Riley, Executive Director	Page 23
	Intermountain Forest Association	

CONTENTS

(continued)

QUESTION FORUM: Marc C. Johnson, Moderator Page 23

LUNCHEON ADDRESS: Richard T. Gale, Chief of Fire and Aviation Page 40
National Park Service

POLICYMAKERS PANEL: Marc C. Johnson, Moderator Page 46

Panelists: Dirk Kempthorne, Governor Page 46
 State of Idaho

 Mike Simpson, Congressman Page 47
 Second District of Idaho

 Tom Udall, Congressman Page 48
 Third District of New Mexico

 Lyle Lavery, Regional Forester Page 48
 USDA Forest Service, Region II

 Larry Hamilton, Director of Fire and Aviation Page 49
 Bureau of Land Management

QUESTION FORUM: Marc C. Johnson, Moderator Page 50

CONCLUSION: Cecil D. Andrus, Chairman Page 61
 Andrus Center for Public Policy

BIOGRAPHIES: Page 62

THE FIRES NEXT TIME

Thursday, December 7, 2000

Boise State University

Boise, Idaho

KEYNOTE ADDRESS

Dr. Stephen J. Pyne

*Professor of Biology and Society Programs
Arizona State University*

CECIL D. ANDRUS: This year, a tragedy struck the western United States with the tremendous destruction of the range and forest lands by the wildfires in western America. That's why the Andrus Center at Boise State University and the *Idaho Statesman* came together to bring you here today. It's a pleasant surprise for a former politician to join up with a newspaper. Usually, they lie about you all during your political career—well, depends on where you sit and how you're looking at it, I admit—and they don't tell all your finer points every day. Now, however, I've been out of politics for a long time, we have a new president and publisher of the *Statesman*, and perhaps I've mellowed just a tad.

Now I have the great pleasure of introducing the publisher and president of the *Idaho Statesman*. Margaret Buchanan came to us from Elmira, New York where she was the president and publisher of the largest newspaper there. She received her B.A. and M.B.A. in finance from the University of Cincinnati. She is an outstanding administrator and has been a major influence in the changing of the direction of the *Statesman*. She is here to welcome you and to get us started.

When Margaret came to town, she and her husband Greg and their two sons immediately became a part of the community. She gives of her time to serve on the boards of many community organizations, including the Chamber of Commerce, Fundsy, the Shakespeare Theatre, and the Y.M.C.A. She is an active member of this community and an outstanding executive of the *Idaho Statesman*, Margaret Buchanan.

MARGARET BUCHANAN: Thank you, Governor. Good morning and welcome. The *Idaho Statesman* is really privileged to be able to work with the Andrus Center for Public Policy to organize this conference today. We have provided the forum, but the day is about you. We are so pleased that you have come together today from many perspectives but all with the same goal in mind: to honor the heritage of our forests and our unique communities and to leave them all healthy for the future.

This fire season, though difficult, did give us a unique opportunity to find some common ground. Today, we hope to take advantage of that and set an agenda for the nation. We will compile the recommendations of this conference into a white paper, and we will forward that to the next Administration, whoever that may be.

Your conversations today are very crucial and very important to the issues we're going to discuss. I'm really inspired to think you have all come today to talk about this issue because this summer was a very challenging summer for the state of Idaho, to see all of the land that burned up, land that we all use and love and recreate in and utilize. So I look forward to listening and learning from you today because these issues are relatively new for me, not being westerner and not having to deal before with forest fire issues as you do when you live out in the west. I look forward to a great day and a great discussion and to seeing some good things come out of the actions today.

So thank you, and, Governor, I'll turn it back to you.

CECIL D. ANDRUS: Thank you, Margaret. I'd like to add the welcome of the university to all the participants. Let me make a couple of introductions. It's my understanding that the Secretary of State for Idaho is here, Pete Cenarrusa. He is our oldest elected official in state government. We also have with us today a gentleman who traveled here from Montana to be with us, Bill Tash. He is a senior member of the Montana Legislature, and Montana suffered some of the devastation we did.

Let me tell you a little bit about his honor, William Tash. I knew him in Korea when he was 19 years old, and we called him Wee Willie Tash. I won't tell you any of the stories because he might reciprocate. All of mine would be truthful, but he would lie. He was a tin bender, and when our airplanes got beat up, he put them back together. Now, all of a sudden, I find that cowboy from Montana wearing a necktie and a suit. He has the same curly hair I have, and I'm pleased he is with us today. Bill, stand up.

We also have with us Tom Steger, the Congressional Fellow in the office of Congressman Tom Udall, who is unable to be with us today. Tom has been called back into duty as a result of the indecision in Washington, but he will join us later today via satellite. Please stand up, Tom. I've known the Udalls from Arizona and New Mexico for many years, an outstanding political family. Tom and I crossed swords a few times. He was Attorney General in New Mexico, and he was very sensitive because I wanted to send the nuclear waste from over there in the desert by Arco to Carlsbad. He's such a narrow-minded fellow, and he gave us a lot of grief. So I supported his candidacy for the Congress of the United States to get him out of the Attorney General's office in New Mexico, and it worked. We are hauling some of that stuff to New Mexico right now.

On the back of your program are the sponsors. We're a 501(c)(3), and that means that we beg for the funds to keep afloat. If you have an opportunity, please thank them because they make these conferences possible.

In your packet is a booklet, *Policy After Politics*. This is a white paper we published after the June conference, prior to all the fires. There are six recommendations in there. We hope you will take a look at it and see where some of those recommendations or proposals will fit in to a new Administration when they are discussing

the policies governing the public lands of America. The rangelands and the forest lands of the western United States provide us our lifeblood from a recreational and industrial standpoint. We need to make some changes. I particularly would like to thank Boise Cascade, who paid for the reprint of this white paper. Take a look at it.

Let me now introduce to you our keynote speaker, Dr. Stephen Pyne, who is with us this morning. He is Professor of Biology and Society Programs at Arizona State University, an expert on fires, and a prolific writer. We can't understand where we are going if we can't understand where we have been and how we have arrived at this point. Dr. Pyne has made a lifelong study of fires from the beginning of time, and while he was working his way through the university, he fought forest and range fires in the southwestern part of the United States. I thought we had to start with an historical perspective this morning, and he is the perfect one to start us out. He has the knowledge; he has the history; he has no axe to grind. We're fortunate to have him here, and we've set up a table in the lobby to allow you to buy one of his books. With that, let me present to you Dr. Stephen Pyne.

STEPHEN J. PYNE: Good morning. It's my privilege and most daunting task to explain from the perspective of history how a fire season like that of last summer could occur and how we might respond. If I could have the slides on...

In truth, there are many fire problems in the west, and it's useful to disentangle them. We can appeal to many stories to explain them. I say "story" advisedly because the creation and perpetuation of a story is, in fact, part of the explanation. I will argue that the need for a new kind of story will be part of whatever solution results.

I'm going to suggest three large narratives: an industrial narrative, an imperial narrative, and a national or American narrative. These are different because part of the situation we're in is the result of the fact that the United States industrialized. We have similar kinds of fire problems and relationships to all nations that are industrializing. The world is, in fact, dividing along those lines.

There are also problems that result from the fact that we have public lands. This is part of what we can call an imperial narrative. If you

look around the world, what cognate countries have similar fire problems? They are places like Canada, Australia, Russia, South Africa. These are all countries that had a similar history, which allowed them, for a period of time, to have vacant land. We have large wild-land fires in the United States because we have large wildlands. That is a different story than the industrial story, but the two, of course, will interact.

Then we have a national or American story. How is it that these and other events came together in the United States to create a particular kind of fire scene? That is the result of accident, history, politics, of course, and many other factors. What we see today is the result, the crystallization of that long historical process.

We often hear the phrase that fire is a tool. It is a tool, but it's also something more. It's a very odd tool. Think of a candle, for instance. A flame sits on a candle taper the same way that an ax head sits on a handle. That's a tool. But there are other ways in which we use fire, ways that are more like a domesticated animal, much more like a milk cow or a sheep dog. It takes its character from the context around it. It is bred, it is trained, and it is almost the origin of our sense of domestication. That's a very different kind of relationship.

Then there is another sense in which we use fire in which it is much more like a captive animal, much more like an elephant or a trained bear. We can use it, and we rely on the properties that are, in a sense, bred in the wild, but we redirect them for different purposes. We use it in all of these cases, and in fact it exists on its own, quite apart from us. But how industrialization will affect those different kinds of fire tools and what that means turn out to be quite different.

This picture is a map produced by satellite image and published a while ago by *National Geographic*. This is the section of the world looking over Africa and Europe. The red spots are fires that result from burning biomass; the white and yellow are electricity, the lights of cities. They are from burning fossil biomass. From a history standpoint, when you begin burning fossil biomass or processing it, it begins in odd ways to replace and to compete with living biomass. The world, in fact, is dividing into these two huge combustion regimes. There are very few places where the two co-exist, and that, I suggest, is probably transitional. The northeastern United States looks very much like

the European scene. Parts of the west look like a different mix.

This picture represents an important part of the story. In 1880, the census produced a map of forest fires in the United States. There it is. Some areas were not forested; hence weren't recorded. Some areas were not yet settled, so they weren't reported very well. If you read the text that goes with this, you realize the United States in the 1880s was pretty much like Brazil in the 1980s. The response was very similar. This was an agricultural society that relied on fire for almost all of its functions, but it was beginning to industrialize, and we're seeing the collision.

There was a lot of extravagant fire, abusive fire. In a survey of the forest, one cartographer said the scene was magnificent but it was too extravagant even for Americans. Something would have to intervene to stop the process of simply burning over everything everywhere. We know that process was interrupted. It was interrupted because of a great historical accident. For a short period of time, much of the western United States was vacated. The indigenous people were gone or removed into small reservations, and yet a new wave of settlement had not yet arrived. At that particular point, we begin setting aside lands for the "common wealth" as permanent public domain. That interrupted the process, and that's why we don't look exactly like either Europe or Africa. We have a chunk that was permanently set aside, land that would not be subjected to those same processes.

The map on the bottom shows different states where experiments were tried. What do they do with fire in this? One of the chief arguments for setting the areas aside was to protect them from fire, but what model was appropriate. No one knew. This was a new invention. They had no real idea how to go about it. Interestingly enough, a century ago, the state of New York was probably the most prominent candidate because it had been setting aside areas in the Adirondacks, the Catskills, as well as dealing with the rural fire problem. The state model, not the federal model, in a different scenario may have turned out to be the key.

The bottom one is a little hard to see, but one of the oddities of reserving the land in the west is that this area is very fire prone. The upper map is a map of lightning-caused forest fires. The bottom is a map of thunderstorms, that is, a map of lightning. And they are not the same at

all. The only place where there is any overlap is southern Florida, which, as we all now realize, is certainly anomalous in fire as in anything else.

What you need is a pattern of wetting and drying. That's the geographic basis for fire. It may come annually; it may come over longer rhythms, but you need that. Then in the west, you have a pattern of relatively dry lightning because of topography. So we have a chunk of the world where nature is going to burn things if people don't.

You have now set aside an area. It is not going to be converted to farms and towns. You're going to have to manage it. You're going to have to do something with regard to fire because if you don't do it, nature will do it for you. The choices are basically to convert that area into something that doesn't burn or to do the burning yourself. But at the time, that was not the obvious choice. The first of the experiments in controlling it was actually Yellowstone Park, and it became effective in 1898 when the Cavalry took it over. The military model was the foundation for federal fire protection. In some ways, we have not found a way to transcend that. Certainly as we began setting aside forest reserves, everyone looked keenly to the Army as a cheap and reliable source of firefighting.

This picture reflects again an international exercise. The man on the left is Dietrich Brandis, who created the British Imperial Forest Service for India and established a basis for what to do with large reserved lands. This model was propagated throughout the British Empire, and it was copied in fundamental ways by the United States.

This quote is from Gifford Pinchot's autobiography in which he said he hoped to do something in this country similar to what Brandis had done in India. This is part of the imperial narrative. I realize that is a loaded term, but we've been experiencing globally over the last fifty years a de-colonizing process. The survival and character of the public lands are going to be the most fundamental parts of the story of what happens to fire in the U.S. What happens is that forestry here, as in many other parts of the world, claims priority, and we begin a national story in 1905 with the Transfer Act, which carried these lands to the national forests.

If any of you have read any of the stuff I've written on the history of fire, you know that I tended to divide it off into twenty-year blocks, beginning in 1910. There were certain problem

fires that defined the year and gave it a character, and this works out very nicely. We're in the midst of one of these, which has to do with the mixing of wildlands and fragments of cities, but it's possible to conceive this history in many ways.

I'm going to suggest a different organization here, one that deals with defining stories. It actually works on a thirty-year cycle, beginning in 1905 with the creation of the national forests as we understand them and the search for some kind of appropriate fire protection regime. Then by 1934, another crisis develops, this time in Idaho, and the response to that reinforces that story in 1935. By the mid 60s, there is another major reexamination, and thirty years hence brings us to the 94 fire season and to the crisis that we enjoy today.

One of these surprising events in looking at the early fire history is that it was fundamentally political. The catalytic event, to the extent that we have a founding one, emerged out of 1910, and that was a deeply political era. It began with the firing of Gifford Pinchot for insubordination and led ultimately to the resignation of Richard Ballinger, the Secretary of Interior. Their controversy split the Republican Party, and they lost the election of 1912.

The fires were seen as a test of competing political philosophies, competing senses of what to do on the public lands. These were large fires; they burned over 5 million acres in the national forests, a little less than 3 million in the northern Rockies. 78 firefighters were killed initially, and the Army buried 88 bodies. They were completely overwhelmed by the catastrophe and the trauma of the event. Shortly after that, to show the politics, the Weeks Act, which allowed for the expansion of the national forests and, by implication, that model of conservation, broke out of the Congressional logjam within six months and was passed.

But there was, in the midst of all this, a major controversy about policy, and there was a cultural context that I think is worth spending a minute on. Not everybody died out there. Ed Polaski, a 40-year-old ranger (That's he to the right with his crew) managed to get his crew into a mine shaft and had to hold them at gun point to keep them in as the fire storm passed. Six members of that crew died; the rest lived. Polaski later invented and promoted a fire tool, and if you go over to the Fire Center you will see a statue of a firefighter holding a Polaski. That

story is deeply embedded in the culture.

All the people on the scene in 1910 considered it a rout and a disaster. They were completely blown away. The Forest Service had been spending about \$40,000 each year over budget, fighting fires, and in 1910, they spend \$1 million. That would be like us today spending \$15 or \$16 billion. The whole thing became a major crisis. But Polaski's story and the story of others as they moved up the food chain portrayed them as gallant fighters that had not been given the resources they needed, mostly by those miserable western politicians, who refused to support the Forest Service appropriately.

It turned out that the same month as the big blowup, we had a controversy that hit major newspapers and even *Sunset* magazine. It argued that the whole approach was wrong. What the U.S. should be doing was to copy the Indian way of managing the forest, and that was by light burning, controlled burns. Indeed, if we did this, we would not have these big fires. This is a sample of what the burning looked like in California.

In effect, everything that is now being promoted as arguments in favor of prescribed fires was there on the ground in 1910. The problem was that Secretary of Interior, Richard Ballinger, also liked light burning. So suddenly the choice of whether to fight fires or light fires became a part of that controversy, and the success or failure of the great fires will be seen as a political test of these men and their competing philosophies of public land management.

So a story that might have been a technical story became a personal and political story. As well, light burning will be fought to the death by the Forest Service. An entire generation will be profoundly traumatized by the fire, and they will see any evidence of fire in the woods as something that they should extinguish.

Also in August of 1910, one of our great philosophers, William James, one of the architects of pragmatism, published his last great philosophical work, a short essay called *The Moral Equivalent of War*. James was alarmed at what he saw as a growing militarism, not only in the U. S. but in Europe, and wanted to find some way to redirect that energy to constructive purposes. So in the same way that there could be a mechanical equivalent of heat, could we not have a moral equivalent of war? He decided yes, and the way to do it was to unite against the forces of nature. We would have a national

conscriptioin of youth, and they would begin a collective war against our common enemy in nature. There it is, being played out in the Northern Rockies. Even as he speaks, he dies. At the end of 1910, the smoke from the fires turned the skies over Boston and New England a copper color.

The moral equivalent of war has remained, folded into the Polaski story and the other trauma of 1910, to give us a founding narrative that we have, in some ways, not yet transcended. This was the first great crisis faced by Pinchot's successor, Henry Graves as Chief Forester. The next three chiefs, up through 1939 will personally be on the fires. The great fires will affect this entire generation, not unlike the long march did Communist China. It will stamp them; they will refer to it constantly. This will be the standard: They will not allow it to be repeated. So to the best of their abilities, they extended this philosophy. The question is how far can you push it into the back country.

In 1934, after a series of very large fires, some in the Selway, there was a major review by the Forest Service of its policies. What should they do with these fires? And this led to a major review in Missoula, and they decided that they should either try to put them all out or, it was proposed, just leave them alone. It was widely recognized by everyone on the scene that the land was in worse shape than it was when the Forest Service took it over. Whatever they were doing was not working. How should they respond?

There were a number of biological and cultural critics coming to the fore, and in 1935, the Chief Forester, Gus Silcox, who had been the second in command of the northern region in 1910, announced the "10:00 AM Policy," which said "We will fight every fire and suppress it by 10:00 AM the next morning." He had the entire force of the Civilian Conservation Corps and the civilian army behind him; he had all of the presidential enthusiasm he could want; and there was sanctuary. There was one huge surge to fight fires. He was going to replay the fires of 1910, and this time, he was going to win.

World War II produced a further nationalization and demonization of fire. The 10:00 AM policy and its prescriptions continued until roughly the mid-1960s with the passage of the Wilderness Act. We were going to redefine some of the character of the public domain; we were going to have to conceive of a fire policy suitable

to it. This begins a major debate and a revision of the debate as to what policy is appropriate. This picture is a record of burned area. You can see that the purple is the unprotected area. As we moved more and more land into protection, the amount of fire plummets. If you think about this ecologically, we were removing fire that might want to be there, but this was a very successful program. The yellow is the cumulative burned area; the green is the cost. Yes, there is some inflation coming into this, but it was costing more and more, despite better science and better equipment. We were not able to keep a lid on fire as we should.

So there were economic costs. There were ecological costs. The land was changing. Fire can be just as effectively removed as applied. There is no neutral position on fire in these lands. So there are reasons to try to reverse that old debate, to take the other side, to try to reinstate fire into the landscape. For a period of time, we made the experiment. I'll talk about Yellowstone separately if anyone is interested, but I think the era continued until the next thirty-year break, which is in 1994. The 94 fire season was large and lethal, but it had something that many others had not: It had a book behind it that created a cultural context for understanding. Norman McLean's book gave people who otherwise had no connection to fire a prism by which to interpret it. So the Storm King Mountain fire and the fatalities associated with that could be understood as a replay of Mann Gulch, and suddenly there was a cultural connection—not simply a policy connection but, if you will, a poetry connection through which people could become interested. This became a catalyst, and it seems to me we are still dealing with the consequences of that.

Let me spend just a minute on this graph of two alternatives. The graph on the top shows burned areas in the western national forests from 1940 to 1994. You can see an increase over the last twenty years. It doesn't seem to want to go away. It used to be you had big fires when you had dry years. Now we can have big fire years unless it's wet and suppresses it. The bottom one is a graph of a wildlife refuge in Carolina. They had a wildfire problem, and they beat it down. Then they realized they needed to put fire in; they did. With aerial ignition, they are now burning almost three times as much by controlled burning as they suffered from wildfires initially.

What's interesting is that, apart from the scale, the shape of the two graphs is the same. If the U.S. had it to play over again, we would have opted for the bottom road on those lands where it is possible—not all forests are amenable to this kind of manipulation—but what you have is essentially the same. We were unable to do that for whatever reasons, and now we are left with a rising tide of fire.

That brings us up to the current debate. What are the problems? There are many fire problems. We have a fire problem in wilderness and roadless areas that has no technical solution. It's a cultural decision, a political decision, a decision that has to be made. Nature gave the task to us; we can't just hand it back. I think we have to accept that and act as best we can. We have a problem with the interface—I like to call it the inter-mix—but that is a solvable problem and has solutions. This is a really dumb problem to have. This can be fixed. You simply have to choose to fix it.

We have problems with ecosystem health, which is much murkier and more difficult. The question is that we seem to have a maldistribution of fire here—too much of the wrong kind, not enough of the right. There are all kinds of other issues dealing with global environmental concerns, not the least of which is climate change. We're talking about sequestering carbon, trading that for our emissions from cars, but now we're going to start removing carbon on an enormous scale over tens of millions of acres. That is going to complicate the issues considerably.

So the debate continues. What we have is not the same series of contexts we had in 1910. I don't think that context will probably ever be repeated. What will happen this year? Who knows. It may not be unlike the election and just go on and on and on without a clear resolution. The sense is that a big fire will produce big results. That's absolutely nonsense. We've had big fires that did absolutely nothing. We've had lots of crews killed and burned over, and we went absolutely nowhere. There has to be some larger cultural connection; there has to be appropriate political context. The political ecology of fire is such that you have a year to plant. It's a lot like slash-and-burn agriculture. You can plant in the ash and have something grow. If you wait a year, it's pretty tough. If you wait three years, it's gone. You have a very short period of time in which to transfer this.

What I think is missing, if I look at the comparison with 1910, is the story. It's the equivalent of the Polaski story, and I'm not arguing for someone to go out and pull a gun and order somebody in a fire situation to do something. I don't want to see people killed. It may not even be one person. But there has to be some event, something that can be converted into a story. It's not a problem of policy; it's a problem of poetry. It's a need to have a convincing story for ourselves and for the larger public as to what we are doing and why it matters.

I have some difficulty with the term "restoration." I won't bore you with that now, but I think that locks us into an ironic narrative because you never really restore it. I would prefer we had a different term and think about what we would like instead.

Let me suggest that fire takes its character from its context. Fire is something that synthesizes its surroundings. If you have messed-up landscapes, you'll have messed-up fires. It is not strictly a fire problem; it is a problem of land use; it's a problem of political and intellectual culture. Fire will act on whatever is out there, and it will be effective or not effective, depending on those contexts.

What were the causes of the fires last summer? They were a mixture of nature and people as they always have been. How does it compare to 1910? If you're a realist, you'll say nothing will happen, but unfortunately, history isn't made by realists. It's made by people who believe in the future, believe that something can happen and act accordingly, and that is what is unresolved. Part of that will have to be the invention of some parallel story to 1910, or we will be forever locked in this para-military cliché. We deserve better; the land deserves better. Our relationship to fire over which we

have a species monopoly is far more complex and nuanced than that, and we can do better.

What can we learn from history? How many days do you want to be here? In some respects, we can learn nothing from history, but I think we can also learn some lessons about being site-specific, about separating different problems from the whole. We can learn a degree of modesty and accept that there are going to be no universal solutions, that it's going to be an ongoing negotiation between ourselves and the land in which we live, and that fire is going to be the medium of that discussion.

ANDRUS: Thank you very much, Doctor, for that interesting and enlightening historical view of where we are today and how we got there. Next will be the science panel, and I'll introduce Dr. John Freemuth in just a few moments. But let me point out that you have cards with your programs, so if you have questions, write them on the card. The ushers will pick them up, and we'll handle as many of those questions as we can.

I think there is an agreement this year that something has to be done, that the guns need to be checked at the door, that the enviros have to quit fighting with the timber people, and the cowboys have to quit fighting with everybody. There has been a tremendous amount of publicity about fires we call "forest fires," but if you look at the fires this year, we've had an equal number of disastrous range fires. I'm looking forward to hearing what the scientists say about the cheat grass in August that is so explosive and about what would happen if an old cow ate it in the spring when it's green and then got off the land. Would it still be that explosive? I don't think so, but that's a personal opinion.

THE FIRES NEXT TIME

Thursday, December 7, 2000

Boise State University

Boise, Idaho

FIRE SCIENCE PANEL

Dr. John C. Freemuth, Moderator
Senior Fellow, Andrus Center for Public Policy

Dr. Ross W. Gorte
Senior Policy Analyst
Congressional Research Service

Dr. Robert H. Nelson
Professor of Environmental Policy
University of Maryland

Dr. Leon F. Neuenschwander
Professor of Forest Resources

CECIL D. ANDRUS: Now I would like to introduce Dr. John Freemuth. He is the senior fellow for the Andrus Center for Public Policy at Boise State University. He's a tenured professor and heads up the political science and public administration area at Boise State University. He is chairman of BLM's National Science Advisory Committee, which Pat Shea put together three years ago. He has produced many publications, and I enjoy working with him. He will introduce the panel, and we'll go from there.

JOHN C. FREEMUTH: I'm from an academic discipline that is so secure about itself that it calls itself "political science" as if that makes what we do more scientific.

I thought Dr. Pyne's initial remarks were wonderful and showed the importance of history in understanding where we've been. These questions are really not technical questions; they're political and analytical questions. Dr. Pyne, you said that we need a story. We do, and maybe we've dumbed ourselves down now so that the only person who will tell us that new story is Smoky the Bear. Perhaps he can get the message to the American public that things have changed because people

might pay attention to Smoky if he decided to tell us something other than "Only you can prevent forest fires." This is also, ironically, the place where Secretary Babbitt announced the change in approaches to fire in Interagency work, right here on campus, right here at this podium. Many of you were here for the Secretary's announcement in 1994.

Also Dr. Pyne would like to chat with all of you at the break about some of his messages, but please, he's already been asked 350 times, "So, what are you going to do with our football coach?" Don't ask him about football at Arizona State. He's already tired of that conversation here in Boise.

It is my distinct pleasure to introduce three people, and we'll have them go one after another in the order that their names appear on the program. Then, if there's time, we'll get to questions from the audience. These are folks whose work I'm aware of, work I read. I find it exciting to have them all here in the room at the same time.

The first person is Ross Gorte from the Congressional Research Service. If you want to find out, in these reports to Congress, about natural resource policy dilemmas, you'll find his

name on most of them. You can get a lot of these on the web, and he'll tell you how to do that. Remember, he works for Congress, so you can't push him too far on these things. We'd like to thank John Hoehne from Senator Crapo's office, who made the request to get Ross out here to talk to us today. He's very influential and has written many wonderful things about natural resource policy from fire to water to public lands.

He'll be followed by Bob Nelson. Bob has worked in Interior and is now a professor at the University of Maryland where he has one of the sweetest deals I've ever seen. He only has to teach every other semester. If anyone from Boise State is here, his is a good model to follow. He's a wonderful writer and has written a great book on the role of economics in modern society. It's great stuff, and I use it in my work a lot. Bob and I will continue a little of this tonight on *Dialogue*, a program on public television. We'll talk about what came out of the day. His latest book uses fire as an example of why he calls for the abolishment of the U. S. Forest Service.

Finally, it's also a wonderful pleasure to introduce someone I've worked with. It shows that the universities in Idaho can work together. Dr. Neuenschwander from the University of Idaho is one of the nation's pre-eminent fire ecologists, has testified before Congress, and can give us a lot of wonderful insights about what we can and cannot do from his discipline's perspective on fire.

So with that, I'll sit down and turn it over to Ross Gorte to begin the conversation.

ROSS W. GORTE: Good morning, I'd like to extend my thanks to the Andrus Center and the *Idaho Statesman* for inviting me here today. This is a topic of great concern to many people, including a lot of members of Congress, and it's been an issue to me personally for a long time.

Before I begin, let me talk briefly about what the Congressional Research Service is, what we do, and how we do it. CRS is part of the Library of Congress, and we provide information and non-partisan analysis for the members and committees of Congress. Hence we are essentially professional critics. Interest groups and agencies propose solutions to various problems, and we look at these solutions, emphasize the limitations, and the potential unintended consequences of those proposals. As a result, we are naturally skeptical of proposals,

so my comments here today should be taken in that vein. I'm a professional skeptic, and I don't believe anything anybody says, generally.

I'd like to start by talking about fire effects, mainly because that's what my dissertation was on, so I know more about fire effects than a lot of other areas. Also, the whole reason we get into this issue of fire protection and fire control is that we want to avoid damages. We don't do it just because fires are burning but because they are doing something we don't want them to do.

I'd like to begin by noting that the standard measurement in reporting forest fires is acres burned, sometimes acres consumed, acres destroyed. Those latter two terms are not accurate. We do not lose any acres whatsoever when they burn. The surface changes, the top few inches of the subsurface change, but the acres are still there. They have not been consumed by anything. The biomass has been consumed. "Acres burned" is generally not a very useful measure because damages are not proportional to acres. They are related to intensity, the flame length, various other unmeasured characteristics of fires, and the extent of each of those factors spatially and temporally.

We do not do a very good job of measuring damages from forest fires. I'd like to note that ecological damages are typically overstated because, first, burned areas look devastated immediately following a fire even when recovery is likely. For example, there is generally no tree mortality if the crown scorch is 60% or less. 60% looks like a pretty badly burned tree; yet those trees generally recover.

The second factor in why ecological damages are often overstated is that fires burn less than 100% of the area within the perimeter. Wild fires are patchy. For example, in the 1988 fires in Yellowstone, within the perimeter of the fire, only about half of the acres burned was in crown fires. Another third was in surface fire. One-sixth of the area wasn't burned at all. So when people talk about a million or two million acres in Yellowstone having been burned, that overstates the reality. A lot of that wasn't burned or was burned lightly.

The third aspect of this is that conflagrations in stand-replacement ecosystems like lodgepole pine and aspen are normal. Preventing stand-replacement fires may cause greater ecological damage than are caused by the fires. It is unclear at this point whether silvicultural treatments provide an adequate substitute for stand-

replacement fire.

Nonetheless, fires do cause damages that are of concern. That's the reason we try to do things. The first and foremost aspect we look at today is property, especially houses. Wildfire conflagrations in the urban/wildland interface do a lot of damage to property. I'll talk more about that a little later.

We're also concerned about the off-site impacts, particularly on watersheds and air quality. In watersheds, we can get erosion, sedimentation, mass soil movement, and floods. With air quality, the concern is particulates because smoke from today's wildfires does put a lot of particulates into the air. Nevertheless, there is also research that documents that the amount of particulates we're getting from wildfires and from prescribed burns today is only about a third of what was being put into the atmosphere before European settlement of the west. If we do a lot more prescribed burning in the future, we're going to have a lot more smoke. That's a guarantee. You can't have prescribed fire without smoke. We'll see smoke like the kind you saw this summer, only it will probably be in the spring and the fall when prescribed burning takes place.

The third concern about damages is the ecological impact of stand-replacement fire in frequent-fire ecosystems. We don't know what the future ecology will look like in those areas. History is a poor guide because stand-replacement fires in frequent-fire ecosystems were rare before white men intervened. That's a great concern. We don't know whether we will get back those frequent-fire ecosystems or whether we will get back something that has never been seen before.

Let me turn now to talk about fuel management. There are basically three tools that are commonly used: prescribed burning, commercial timber sales, and other mechanical treatments, including potential new uses for small and medium-sized materials. You will probably hear more about that from Bob Nelson in a little bit.

These tools are not good substitutes for one another. They are complementary. What you can do with a prescribed burn, you cannot do with a timber harvest. Likewise, what you can do with a timber harvest in terms of protecting an area, you cannot do with a prescribed burn. These are not substitutes. They are complementary tools. You have to use all of

them in various ways and in various settings, depending on the site.

The second thing I want to raise is that these are likely to be very expensive. Traditional treatments cost a lot. In 2000, the U. S. General Accounting Office estimated that it would cost \$12 billion over the next sixteen years to treat the areas of national forest lands that were considered at high risk.

This is probably significantly understating the reality for three reasons. First, in frequent-fire ecosystems, it's not a program that's going to end. It's going to go on forever. Thus, it isn't a 16-year program; it's a permanent program to treat these lands. Second, the Forest Service estimate of acres at risk has risen more than 20% on their own land, and we've finally begun to identify other federal and non-federal lands that are at significant risk. Third, we're likely to be a lot more careful and spend a lot more on prescribed burning after the escaped fire in Los Alamos this year. There may be new uses that offer ways to cut the costs, as I'm sure Bob will allude to, but I'm skeptical about the ability of the federal government to create markets and to become a reliable supplier over time, particularly in light of the generally low levels of trust among the industry and environmental communities with the way the agency works and with each other.

Let me turn to the effects of each of the treatments and combinations of treatments. We don't really know, on a broad scale, how those treatments will affect forest fires, either acres burned or damages. Why? First, fires are patchy. The intensity across the burned area varies significantly, depending on the micro-conditions at the time. It depends on the site, the aspect on the slope. It depends on fuel conditions: the load, composition, structure, and moisture content. It also depends on the weather conditions: the humidity, temperature, solar radiation, and especially wind speed and direction.

So fires do not burn consistently, which makes the results of a fire difficult to predict. Second, it's difficult to do forest-fire effects research. Wildfires are not well-suited for research because we don't know the *a priori* conditions, i.e. what it was like before the fire started. Prescribed fires are typically not very suitable for doing fire effects research because burning conditions are necessarily restricted. Fires in laboratories are feasible, and we have an

excellent facility in Missoula to test these, but they are not very good at reproducing the complexity of field conditions.

The last option is experimental wildfires, but somehow I think that experimental conflagrations are not going to be politically feasible. Hence the effects are often based on models from expert opinions and on anecdotes, in contrast to case studies. However, many fire experts believe—and must believe in order to do their jobs effectively—that catastrophic fires can and should be controlled. Thus their views may well be biased, overstating the effectiveness of fire control efforts.

Despite fuel management programs, conflagrations will happen. As long as there is biomass, drought, wind, and a fire ignition source, conflagrations will occur at least occasionally. They are rare but not unprecedented even in frequent-fire ecosystems with restored natural fire cycle. Few fires that occur become conflagrations, only about one percent on average, but predicting which fire is likely to become a conflagration is difficult because it depends on a host of factors that we don't know very well. The effects of fuel treatment on the likelihood, on the damages, on the ability to control conflagrations is largely unknown.

So, what do we do? Well, there are roles and responsibilities for governments at all levels as well as for individual land-owners. For the federal government, one priority, obviously, is to protect their own lands, which includes the appropriate level and mix of fuel and other vegetative treatments and an appropriate road system, "appropriate," of course, being defined politically.

Another role is to disseminate information, to let other government agencies and the public know about what is being done and what can be done. The federal government has a role in providing financial and technical assistance for appropriate protection of non-federal lands. The federal government also conducts research and supports research on the effects of wildfires and on the ways to reduce damages before the fires occur and after the fires occur. Last, the federal government can and does need to provide some form of appropriate assistance after catastrophic fires occur.

State governments have the responsibility for protecting state and private lands within their boundaries. States are generally responsible for providing adequate transportation systems and

for regulating the insurance industry to ensure appropriate fire insurance requirements on individual homeowners in conjunction with the appropriate federal relief and disaster assistance programs, whatever those systems are. The states can also contribute to the information exchange on what can and should be done, and they can contribute to the financial and technical aid for protection of individual lands.

Local governments have a couple of important roles in protecting areas from wildfire also. Local governments are responsible generally for zoning and for controlling land use. They regulate the urban/wildland interface to the extent that there is any regulation on that. How local governments deal with local land use can include how they deal with access, requirements on water supply, information, assistance, and incentives. Local governments are also responsible for building codes and fire codes, and these have a significant impact on burnability of an individual house. Local governments can do a lot to protect individual houses if they choose to. Whether they choose to do this by regulation, by providing information, or by providing incentives is also a local decision.

Finally, private land owners, individually and communally, have some responsibility. Individually, they must take responsibility for their own property. They must learn what the threats are and what they can do about them. Research has shown that in excess of 90% of houses can survive catastrophic wildfires (a) if they have non-flammable roofs and (b) if the homeowners clear flammable material—vegetation, firewood, outdoor furniture, etc—for ten meters around the structures. Ten meters is not very far and is typically within their own property boundaries. They also should find out what government programs exist to provide both financial and technical assistance in their efforts. In addition, landowners can cooperate with their neighbors and with their state and federal government agencies to reduce the threat through ensuring adequate access, available water supplies, and fuel reduction where appropriate.

Thank you.

ROBERT H. NELSON: I'm very pleased to be here. I think this is an extremely important subject. It could well be that when we look back on the year 2000, the fires of 2000 may not match the fires of 1910 in terms of influence on

future land management, but it could very well prove to be a landmark year for the public lands system and for the Forest Service.

As John suggested, I'm going to focus some of my remarks on the Forest Service. I think that some of the problems that we have are less problems of technical knowledge about fire or causes of fire and more institutional and political. They are policy problems about how to get things done. I think the Forest Service is at the center of that, and we need two things. Stephen Pyne said we need a better story. The Forest Service has been one of the main story creators in this area. Smoky the Bear was one, and the fires of 1910 were another.

We also need a better management capability. Without leaving the substance aside, we have actually, as a result of the fires, reached some degree of consensus that the basic problem was that we had excess fuel buildups on the forests out there. There were a number of warnings of the potential for catastrophic fire, and the fires of the year 2000 to some extent were a realization of those warnings. We ended up in this situation with basically tinder-box forests, as they're called, as the result of management decisions, suppression of fire especially by the Forest Service over many decades, and failure to act in the 1990's.

Now what are the options that we have available? One is prescribed burning. That's basically going in and removing the excess fuels by setting fires or allowing natural fires to burn. Another is mechanical thinning, whether it's commercial or non-commercial is an important question. The third option is to do nothing. You could call it the let-it-burn option. We'll get rid of the wood eventually. If we don't do anything, it will burn, and we'll have more fires like the fires of 2000.

I would claim that for the last ten years, not by conscious policy deliberation exactly, we opted for the let-it-burn option. As the result of the management systems we had and of decisions made at the national level, very little action was taken. It's not that this was a situation of ignorance because we knew about the problem. In effect, we *de facto* said let it burn.

Now why is that? That gets me to my subject of the current condition of the Forest Service and to some of the stories it tells and that we tell along with it. I think the Forest Service has been experiencing difficulty for some time with its management systems. I would trace it at least

back to the 1970s. I'd say it has had a dysfunctional land-use planning system. Every time you try to cure it, the cure seems to turn out to be worse than the disease so that we've now reached a point of almost total gridlock in land-use planning decision-making in the Forest Service system. The Forest Service had tremendous economic problems. Probably the leading natural resource economist of the last fifty years, Marion Clawson, once said in *Science* magazine that the Forest Service's economic practices were disastrous. It made all the wrong investments. It responded to political incentives rather than economic. From the economic perspective, it was about the equivalent of an Eastern European steel mill around 1980. It has run large deficits in billions of dollars every year from excess costs over revenues.

That was under multiple-use management which, in some sense, was the story. It was a utilitarian story. The forests were used to serve human needs. In the 1990s, the Forest Service adopted another story and another management mode, which has been called "ecosystem management." Basically, my message is that ecosystem management doesn't work. It was a mistake, and the fires of 2000 are, in considerable part, a reflection of the failures of ecosystem management. Maybe it can be fixed, but it's in a grave condition, and these fires illustrate the problems.

Ecosystem management has exaggerated the economic problems of the Forest Service. The deficits are getting larger all the time. In 1999, the revenues were \$788 million; the costs of managing the system was \$2.3 billion. So costs were almost three times revenues. Another expense we have to factor in is fire expenses. This year, the Forest Service will probably spend close to \$1 billion on fire suppression in the west. That's another major item on the debit side.

Of course, ecosystem management didn't claim to be doing great things economically. We've gone from 12 million board feet of timber harvested in 1989 to less than 3 million in 1999. But it did claim that it was going to be doing good things environmentally. It's not clear, however, that ecosystem management is doing good things environmentally. In fact, the major events of the last seven or eight years in the west in terms of shaping the landscape, especially given the *de facto* no-action management outcome resulting from gridlock, have been

fires. So we had large fire seasons in 1994, 1996, and, the worst in fifty years, in the year 2000.

What have been the environmental consequences of fire? There are obviously some pluses and minuses. There are some places where stand-replacement fires are a good thing, but on the whole, they have probably been negative. Even in stand-replacement areas, we get abnormal patterns of burning and burning over wider areas at one time as a result of past fire suppression. In Ponderosa pine and other light-burning and frequent-fire cycle areas, we get crown fires that have never occurred before. They burn the whole forest. Environmentally, we get air pollution; in some places, we sterilize the soil. You can get tremendous runoff problems if you don't act quickly. Probably, under ecosystem management, we've had a negative environmental impact as well.

The Forest Service has had management problems for at least twenty or thirty years, but the Forest Service has to come in for severe criticism for the quality of its management in the 1990s. These fires that I've been talking about as being the major events of the decade were not unanticipated or unknown. Leading foresters have been telling us for ten years that catastrophic fire was about to arrive. In 1994, the National Commission on Wildfire Disaster said western forests were fire prone and that something desperately needed to be done. Nothing was done. In 1995, the Secretaries of Agriculture and Interior put out a report that almost mirrored those conclusions. It came right from the top of the agencies, and nothing was done.

In 1998 and 1999, G.A.O. put out reports saying that catastrophic fires were threatening the west, and nothing was done. Finally, this summer, after we had the worst fire season in fifty years and the national media focused on it, there seems to be some impetus to action. But when you have these warnings and you have a management system that is not responding, you clearly have a big problem.

Now the Forest Service was founded on the idea of scientific management and technical expertise. That was also part of its story, its rationale for existence. Of course, it never realized that in its fire management, going back to the 1910s, 20s, and 30s. It was probably unscientific. A lot of the outside experts thought the Forest Service was making large errors. Even inside the Forest Service, there were people who

were saying as far back as then that things were going wrong.

But science has actually played a relatively modest role and has been subservient to political and bureaucratic imperatives right back to the very beginning. Ashley Shiff wrote a famous book in 1962—well, it should be famous—called *Fire and Water*, published by Harvard Press. It basically described a decades-long history of misuse of science in the Forest Service. I would say that we've seen it again. Here in the 1990s, we had the best forestry scientists putting out reports, issuing warnings, saying something has to be done, and the Forest Service basically ignoring this disaster waiting to happen. As Ross says, there may be some exaggeration, but on the whole, we have to think of it as a very negative experience: damage to the environment, loss of homes, loss of tourism, just the costs involved.

What about ecosystem management, which has become the new story to guide management in the 1990? How does that stand up scientifically? When the Forest Service adopted it, they said, "Well, we have to set objectives like 'healthy forests' or 'natural forests.'" Of course, no one had any idea what these phrases meant. People started making jokes that ecosystem management is whatever the Forest Service or anybody else says it is. They were scientifically meaningless, but they sounded good.

You can't just go on forever with no relationship between your management system and your actual goal. So in the last few years, the agency has tried to translate this into an actual management reality, and it focused on the idea, in the last two or three years, that a healthy forest is going to be a pre-European settlement forest. That means we now have thousands or millions of dollars being spent on historical research, on sending out biologists and historians, to try to figure out what the forest looked like in the west prior to European settlement, about 1870 to 1890. There wasn't any timber harvesting in those forests, which may be one of the reasons why timber harvesting is plummeting. We're actually realizing the goal of pre-European harvests. There wasn't any livestock grazing. There wasn't any motorized recreation. There were no ski lifts, and so forth. It seems we are setting a goal that excludes most of us unless you are pre-European.

I call this management Disneyland manage-

ment. We're going to create a giant theme park across the west to pre-European settlement. I really don't think the American public, if they ever actually know what's happening on these lands, will think we should turn it into one giant theme park containing 10% of the land area of the United States and 40% of the Idaho land, the largest percentage of any state of the national forest system.

In fact, this whole idea of going back to some original condition has very little scientific basis. Dan Botkin wrote a book about 1990, *Discordant Harmony*, in which he says that nature is basically a series of moves from one disequilibrium state to another. There is no climax, no permanent equilibrium. It's more like chaos than harmony. From a scientific point of view, it's quite arbitrary to pick any point, like 1870 or 1880, as the goal for restoring the land to something considered to be the idyllic condition of the past that has been lost.

One way of characterizing it is the Disneyland phrase. Another way that gets to another element is to call it "Garden of Eden" management. We lost touch with our original virtues when we were infected by industrial development and when humans, who were sinful, came from Europe, and disrupted the harmony of nature. We have to restore that. Just like in the Bible, we are waiting for the millennium, or we may achieve that harmony in Heaven and the hereafter. The way we're headed, we'll turn the management of the forests over to the theologians rather than to foresters.

This whole idea of ecosystem management has led practically to paralysis and gridlock. That paralysis and gridlock contributed significantly—obviously there were weather and other problems—to the forest problems and the fires of the years 2000. It is a story, but it's a fundamentally flawed story. When you look at it seriously, I don't think it can hold up. It is an extremely appealing story at some level. It's a story of secular salvation. I guess if enough people are willing not to look at it, it might sell. But also, it provides no realistic basis for management. The idea that we're really going to turn these forests back to 1870 or 1880 is unrealistic.

That basically leaves wide open the question of what we're trying to do. It's partly that wide openness, when your story doesn't really tell you anything and is actually misleading, that encourages the tremendous politicization of the

Forest Service.

So what do we do? In the long run, my proposal is to abolish the Forest Service. I think the agency has outlived its usefulness. The whole idea of centralized management from the federal level is an idea that had its time in American history but is no longer apt. The Forest Service, right now, is a bit like the Roman Catholic church on the verge of the Protestant Reformation, and we're facing an era of increasing pluralism of values. The church is just having more and more trouble justifying that it is the authoritative priest with all the answers and that everyone else should follow the instruction and wisdom as handed down from on high. But I don't really think we're going to abolish the agency in the near term. It could happen, but it probably won't. In any case we need to move forward.

What would I recommend? Like a lot of people, I feel that the need is for a basic decentralization of authority in the agency. Fire provides a great opportunity for that. I think the states and localities will have to be not just consultants but total participants in the development of any plans. Prescribed burning is like locating a toxic dump. You can't locate it till you get the local people to agree to what you want to do.

The Forest Service in general has lost so much legitimacy that it's extremely difficult for the Forest Service to take the lead and to sell solutions for things like fire. I think what actually is going to have to happen is that the states and the localities will have to be the ones to put these solutions together. The Forest Service will be part of the working team to implement the solutions, it will provide a lot of knowledge and expertise, like risk maps, so that every community will know where it stands vis-a-vis fire, and it will have to be an important part of the implementation process.

But I see Governor Kempthorne or Governor Racicot as the ones who will have to become intimately involved in the details of planning the response to fire in the west. They're going to have to be the ones to put the political heat on, and they will have to deal with the conflict of pressures, with the environmental organizations, which often resist a lot of these solutions, and with a lot of other people. There will, in some sense, be an incremental radical decentralization. The states won't take over the land formally, but in terms of the actual decision-

making process, I see the states playing a central role.

They are being driven to it. In a state like Idaho, if you see a large chunk of your state burn down and you say that this is because the Forest Service sat there and did nothing for the past eight years, you might say, "We can do better." In fact, we'd better do better unless we want to see the same thing happen in two or three years.

Thank you.

LEON F. NEUENSCHWANDER: Good morning, and thank you for having me. John asked me to talk about several things today. One was whether we have enough background, research, and science information in fire ecology and fire science to proceed. The answer to that is yes. Am I finished?

I'm going to go through a series of statements here, and some of you have heard them before. For research, we're going to use "R". We won't say "research" every time; we'll just say "R". For other stuff, we're going to say "duh," and "duh" means duh. The first of these statements is, "We've had large fires in the past, and we're going to have large fires in the future." Duh.

We've burned about 7 million acres so far this year. Those are perimeters, not the black acres. That is probably a fraction of what's going to burn if we maintain the current management approach. We've heard that already from two different people.

Montana and Idaho burned about 2.2 million acres. Steve, that's pretty close to what we had in 1910. There were some similarities, too. We had a lot of fires in a lot of different locations, and some of them got really big. Some of them burned really hot. Some of them didn't. About 30% of these reported acres were on private land in Idaho. However, nationally, about 70% of the acres that burned were on private land. This is not too far different from the ratio of public land to private land. We have assumed, though, that the effects from these large fires are the same on private land as they are on federal land. R.

We spend over \$2 billion a year, according to FEMA, fighting fire in the wildland/urban intermix. This is a huge problem. R. Fires this year burned over 852 homes and other structures. We're averaging 600 homes per year. We need to do something about that. R.

I'll give you one example, my favorite. The Los Alamos fire damage will likely exceed more

than a billion dollars. It burned 235 very expensive homes and 12 energy lab buildings. It also burned 47,000 acres. Help me with this one. This includes a building at the lab where the first atomic bomb was dropped.

Let's talk about smoke. We've already heard about smoke. The smoke from the wildland fires was extensive, and we've heard some projections that it will get even worse in the future. The smoke concentrations exceeded health and safety standards in many locations. R. How many people were really affected by the smoke, and where were they? Our firefighters that are making a living in this smoke concern me. That needs to be addressed. R.

The fallout from the smoke will likely be further restrictions in prescribed fire smoke. This year, from our burning on our school forest, I was shut down on seven of the twelve burning days I had because of smoke restrictions. Catch 22. This is a problem. We often use these prescribed fires to reduce the chances of having these large catastrophic fires. R. We have to do something reasonable about smoke.

Resource losses are not available yet. That's probably several years out. But I expect the losses to be less than the suppression cost to put the fire out. Losses on federal land will be even less because about 68% of those acres burned in wilderness or roadless areas. My few economist friends say that, in theory, it's not supposed to happen this way. In theory, the more we spend, the more we should save, not the more we should pay. Also, with high costs are the rehabilitation costs after fires. In one area in Idaho, we spent essentially \$200,000 to rehab 39 acres within a fire. R. A certain amount of research suggests that a lot of this rehab is not needed. Where it's needed and how much is certainly an R.

Now I'm going to step on John's toes just a little bit and talk about fire policy. It's always changed when you've had a fire crisis and a big fire year, especially when the media makes it change. It was perceived that fire suppression efforts were costly, and they are. Many homes were lost; many stories were told. The suppression costs were perceived in many places as too little, too late. Fire suppression forces were too few, too tired, and overworked. Fire suppression forces were unavailable to fight fires during the peak of the fire season.

I grew up in a little town near Sweet, Wyoming. I don't know why it got that name.

The fire that was burning there got to 8,000 acres, and in that 8,000 acres, they had eight firemen. Well, it was Wyoming. But really. There are many examples where we just didn't have enough people.

Procedures and rules for prescribed fires were questioned, especially around New Mexico. Some disastrous fires, it was said, could have been avoided altogether if we had taken a different course of action. Maybe. Maybe not.

Probably one of my favorite quotes in this area came from a report in the *Missoulian* when they were interviewing some of the people who were harmed by the fires. It said, "Some fires just burned hotter than hell. You know, it did that fire roll thing." The "fire roll thing" just means that it sucked a lot of debris up and really got out of control.

President Clinton did respond and came up with a change in policy in September. There are four parts to this. In the first part, he was going to pay back the emergency firefighting funds, the funds they had already spent. Duh. The second part of this was to increase fire preparedness. To this, they are going to add \$340 million. I'll come back to that. They had to do some of that. And, they're going to increase the local fire department and private landowner assistance with \$88 million. This is innovative. This is new. For essentially the very first time after these fires – Steve, you can correct me if I'm wrong, but do it later in private – we're going to be very pro-active and spend about \$390 million in thinning and fuel treatments.

I have a few conclusions. Let's start with the basics. The goal of fire suppression is to save lives and private property and to protect natural and cultural resources from fire at the lowest cost to the government. That's out of the manual. It isn't really to suppress all fires, but what if we did. Let's just say we could. What would happen? We would see a tremendous decline in the biodiversity in our wild lands. We would see a decline in our fish populations. I heard Fish and Game make a presentation that said the elk herds in Idaho are declining in the Lochsa, our premier elk herds. There are only three calves per hundred cows now, and the population is falling. This is surely a response to lack of fire and to lack of the habitat that fire creates. We would have a forest that would become very uniform and very monotonous, and there wouldn't be very much life in it. Duh. We don't need an R here.

What if we just let all fires burn? Let's just ignore this goal of life and property. We're just going to let all fires burn. Well, how many of you want one of those big grumbling infernos in your back yard? I think it could put a whole bunch of our economies out of business in short order. That's not acceptable either.

But it is true that eventually wildland fuels will burn and eventually fires will occur. From an ecological standpoint, in my opinion, they must occur. It's not a matter of "if", it's a matter of "when." Further, these fires occur during dry years. Global warming is happening, and we could have more of those. The fire suppression paradox is that as we put fires out, the fuel, forest succession, and tree density increase, making the forest more flammable and harder to suppress when the next fire comes. We continue to suppress fires, and despite the fire record, we put out more than 95% of them.

We will continue to put these fires out until the forest conditions combine with drought, wind, and fuel to produce an inferno that we can't suppress. In my opinion, the fires that used to burn at low intensity are the easy ones to put out. Today, all fires except prescribed fires in the forest burn the same. They burn hotter than hell. Large, high-intensity fires are more difficult and more costly to suppress than low intensity fires. Duh. Small fires are easier to put out than big fires.

This year, as in any extensive fire year, the solution, at least one of them, is fire preparedness, i.e. to increase the number of firefighters, the number of fire trucks, the number of fire planes. This is Catch 22. Putting out more fires leads to more fuels which leads to more fire trucks which leads to more fuels which leads to more fires which leads to more fire trucks, and so on. High levels of fire preparedness may even give the public a false sense of security. People who live in the urban/wildland interface—Burt and Ethel, for example—may feel comfortable enough that they will not make the effort to clean up around their home. Catch 22. Fire in the wildland/urban interface is a major problem.

In my opinion, the only way out of this dilemma is the use of fuel treatments. Now Steve, help me with this: that means restoration thinning and restoring fire to fire-dependent communities in our forests and rangelands. Putting fire back is part of the solution.

Now let's talk about the goal of the fuel treatments. It's to reduce the chances of crown

fires, to reduce the intensities of these wildfires, and to give our suppression forces a chance to extinguish the unwanted fires. It could be to bring the forest back to HRV [historic range variability] conditions. I'll enjoy debating that with you later. It's certainly a viable goal in some areas though maybe not everywhere. Wildland fires and damages are going to cost us more in the future, especially in the short term. The number of fire trucks, the number of fuel treatments in the short term are not going to change that. Catch 22. The sufficiently large areas must be treated and in the right location before we will realize a reduction in our fire costs and damages. Nevertheless, I think, because of past management actions, that restoration thinning and fuel treatments are needed to restore the role of fire and to reduce the fire intensities, especially around our urban intermix areas.

This problem is most acute in the dry, low-elevation forests and woodlands. Most of these forests are on private land and are on the lower portions of the national forests. Catch 22. Fuel treatments only on federal lands will not solve the problem. A single national fuel treatment strategy is not compatible with our different ecosystems. There was a proposal that we set a diameter limit of 15 inches in our thinning, a national diameter limit. There was also a fear that fuel treatments will be put in all forest types and everywhere. It is too expensive, unneeded, illogical and ecologically unsound to undertake these fuel treatments everywhere and to have a single statement. This is stupid. It's not even duh. Catch 22. Fuel treatments can modify fire behavior, increase the survivability of natural, economic, and cultural assets and increase fire suppression effectiveness, but it will not eliminate the large fires. It will not eliminate the need to clean up around houses and structures, along right-of-ways and highways, and on private and state lands.

Fuel treatments should be concentrated where they will do the most good. I've already brought up the low elevation, dry forests. There, leaving the large trees and removing some of the small trees, the brush, and the slash are the preferred treatments. Some of this has to be done in the private and urban intermix as well. Where they will also do most good is along the roads and right-of-ways and around the houses.

Logging is one tool. Prescribed fires is one tool. Thinning is another. In some circum-

stances, they can be used independently. In some circumstances, it's questionable whether changing the structure of that forest is going to make it more sustainable. You must change the structure and the function together. Often the best results occur when logging, restoration, thinning, and prescribed fire are used together. Catch 22. Stop logging on federal lands. Catch 22. Stop prescribed fires because of smoke.

President Clinton authorized 3 million acres of thinning out of the 39 million federal acres that have been classified as high risk. This is less than 10%. Catch 22. It's probably not enough. What is enough? R. Where should they be done? That's also R. How big? That is also R. I don't know what we'll do with all of the small trees, debris, and little green crap that we take out of the forests with this thinning. Catch 22. Burn it.

I don't know how these fuel treatments and thinning will affect fish and wildlife populations. R. But I do know the consequences of doing nothing, of not doing the thinning. It's already been stated. It will be more of the same: increased deforestation, increased erosion, increased sediment in our streams, decreased huntable wildlife, and an ever-increasing set of suppression costs and damages.

Thank you very much.

FREEMUTH: OK. We're going to have about ten minutes for questions, then we'll take a break to set up for the next panel. We have the questionnaire forms on your programs, but we have a roving mike to use for oral questions. We'll get the three scientists and Steve back up on the stage for some questions.

AUDIENCE QUESTION: Can we afford to leave untouched all these lands that this Administration has set aside as roadless where we can't do anything because of lack of access. Can the forests afford to remain untouched?

NELSON: If you look at it one way, you can say that since the Forest Service loses money on most of the things they do, the less they do, the more we save. It also seems at times that the more they spend, the less they do. A lot of the complaint is about the fact that nothing is happening even though we are still spending \$3 billion a year on management for the U. S. Forest Service. It mostly seems to be going for paper work. I don't have the answer, but this roadless stuff does somewhat come out of the

idea of ecosystem management. If you're going to go back to pre-European, they didn't have any roads either or any timber harvesting. It's part of the whole idea that our real goal should be that the forest should be natural. That's our story that we're actually operating under, at least in the Clinton Administration.

Some people don't buy the story, but it's been governing land management. It's that the purpose of the forest is not utilitarian—that was multiple use—but to make the forest natural. I don't think it's either possible or sensible, but I never liked the multiple use thing much, at least as it was implemented. The new story has to involve the idea that natural is not a good idea either in theory or in practice. In a certain sense, the forests are going to be more like a garden. We have an obligation to decide what we want for these forests, whether it's for them to be aesthetically appealing or a source of timber or whatever we want, and we're going to have to manage affirmatively to get there. I think roadless stuff is a diversion from that.

FREEMUTH: I have a question over here.

AUDIENCE QUESTION: Question for Dr. Pyne. In your book on Australian forestry, you talk about how the early British-trained foresters in Australia changed the narrative, particularly McArthur, much more quickly than the narrative has changed here in the United States about the role of fire in forests. Is there anything we can learn from that Australian experience that can be applied today?

PYNE: I don't think there is anything specifically that we can learn, but what's interesting about the Australian story is that they tried very specifically to integrate their fire practices with Australian history. This was something they needed to do because it was part of their identity. Their native vegetation, eucalyptus, was adapted to fire. The people who had resided there for tens of thousands of years, the aborigines, had used fire. Australians are rediscovering their own cultural identity by adopting this strategy, and they are repudiating the American model with all its aircraft. They were very specific about this because that would mean they had been re-colonized. They left Britain and now would become an American colony. They very specifically rejected that, so it was an act of nationalism. That was part of the

appeal. It was able to move beyond technical issues. So I would say that's the lesson I would draw from it.

AUDIENCE QUESTION: It's a two-part question, but I'll take about two minutes. Mine has to do with the Special Projects Unit that the Forest Service has and relates to the making of their topo maps. They have overlays of canyons that could generate fire storms. These are storms that twist like tornados and can pull up trees up from half a mile away and have crowns of 500 feet high. Sometimes the embers must travel several miles high in the atmosphere to cool below kindling temperature. My question is that with these topo maps and the kind of support that the aircraft line gets, if they could coordinate with their scratch maps before they go out to support the firefighters, wouldn't that help? Now when they do dump their chemicals, those chemicals contain a fire chemical, sodium cyanide, which turns to cyanide when it hits water. A study done fifty years ago indicated effects on small sports fish, and after the fires of 2000, the feds told them to change it. With the fed funding and with the outfitters and rafters we have, if we have seagoing fish that are affected, won't it be three or four years before we see the results?

NEUENSCHWANDER: R.

PATRICK SHEA: A geologist in the insurance industry created the Richter scale for earthquake, and it's a useful scientific index that allows you to assess what the actual damage was from an earthquake. Why in the fire community can't we come up with perhaps what we'd call the Andrus scale, which would be the temperature of the fire, the high and low in terms of its effect on the ecology; a smoke index in terms of health; and then a watershed impact index, which would include the actual costs of suppression and then the cost of whatever post-fire activity went on.

PYNE: Yes, we can, and in many places we have. I've worked with the Boise Forest, and they've developed what they call the Fire Hazard Index. Nationally, the Forest Service has been putting these together. I've worked with Governor Lamb and Neil Sampson and others, and we did this for the state of Colorado. This can be done, and it's useful because it can be

done before the fires start, and it can give you an area to prioritize where you want to spend your limited dollars on treatment.

FREEMUTH: We can take one more. Here's a hand, and then I'll turn the mike back to Governor Andrus.

AUDIENCE QUESTION: A question for Dr. Nelson. Given the pretty even split on so many political issues in the American population, can we expect anything better than the gridlock we've seen in Forest Service management if we get rid of the Forest Service or change the management model so that the states have more control?

NELSON: If you look at the map, there was all red and all blue. It seems the gridlock comes from trying to combine the two, though there

was a little story in the paper that said the solution was to split up and give Bush all the red and give Gore all the blue for the next four years. It seems to me that if you get smaller units, you're more likely to have more homogenous groups and less division.

ANDRUS: We're at the break, but permit me to make an observation. I saw Dave Alexander arrive this morning; he's supervisor of the Payette National Forest. I would bet that Dave Alexander could have gone out last spring north of Payette, looked at the fuel piles, and told you what was going to happen if you had a lightning storm. But I'll tell you, Bob, that he didn't have the money and didn't have the authority to go out there. So closer control at the local level would help.

We're going to have a short break, and then I'll have you all back in here for the next panel.

THE FIRES NEXT TIME

Thursday, December 7, 2000

Boise State University

Boise, Idaho

STAKEHOLDERS' PANEL

Marc Johnson, Moderator
Andrus Center Board Member
Partner, The Gallatin Group

James B. Hull
State Forester, Texas Forest Service

Darrell R. Knuffke
Vice President, The Wilderness Society

Brad Little
Owner, Little Land and Livestock Co.

Jaime Pinkham
Executive Committee, Nez Perce Tribe

James S. Riley
Executive Director, Intermountain Forest Association

James C. Smalley
Senior Fire Service Specialist
National Fire Protection Association

Dr. Gary J. Wolfe
President and CEO
Rocky Mountain Elk Foundation

CECIL D. ANDRUS: Let me remind the attorneys here that your C.L.E. registration slip is on your program. It's on the flyleaf on your program. Fill it out, put it in a box on the registration table, and you'll get six hours of C.L.E. credit if you're an attorney licensed in Idaho, Washington, or Oregon.

Let me introduce Marc Johnson, who will coordinate the panel for the stakeholders. Marc Johnson is a partner and Boise principal of the Gallatin Group, which is an industrial affairs and business management firm, located in Boise, Spokane, Seattle, and Portland. Marc was head of public television here many years ago at

Boise State University. He worked with me in the Governor's Office for eight years as my Chief of Staff and now has found honest employment and is making money outside the political arena by heading up the Gallatin Group.

I give you Marc Johnson.

MARC C. JOHNSON: Thank you, Governor. What we want to do with this panel is to ask our panelists, some of whom have come great distances to participate, to respond initially to a couple of questions. Then I'll give you an opportunity to get into the conversation fairly quickly. I want to ask each of them for, frankly,

a sound-bite answer to this question: What impact, from your perspective, has come about as a result of the fires in the west this year?

Let's start with Jim Hull, who is the Texas State Forester. He came a long way to be with us and arrived about midnight last night. He is very active with the National Association of State Foresters and heads up their Fire Committee. Jim, from the perspective of the state foresters, how devastating a year was this fire season that we just came through.

JAMES B. HULL: It was obviously extremely devastating in many ways. One was that it changed the entire way we look at fire protection in America. Until we come to grips with that, all of the rhetoric that might come out of this meeting and many others that are being held across the nation are really moot issues.

As we look for a new phrase or new title, we're going to have to look at a sign like that, draw a big red line right through the middle of it, about where the heart of that buffalo is, and say, "The Fires: No Next Time." Until we change our paradigm about how we look at wild fire in America, quite honestly, we're never going to get there.

JOHNSON: Brad Little, leader in the livestock industry, articulate spokesman for those who use the public land as range land. What's your answer to that question? How devastating has it been from your perspective and your industry's perspective?

BRAD LITTLE: Marc, here in Idaho, we had some of the big range fires. We lost a lot of cattle, and if you have livestock that are burnt up, that's obviously a significant factor.

One of the things that's probably of most concern to us is the position of federal agencies on rehab, particularly for the medium and smaller operators that have only one unit to operate on. They have a year-round unit, and they have livestock out there all year round. They're talking now about three to five years of rest if they're doing some of these chemical treatments for annual grasses. That's going to put those people out of business, and that needs to be addressed. There needs to be some kind of dialogue on it.

It would be nice if we could have the dialogue before the fire instead of after the fire because you've got to look at buying hay and some other

things. It's really going to be critical for some of these operators in the west. If you're in the livestock business or any other business out there on the land and if you have a fire that's burning, you have a lot of high-stress things going on. You're worried about your family, and you're worried about your livestock. Besides that, it's a very emotional time. When you're out there moving that livestock out of the way and are worried about the safety of your family and employees, it's really a problem to have arbitrary rules come in on top of it.

JOHNSON: Jim Smalley is with the National Fire Protection Association and came all the way from Massachusetts to be with us. Mr. Smalley, you're in charge of educating the American people about the impacts of fire in the wildland/urban interface. Tell us, from your perspective, what happened this year.

JAMES C. SMALLEY: Well, we didn't have an unusually high or anomalous peak in the number of home losses, given the relative number of acres that were on fire. We had 850 to 1,000 homes lost. That may sound heartless on one hand, but it could have been much worse. Our concerns are that we don't take a knee-jerk reaction and that we don't just put in more fire trucks and more suppression and go that route. We have to have a significant change in course in redefining responsibilities and redefining what this interface is. This is a solvable problem. We don't have to have this problem. The wildland/urban interface or intermix—where the eaves meet the leaves—is not a fire problem at all. It is a land-use planning problem. It's only a fire problem when there is a fire. That mix is created much earlier than the natural event. Is it a disaster? The fire is only a disaster when there is human involvement.

JOHNSON: Darrell Knuffke, you're the Vice President of the Wilderness Society, one of the nation's leading and oldest conservation and environmental organizations. How is this dialogue unfolding after the fire season from your perspective?

DARRELL R. KNUFFKE: Thanks for not identifying me as one of the nation's oldest conservationists. I'm rapidly approaching that. The topic of this conference is "the fires next time." I don't think we have a hope in hell of

preparing for the fires next time unless we come out of this conference and others like it with a pretty clear-headed understanding of the fires this time. What happened? We think what happened is that what could burn, did burn. It was a function principally of the weather and the convergence of a number of other factors. Everything burned: cut-over private land, some wild lands.

The thing we've seen more than anything else in the wake of this fire season is the re-ignition of the public policy debate over how we manage our forests. Everybody who has disliked the Clinton Administration's forest management or roadless policies or pretty much anything else, including the Florida recount, sees some hope in the dramatic nature of these fires to change things. It's sort of a mass "gotcha" by people on both sides of the issue. If we don't stop that, we're not going to get very far down the trail.

JOHNSON: Jaime Pinkham has been on the Executive Committee of the Nez Perce Tribe. He's a very articulate spokesman for Native American governments. He has recently become the head of the fisheries effort for the Nez Perce Tribe. Jaime, we're delighted to have you here. I know you have an academic background in forestry issues as well. Tell us from your perspective and the tribal perspective what's going on and what has gone on this year.

JAIME A. PINKHAM: Well, in Indian country in the U. S... Actually, all the U. S. used to be Indian country. Maybe that's another goal in getting it back to pre-European conditions...

JOHNSON: ...That's a different conference, Jaime.

PINKHAM: Actually, in Indian country, we got by fairly easily this past year when you look at the national statistics. About 3200 acres were lost. Something we need to keep in mind, when you look at the dedicated effort by the people on the fire lines, is that 25% of those firefighters came from Indian communities. That does offer a form of employment in very depressed communities. Tribal communities are very rural, and sometimes we lack the infrastructure. We talk about the urban/wildland interface, but when you look at Indian country, there is no interface because we live intimately with the land.

We're beginning to see more and more issues

about where we put our dispersed housing because we've always had a lack of planning dollars. One of the disparities is that for every dollar that the federal agencies, like the Forest Service, receive for coordinated management, Indian country only gets 35 cents. We've really been lagging behind on adequate planning on how to do better fire management as well as integrated planning, which means where should our home sites go? We're running into that conflict more and more, and we're trying to elevate the importance in our tribal communities on how we respond to those issues.

One of the things we really took a hard look at this past year was all the talk about how we want to mimic nature. We took control of nature, but now we want to mimic nature. In a sense, it's giving the knowledge back to nature and relying on that knowledge to help us manage the forest and the ecosystem.

One of the biggest investments the Nez Perce Tribe has made over the past few years, an investment in science and political talent as well as capitol investments, is to rebuild those critical habitats for endangered salmon and steelhead. We've made considerable investments there, and as we watched these fires unfold, rolling through these habitats, it raised a concern for us. With that kind of investment and with those goals in mind of recovering endangered species, we're concerned about the effect of the fire on our ability to recover these endangered species. That's another equation. We can talk about the urban interface; we can talk about our depressed communities, timber salvage, and so forth; but I think we also need to talk about the endangered species and help find a solution to this equation.

JOHNSON: Gary Wolfe is the president and CEO of the Rocky Mountain Elk Foundation, headquartered in Missoula, Montana, nationally respected leader on conservation issues, particularly as they pertain to wildlife management. Gary, give us your perspective on what we have been through and how it is impacting the west.

GARY J. WOLFE: I'm in a pretty enviable position here. I don't have to worry about all these other impacts that we're talking about. I can focus on the impacts on elk, on elk country, and on elk-hunting opportunities. I recognize that there were some very disastrous, very devastating impacts, especially from a human and economic standpoint, but looking at it from

a wildlife perspective, especially on big game—elk and deer—the species that have evolved throughout their entire existence with wildfires in the western landscape, both short-term and long-term impacts have occurred. Short-term, certainly there were deaths of individual animals from large catastrophic fires. It caused a change in the movements and distribution of animals. It certainly disrupted recreational opportunities like hunting. Some of my outfitter friends were actually burned out of their areas; and they can't really get in and set up their camps this year.

In regard to the long term, what we've learned over time is that these animals have evolved with wild fires. In the northern Rockies, many of the most important winter range areas were created as a result of catastrophic wild fires. 1910 is a good example in the Selway and the Lochsa. That is not to say that's the best way to do it. In fact, we think there are many better ways to do it than with catastrophic wild fires. But the reality is that the long-term impact on big game animals in the west is going to be positive as a result of this. Short-term problems. Long-term positive benefits. There are better ways to do it in the future, and we'll be talking about that in a minute.

JOHNSON: Absolutely. Jim Riley is the executive with Intermountain Forest Association, headquartered in Coeur d'Alene, Idaho. He represents the wood products industry in Idaho and Montana and across the northwest. Jim, what's your perspective from the wood products industry.

JAMES S. RILEY: Well, Marc, last summer's fires have been a huge lesson for all westerners, certainly, and I hope across the nation. The person who said it best was Patrick Moore, who was the co-founder of Greenpeace. I made his acquaintance over a year ago. He speaks about the forest and what needs to happen in the forest. His simple message is that we need to help the public see the forest through a new set of eyes. What he means and what is the turning point of this last summer is that simple sound-bite solutions to forest management, which this debate has swirled around for the past two decades, are not consistent with the dynamics of an evolving, changing forest ecosystem. People who thought that they were protecting their forests by excluding all kinds of activities,

including fire, and who practiced management activities that mimicked nature, actually have done more not to protect the forests than they've done to actually protect them. With those lessons behind us, my real hope from all this is that we can move forward in an era of more thoughtful, cooperative, and collaborative decision-making on public forest land management and leave behind this era of polarization.

JOHNSON: Let's pick up on that point. The science panel earlier gave the view that we have a window of opportunity here to do something. Clearly the public is better informed than it was back in May regarding the impacts of forest fires. We have a window of opportunity. We have a new political environment apparently taking shape. How do we capitalize on that?

RILEY: I think it's going to take two things. Part of the recognition of what the science panel has very capably reported again this morning is that the evidence of existing problems out there is compelling and overwhelming. If you remember what Leon talked about, he said of the millions of acres of unacceptable forest health conditions that lend themselves to these catastrophes, less than 10% are under current treatment plans.

So with that scientific background, I hope we can capitalize on the leadership of the governors of the western states. They've already stood up in the Western Governors' Association and other places and said they want to help evolve plans that work locally and that are based on some of the principles that came from the previous Andrus Center conference and the white paper that Governor Andrus held up today, part of which suggests localized decision-making, and marry that up with the \$1.8 billion in financing, which was authorized by the Clinton Administration but will be spent by whoever is in office next year. If that can be given to the governors to work out local plans and if we can have local collaboration and real spots on the ground, I think we can bring about that era of new management.

JOHNSON: Don't be bashful. Everyone has a microphone; everyone has them turned on. Darrell?

KNUFFKE: We've heard some of the speakers this morning talk about how significantly

inadequate that infusion of money is. That tells us at the Wilderness Society that we've got to be pretty darn strategic about how we spend it. That gets me back to the role of science. I was a lot more sanguine about the role of science last night than I was after this morning's panel. The scientists seem to have a lot of room for disagreement. But still, there ought to be some places where we can come together.

Bruce Vento, who just passed away, was fond of saying that we're all entitled to our own opinion, but we're not entitled to our own facts. There needs to be some body of agreed-upon information from which we can, as a committee of people, move forward and take some steps.

JOHNSON: Where do you think the divergence is? Where is the lack of consensus? To put it more positively, where is the consensus? Where can we work together?

KNUFFKE: It seems to me, from what I've heard this morning, that at least one area where we have a real problem, perhaps the most fixable of our problems, is at the interface or the intermix. Forests, wilderness areas, roadless areas don't deal in catastrophes, don't deal in devastation. They deal in natural events, some of which are more dramatic than others. What is going to drive this debate in the years ahead is fear on the part of people who live where the eaves meet the leaves. That phrase is a lot more appealing to me than the urban/rural interface. Nonetheless, we'd know what we're talking about.

JOHNSON: So what do we do? Let's be specific.

KNUFFKE: I think specifically what we have to do is bring together all these people from the federal agencies all the way down to local homeowners and homeowner associations and put together something like an Extension Service or maybe an extension of the Extension Service and help people know what they can and should do.

Get the insurance companies involved. Anyone who thinks the insurance industry, through rate structures, can't influence positive behavior and penalize negative behavior hasn't bought insurance for a sixteen-year-old lately. They can do it, but they haven't. The whole subject is more than just professional and

academic with me. I live in a frame house in the trees in northern Minnesota. I called my insurance agent and said, "What are you hearing in the wake of these fires?" He said, "Nothing," and this was State Farm. "It's not a a problem up here." I think it's a problem everywhere, and we're going to have to engage at that level and offer some incentive to people to retrofit their homes and to be a lot more thoughtful in zoning and building codes in these places.

JOHNSON: Jim?

SMALLEY: Well, let me say this. I was at a conference last week in California, and every time I go to that state, I hear the same kind of an argument. The insurance industry and the fire departments should fix it, and that's the response to fire. One thing is that there is a misconception that there is an "insurance industry." There is no insurance industry. There are insurance companies.

I sit on a land-use planning committee for the Institute for Business and Home Safety, and their member companies are large insurance companies. At every meeting, we have to go through this little thing about rate-setting. We can't discuss rates, and we can't discuss any kind of monetary premiums. They cannot talk about that among themselves. Some of the tools that we need to assess risk are just now becoming available to the insurance industry. There is a talk in structural fire departments about residential sprinklers, about putting these things in homes to save lives and property and then getting a rate break from the insurance companies. The problem is they have no track history. They have no way to know whether these things actually work. In addition, what is a fair rate structure?

Say someone is living out in a wildland area and they have a combustible roof with pine straw all over the top of it and in the gutters. They are finally convinced to put on a really good non-combustible roof. I'm going to put on slate or tile, make it look really nice. The fire people are saying, "The insurance company should give you a break in your premium." The fact is that, since you have added value to your house, your insurance premium goes up.

The other irony is that—let's say we have a good program to replace combustible roofs with non-combustible roofs. Non combustible roofs, let's say, have a replacement cost of \$10,000.

Hypothetically, let's say the insurance company says, "We'll give you a 50% rate reduction in your fire insurance." Go back and look at your homeowners' insurance. How much of that insurance is for fire? Mine is \$500 a year. \$400 of that is in liability, replacement costs, and that sort of thing. The smallest percentage is in fire insurance. So if they give you a 50% cut, that might amount to \$25 per year. How many years will it take you to pay back a \$10,000 investment? The incentives are placed at the wrong end.

The other irony I like to point out is that the insurance industry is the largest purchaser of replacement roofs in the United States, but it's basically from hail. Hail and wind damage. And Jim Hull from Texas knows that.

JOHNSON: Brad, you're itching to get in this, I can see.

LITTLE: When was the last time an insurance company said, "Our stock price is going to go down, and we're going to lower our dividends because of a fire claim. Every time there is a fire claim, FEMA jumps in and does something, so why should the insurance companies do anything. Until the politicians quit standing up and saying, "We're going to make everybody whole," the insurance companies aren't going to do anything.

SMALLEY: You're right. The incentives are placed at the wrong end. We've made wealthy some homeowners living in large homes destroyed by devastating fires. FEMA comes in with low-cost loans, and they don't build the home they had; they build one twice as big. They still put the vegetation right back where it was.

RILEY: I agree that we ought to start looking at places where there is agreement, and the wildland/urban interface is one of those. However, if I had the numbers right, somewhere between 30 and 50 million acres is judged to be at risk. Is that right? OK, 39 million is the figure Leon uses. Of that, I would say, less than 1% is truly in the urban/wildland interface. The rest of it, the vast majority is wildlands that are not covered by any insurance program. We can get all distracted by these kinds of issues, and I think Jaime Pinkham's point is excellent. While we spend a lot of time worrying about

protecting the \$200,000 house out there, we might have burned up invaluable riparian habitat for endangered species. Why does that make sense? Is that the right way to do our priorities? That's what we have to be looking at.

HULL: One quick comment on the insurance. I don't sell insurance, but they're not quite as in the dark as we might think. In places in east Texas, we worked with the local fire districts, volunteer fire departments, and put in dry hydrants on a three-mile grid. The insurance industry dropped the rates by 10 to 15% for the homeowners that lived there. That many times more than paid for the cost of installation of dry fire hydrants. So there's a lot we can do that perhaps we've not explored yet.

SMALLEY: That's very important, and I'm not trying to lessen that impact. But that's the suppression response end of it. I agree with that idea, I think it's a wonderful idea, and I totally support it, but we've got to redefine what it means for protection. I'm a second generation firefighter. My father used to say, "Oh, don't worry if the Washington politicians take the shirt off your back. They're going to have a bureau to put it in."

While fire suppression is the normal response in municipal settings, it doesn't work on a vast scale of wildlands. We have a fire department, but we don't have a flood department. We don't have a wind department to come out and control wind emergencies. We have to get away from the idea that we can respond to these things in some sort of meaningful scale. When you have two hundred houses on fire and seven fire trucks, do the math. Duh. It doesn't work. We have to think of a different way to put protection into structures and into these interface areas. We really have to separate what we can really solve, which is an interface problem, and the other factors and interdependencies. It becomes like trying to keep a hundred corks under water at the same time. You can get some under, but they're going to pop back up. This is the nature of what we're trying to do here today.

KNUFFKE: I would suggest that rather than the fact that we don't have a flood department, we have a couple of them: the Bureau of Reclamation and the Corps of Engineers. At least a fair amount of the way those folks have made

a living is by protecting people against their own foolishness of building in flood plains. We do the same thing in erosive beaches and have massive public works projects for beach replenishment when homes don't belong there in the first place. So all of that has served over time to insulate people from their personal responsibility to make sensible decisions.

SMALLEY: You're right, and I live in a coastal community. When the storm hits the coast of Massachusetts, the cameras are usually in my community, so you're seeing my neighbors being washed off into Massachusetts Bay. It comes down really to personal responsibility and ownership of that property. Any attempt we make to force federal or state agencies to do something fails when we get to the private ownership, the homeowner. There are all kinds of incentives and ways to force compliance, to force safety, and to use mitigation measures. I work for the National Fire Protection Association, and we publish a set of national fire codes that cover a lot of things that are right here in this room and that are protecting us from fire, things that, when you walk into the room, you are not aware of. Certainly exit signs, sprinkler systems, floor finishes, wall finishes, and that sort of thing are covered under the fire codes. I don't personally believe that it's a code issue because only 16 states of the fifty have building codes that cover all buildings and all occupancies. I know I'm out here in the west where you really don't want to talk much about codes and ordinances, but I don't think it's a code problem.

JOHNSON: Yes, we don't want to get into that. Let's move on. Jim Riley, is prescribed burning something we can start some consensus about?

RILEY: I think there can be some consensus about prescribed burning, but again, I think people have tried to say that prescribed burning is the answer, that if we control the time the fire is lit in some of these ecosystems, they'll burn in the ways that would do certain things. That, I believe is folly, according to a lot of the research—R— that's out there.

I was meeting with Jack Ward Thomas the other day, and he made the pertinent observation: "We're talking about reintroducing fire into ecosystems that have never existed before

in these forests. They have evolved to the point that we don't know what they will do." That's what the data is telling you. If you did that without mechanical treatment, logging, and thinning beforehand, you'll have a disaster on your hands of the magnitude of what we just went through.

JOHNSON: Gary?

WOLFE: I'd just like to build upon that, Jim. I think one of the most important things we need to do is to recognize that active management is something we have to embrace. For too long, we've had this difference of opinion between industrial foresters and conservationists. Some people in the conservation and environmental movement say prescribed fire can do everything. Other folks in industry say "No, we don't need fire at all. Commercial timber harvest can do everything." I think Ross really hit on it this morning when he talked about a variety of tools, and we can't use all of the tools interchangeably. They're compatible with each other. You have to have a management plan and goals in mind. You have to bring a variety of stakeholders together, collaborate at the local level, and move forward with common goals and common vision.

JOHNSON: Do you see that happening now and the beginning of that with this new national fire strategy that we will hear more about later today?

WOLFE: I don't know whether it's going to happen at the national level, but there is a specific program that we have going here in Idaho that I think is a good model at the local level. It's called the Clearwater Basin Elk Habitat Initiative. It's in one area, one basin, about six million acres in the Clearwater Basin, but it includes a whole range of stakeholders, including the Intermountain Forest Association, the Rocky Mountain Elk Foundation, the Idaho Fish and Game Department, the Forest Service, the BLM, some of the private timber corporations, and the University. That's a collective group that is working together at the local level to identify common philosophies, common values, and common goals for the Clearwater Basin and then developing prescriptions that can be implemented and that everyone can embrace. I think that's a perfect example of how we have to move forward.

JOHNSON: Jim Hull, how does prescribed burning fit into this equation?

HULL: I came here prepared to talk about a few things. When I walked through the door a while ago, I was handed this paper. It said, "Boise Officers Shoot Man in Confrontation." I hope I don't get shot over this.

JOHNSON: The governor insisted that the guns be checked at the door. I think you're OK.

HULL: Flying up here, I thought, "I'm not going to get into politics and elections," but I really did like that "Rs" and "Duhs" thing of Dr. Neuenschwander. What was the question? Prescribed burning. I think I am probably like 90% of the folks in here. I'm an absolute pyromaniac when it comes to prescribed burns. I love to do it. I think there is great potential there. The problem I have with it is priorities. I see the absolutely huge amounts of dollars that are being allocated to prescribed burns on a very few number of acres. As a state forester that has responsibility for all rural fire protection in my state, as do most other state foresters, with the west being a little bit of an exception, I do worry about the dollars and how to prioritize. For the same dollars that are going into a those very few acres of land, I think we could do a tremendous amount in recognizing what the situation is around the nation. While you're from the west, the fire problem we had this year was not a western problem. It was a national problem.

I came up here and drove from here to Missoula. I found it very interesting that as I stopped in these various fire camps, most of the people that I saw were from North Carolina and Georgia and other states all over the rest of the nation, outside of the west. Also, as I went through these little communities, I found it very interesting that I saw the same identical thing that I see in Texas and throughout the other parts of the nation. I saw the signs in the windows of stores. "Thanks to the firefighters. We appreciate what you're doing." But I also saw, as I visited with some of those folks that had had their houses destroyed and had lost property, the same thing that I saw in the eyes of Texans that had lost property. They appreciate what all of us are doing to suppress these fires, but folks, the reality is that Americans would rather not have destructive wildfires in the first place. I think that is where we have to come

from. We've got to look at spending priorities.

There is so much we could learn about wildfire. Four of the most devastating fire seasons we've had in the state of Texas occurred in the last five years. It didn't just happen. Certainly fuels, population build-up, land-use changes and all those things were part of it. But when we got to looking at it and analyzing it, we learned what we should have known all along. When you look back at 150 years of weather patterns in Texas, you find they are on a 25 to 30 year cycle. All of my career, up to 1996, had been spent in a wet cycle, and every decision I made was based on this wet cycle. In 1996, we came out of it, and it's just as predictable as anything could possibly be.

Therefore, we're going to have to change the way we look at wildfire, reforestation, and everything else in the state. We must learn what it is we're all about. A lot of these prescribed burn dollars could be going to learn that. One of the things I've done in Texas is to realize that wildfire suppression is extremely expensive. I've dedicated 10% of my entire fire budget to prevention. Folks, that 10% is paying a whole lot more dividends than that 90% we spend on suppression. It's a matter of priorities whether we prescribe burn, whether we do an awful lot of other things, but we have to look at all of it.

JOHNSON: Other thoughts on prescribed burning? Darrell?

KNUFFKE: The Wilderness Society sees it as a valuable tool, one of a mix of tools. Apart from the horrible human cost of the Los Alamos fires, the other victim, we feared for a while, might be the use of fire as a tool. I was delighted to see that the press across the country did not rise to the bait and basically said, "Los Alamos is an example of what not to do." It does not stand for the proposition that we should not use controlled fires in our forests. That was good news.

SMALLEY: Around the interface areas, one thing we'd like to emphasize is that prescribed fires should be used in strategic goals rather than in quantity goals. We don't think it should be used because we have to burn a thousand acres here or a thousand acres over there. Rather, if you burn a smaller number of acres strategically, it makes it more manageable.

PINKHAM: Educated as a forester, I have come to understand that science isn't always failsafe, and neither is forest policy. While we do want to reintroduce fire back into the ecosystem, we need to also understand that where it's been excluded for so long, we can't just launch back in there and reintroduce it then and there. At the same time, we can't stand back and do nothing. It's a painstakingly long process with continued drastic consequences. There needs to be the opportunity to allow some management activities. I think the term people are using now is "restoration forestry," to try to reintroduce the diverse cycles into the ecosystem. But we need to come to a common understanding of both the science and ecological processes that are out there. Too often we get bound up on questioning each other's motives on why we want to do this, but if the focus is truly to restore back to nature's methods of management, we have to allow that there has to be some manipulation, including thinning to reduce the densities, and then going through a transition period. We have to reintroduce fire at that time.

LITTLE: I thought we had done this before. We've talked about forest health for the last fifteen years here in the Boise Forest. We talked about forest health, and they said, "We're going to clean up these forests, log all these trees." Then here come the lawyers, and everything gets tied up, and all these plans are stopped. It's just like these consensus groups. All you have to do is have one guy file one suit on one endangered species, and the whole thing is for naught. So that looks to me like the biggest hurdle we have, whether it's prescribed burning or salvage sales.

How do you take care of these litigation hurdles that rise up everywhere and add to the cost? One of the biggest cost factors we have is those big piles of books I've been getting from the Forest Service on roadless plans and resource management plans, which are just compilations of stuff to keep the lawyers from taking over. I don't know how you resolve that issue.

JOHNSON: We could keep them tied up in conferences all the time so they couldn't file lawsuits.

WOLFE: Marc, could I ask one thing? On the prescribed burns, one of the things we need to do is continue with the education process with

the American public about the role of fire in the ecosystem and the sometimes positive benefits of fire. John, I think you mentioned earlier that Smokey the Bear has been the icon for the Forest Service: "Only you can prevent forest fires." Why couldn't we think about Smokey helping to educate the American public on the positive benefits of controlled, prescribed fires and what it can do for wildlife habitat, increased forest health, and increased safety around certain communities? I think it's something we need to look at. I think the agencies, the industry, and non-profit conservation groups should think about how we get out the word about managing fire appropriately and that all fire is not necessarily bad.

JOHNSON: John does a great Smokey the Bear. We'll have him do it again later. Jim, what would you tell these federal managers—Lyle Laverty is sitting right behind you—about how they should approach this part of the problem?

RILEY: I know Lyle. I have a book I'll send you on this soon. Jaime mentioned restoration forestry, and I think that's a concept that's coming around. I came late to believing in restoration forestry because, as a private sector forester, I always believed that if you did forestry right, you wouldn't need to do restoration because your stands would be sustainable and healthy over time. The fact that they are out of balance and need to be restored showed that you've failed rather than succeeded in some respect.

But putting that aside, I believe that the concepts there, where the science shows us that we have particularly high-risk stands that are volatile and susceptible to fire and other agents, we can quickly look at those through the lens of science and decide what needs to be left. You need to look not from a perspective of what needs to be taken but what's the right thing to leave on that site. With that in place, then you can have a rational conversation about how you can get that done. Will logging get you there? What mix of logging and other things? That's what we did in the Clearwater Elk Initiative. If you have all that done based on science, I'm more optimistic today than ever before that we can arrive at those site-specific prescriptions. Then you run headlong into Brad's excellent point that the process is so encumbered. How can you ever implement the plan? We're there

with the Clearwater Elk Initiative where we have an excellent plan supported by a very broad set of interests but have difficulty getting financing carried out because of it. I think it's going to take an Executive Office instruction or an order that allows flexibility at the local level to implement these decisions when they are made, even when there is not 100% consensus. I believe that's what the governors were asking for because that's what needs to happen. The biggest failure of all of this would be sitting here three years from now, having had all these great ideas and a lot of local conferences and collaborations, and having had nothing happen.

JOHNSON: Darrell, does that make sense to you?

KNUFFKE: It does make some sense to me. Again, the Wilderness Society can support the idea of restoration forestry but not unreservedly, and we come to it with some unease, based on the salvage experience wherein we saw an awful lot of big, healthy trees taken out to make the removal of salvage logs economic.

I'd like to see us embark on a path whereby we simply commit ourselves to spending what it's going to cost to do the job, starting at the intermix and moving out. The further you get from where the people live, the less effective are those treatments if human health, property, and safety are our concerns. There are a lot of jobs in this work, and there ought to be. That's all to the good, but I think that in this effort, particularly with the head of steam it seems to have behind it, we need to separate the logs from the loggers. Hire the work done by competent professionals, hired by the Forest Service, to come in and get the stuff out. If anything saleable results, let the Forest Service sell it whether there is or isn't a market for it. Otherwise, I think we're going to run the same risk we encountered in the wake of the salvage operation.

RILEY: Let me say this. I think this is a climate that calls for experimentation in lots of different things, and I'm willing to say on behalf of our people that these newer ideas about different ways to organize contracts, about how the private sector is involved in the activities are all things we ought to explore, we ought to monitor, and we ought to look what worked and what didn't. I also think we have to be careful about these one-size-fits-all prescriptions. Any

forester in this part of the world goes out there and says, "Each stand is different; each stand requires a different set of circumstances." To try to say in a uniform fashion that we'll do restoration forestry as long as there is no tree bigger than a certain diameter is equally as "duh" as it is to say we're going to high-grade and only take out the biggest and most valuable trees. You have to look at the functioning of the ecosystem.

LITTLE: I've got a question for Jim Riley. He talked about resolving the litigation hurdles at the end. Are you talking about a pseudo God-squad? You talked about some kind of executive decision. This has to be a pretty powerful executive. These federal courts are pretty tough to get around. How do you do that?

RILEY: I better be a little careful here. We have executives that think they are so powerful that, in a sweeping action, they can set aside millions of acres of land without any due public process. You'd think that some of that same executive authority might be used to grant discretion to local groups and local states, particularly in light of the fact that this is a national emergency. In national emergencies, maybe it warrants and justifies allowing people to act in a controlled, monitored fashion and include experimentation. So I think that the executive officer of this country, the president of the United States, can say we're going to grant discretion, under the Governor's control, to local forest units to write plans and carry them out. When we'll do that, monitor it year to year, and bypass all those paralyzing processes that mean you don't get anything done unless you spend \$2 million and two years and have two hundred attorneys look at it for you.

KNUFFKE: I don't think it's a national emergency. It's a national problem. We've got time to make a sensible decision, and there is never a shortage of time to make a wrong decision. I think it would be foolish in the extreme to undertake any thoroughgoing changes in the way we manage our forests until we're damn sure we know what happened in the year that is just about to pass. When you start talking about an emergency, that often leads us to begin to think about ways to pinch off public participation. The roadless policy – I'm guessing you don't like it though we haven't

talked about it.

JOHNSON: I think that's a safe assumption. Accept that as a given.

KNUFFKE: Two years and a huge public involvement process, so I'm reluctant to see us, under the guise of an emergency, start eliminating people's opportunities to comment and to be involved. These are, from my perspective, our national forests and ought to be thought of that way. That does not necessarily argue for a one-size fits all approach to their management, but they are part of the national birthright and ought to be dealt with that way.

RILEY: I agree that there needs to be a thoughtful process that's open and available to people who want to help shape these decisions, but it needs to happen in time frames that can be concluded so action occurs on the ground. I'm not talking about overriding all of that. There's a right amount of that, but it certainly should not be a process that is so stymied in endless deliberation that nothing occurs. Whether you want to describe it as a problem or an emergency, something needs to happen.

JOHNSON: Dr. Pyne, would you stand up here for a minute? Earlier this morning, it seemed to me that you were ending where this conversation has arrived right now. We have the range of opinions here. What do you make of what they're saying?

PYNE: Well, I'm an historian, so I tend to look to the past rather than project to the future. I have mixed feelings about what's going to happen. Part of it is that we can't parse up the big problem into small problems. They are only going to be solved on a site-specific basis, and that's going to be with some kind of collective action. I'm also a pyromantic, not a pyromaniac. I would like to see a whole lot more fire on the landscape, and I don't think it's going to happen. I think we're going to have very selective areas where, because fire is an indispensable ecological component, we have to have it in, but if all you're talking about is fuel reduction or other kinds of manipulations that are a lot cheaper and more risk-free devices than fire, I don't think that's going to happen.

The other stakeholder that's not here is the international community. Why is it so awful for

Brazil or Indonesia to burn up a million acres of old growth forest, but if we do it in Yellowstone, it's ecologically wonderful? All kinds of issues of climate change enter into it, so it's going to be more complicated, but I would like to reconstitute the debate.

I think the whole set of terms that we're using remind me of my damn word processor. It starts capitalizing, and it changes my grammar. When I write something the way I want it, it defaults into something else. I just see the whole debate defaulting into things that will not be solved. If you want to trisect an angle and you're only allowed to do it with a compass and a straight edge, you're not going to do it. You have to find another set of devices to achieve that. So my hope is that we can somehow go back and reconstitute the discussion. I would call that a story or inventing a story or however you want to do it.

JOHNSON: Sounds like the perspective of an historian. Brad Little, with regard to Governor Andrus's comment earlier today, how about rangelands? How should we think about these issues in regard to rangelands and particularly his comment about getting the cows on the range to eat that grass early in the cycle and then getting them off.

LITTLE: Well, even Chief Dornbeck and I agree that a lot of this fire problem is a fuel problem. We've got a non-smoky way to take care of the fuel problem. I was in Canada a few years ago, and as they're doing here in the United States, they ran the sheep industry out of Canada. In Alberta, they have classes now that teach sheepherders how to pack a mule and light a Coleman lantern. They eliminated the sheep industry, and then people up there running big silvacultural operations realized they had to bring sheep back as a 4-H management tool. There are places in the United States where we are getting to that. We're just eliminating the sheep industry, which is a great tool for fuel management, particularly herded sheep, and they're going to have to bring them back in.

Sebastien Minaberri is paid to graze his sheep just above Los Angeles as a fuel management tool. I think even in the \$1.8 billion, there is language that talks about using livestock for fuel management, but the problem with cheat grass is another conference. The fundamental

element for both forest and range is that you have to take care of the soil, and you have to take care of the water. Everything else is secondary. If you're going to take care of the soil long-term, you're going to have to do some fuel management, and we think domestic livestock has a big place there.

JOHNSON: Jaime, same question I asked Jim Riley a while ago. What would you tell these federal land management agency heads that are putting this national strategy together? What ought they to be focused on?

PINKHAM: I guess the irony is that, as the speakers mentioned this morning, the warning signs have always been out there. So has the concerned community, but as Darrell and others have been saying, how do we make it a responsive community and finally light the fire under them, so to speak, to get them to respond. I think too often we always point the fingers at the federal land managers and say, "You're the ones to blame for the hardships of the world." Really, we need to look at another level of leadership here. It is our Congressional leadership. They're our neighbors, and they are just as impacted by this as we are. What do we do to get them to help create the changes and reforms. For example, people bad mouth the Endangered Species Act and its administration by the Fish and Wildlife Service, but don't blame the agency. Look at those who wrote the law. If you want to effect change, effect change at the highest level possible. Congress is the place to look. I also feel that in these kinds of debates, because of the diversity of values out there, it needs to run through a deliberative process to make sure we come to a right understanding.

John Gordon said one time that the greatest potential harvest from model forests is not wood products but knowledge about how diverse cultures and diverse politics shape our forests. He's right on target there. We need to have the ability for all the communities to come together.

The prescribed fire thing bothers me because the same people who fear fire in their backyard will fear smoke in their backyards. We have a series of laws and hoops to jump through at the state level, the federal level, and even the tribal level in regard to air quality codes. So launching right back into prescribed fires is going to have social impacts just like having wildfires spreading across the community.

JOHNSON: How do we deal, Jim Riley, with roadless lands in this debate? Are we going to have to think entirely differently about fire in roadless lands or in designated wilderness?

RILEY: Much of that 39 million acres is in the roadless lands. If you want to be honest about addressing what is a region-wide problem, I don't think you can separate it by these convenient categories of things we've allowed to evolve over time. I don't think it is good policy to try to look at the roadless lands in a block and to say they are uniform in some fashion and need to be treated in some uniform way. That's part of what really troubles me about the recent policy for those. When you get to looking at those roadless lands, you will find that opportunities for environmental problems occur because access and certain types of management will not be permitted. It has reduced to zero what management options will exist for folks interested in controlling fuel loadings and densities in these stands. I have asked the question, and there is no part of that plan that talks about what they're going to do about the high risk of forest lands within the roadless blocks. It is a big problem, Marc, and I think the policy is wrong-headed.

JOHNSON: Does someone else have a perspective on how we ought to be thinking about this debate with regard to roadless and wilderness land? Darrell?

KNUFFKE: I might have a point of view on that. It will not surprise you to hear me say that the Wilderness Society has been very supportive of the roadless initiative. In the context of today's discussion, I think we have to look at what transpired in the year 2000 and conclude that roads and logging haven't done a heck of a lot to slow forest fires. This year, heavily logged areas burned, and then the fires tended to move somewhat slowly into roadless areas and wilderness areas. The fact that we can log them and punch roads in them does not necessarily, in and of itself, get us out of this problem. \$1.8 billion sounds like a sack of money, and it is, but not when set against the need. We can't do it all. If we're going to get the greatest effect, you have to start at the interface and work out. The further into the wildland you get, the less effective are treatments if protecting property is what's driving it, and I think it ought to be in

the short term.

In 1994, 35% of our firefighting budget nationally was spent protecting private property. I don't think anyone in the room would argue that hasn't gone anywhere but up. One anecdotal report I heard from Montana was that 90% of the money spent fighting fire in Montana was to protect property. One firefighter said, "When the fire starts, there is no budget. You can spend \$1 million to save a \$50,000 cabin." That's the magnitude of what we're talking about, and that's why we had better spend as much of that \$1.8 billion as we can get our hands on and not worry for now very much about wilderness or roadless areas. They take generally pretty good care of themselves.

JOHNSON: Other thoughts on that? Jaime?

PINKHAM: I guess I'd better put my other hat on here. I also sit on the Governing Council for the Wilderness Society. On the other hand, being educated as a forester, sometimes I find myself getting caught professionally, but that's nothing unusual for a salmon-eating Indian Democrat in the state of Idaho. But that's another conference, too.

JOHNSON: Is that a "fourfer"?

PINKHAM: No, that's more like a "duh."

JOHNSON: Brad, how should we think about roadless and wilderness in this discussion?

LITTLE: Well, as a hamburger-eating Republican in Idaho...You know, my ancestors and then Jaime's ancestors burnt in those roadless areas. They talk about my uncle packing a 30-30 with him so that nobody would stop him when he came out behind his sheep, just setting everything on fire. Now they arrest you if you do that. They probably tried to arrest him then. That's why he packed the 30-30. A lot of these roadless areas were burnt, historically. They were burnt by Jaime's ancestors and mine, and they were grazed. Some of those roadless areas were grazed and grazed heavily. So both the grazing is gone, and the burning is gone.

I disagree that we don't have a crisis out there. I think the crisis is an environmental crisis about our watershed and the soils that are up there. I think that we do have to do something, and the

biggest impediment I see to it, as I stated earlier, is litigation. That's going to be the question. How do we get around that? Look at the Quincy Library group. Look at the enormous consensus they had in Quincy, California. That was a tough deal there, and they finally had to pass a law through Congress. I don't know whether, for all these little different ecosystems, if I dare, as a Republican, use the word "ecosystem," we have the time to pass legislation. That's why I like Jim's concept that we need some kind of an order. We have to have something to operate with a 50-50 Senate and almost a 50-50 House. There will have to be some buy-in from Darrell's constituency as well as Jim's and mine. That's our challenge, I think.

WOLFE: Marc, can I weigh in here in terms of fire in some of these roadless areas? I'm going to approach it from the standpoint of an elk-eating conservationist. Some folks would say, "How can you rationalize that? How can you shoot and eat elk and be a conservationist?" As an elk-hunter, let's take the Bob Marshall Wilderness Area in Montana. In Montana this summer, many of us who are elk-hunters and many who are conservationists were saying, "You know, it would sure be nice if the fires that were occurring in the Bitterroot Valley were occurring in the Bob Marshall Wilderness Area because it would improve the habitat for elk, and it would improve ultimately our opportunities for elk-hunting in the Bob Marshall."

So some way or another, we have to make sure that we can keep fire as an important component of the roadless areas and the wilderness areas. I'm not sure how we do that, but it's an important component and a valuable ecological process. Our wildlife evolved with fire in those wilderness and roadless areas. I know that one of the challenges we have right now, as wildlife managers, is trying to improve the quality of the habitat within some of those areas. So it's important that we keep that in mind and figure out a way to keep fire in those areas.

JOHNSON: Another quick comment on that subject. I want to raise one more thing, and then we'll go to your questions.

HULL: Well, all I know about is armadillos. Jim, they eat pretty good, too. I've tried them. From my perspective, 6% of the forest land of

Texas is federal land. Well over 50% of the problems that I have are on that same 6%. Some of that is wilderness area.

I can tell you what we're going to do down our way because of the experience we've already had messing around with a 2-acre fire on a wilderness area and seeing what happens in those highly-populated areas. Where there is roadless, and we have about 4,000 acres that might be impacted by that, if we can't drive there and put it out, we're going to bomb it from the air. We're going to put the fires out, and I think you're going to see that across a large portion of the nation. We cannot afford to mess around with some of this stuff we talk about in our wilderness areas and other places, for that matter.

JOHNSON: Gentlemen, Governor Kempthorne will be here later today to give us the perspective of the western governors on this issue, but it's clear that the governors are arriving at one central issue, and that is more involvement at the state and local level in sorting out these issues. My question to each of you, very quickly, is how do we get that involvement screwed into this process? Jim, how do county commissioners, local elected officials, and state foresters have an impact on these issues, which, as we've already said, are national in scope?

HULL: I can tell it's already starting to happen. I can tell you, first off, that this B word is something that's very foreign to most state foresters, that is, thinking in terms of "billions" of anything. In regard to this \$1.8 billion that we're talking about, the federal land management agencies at Ag and Interior, are insisting all the way along that the states be a very viable partner in this whole thing. It's already starting to work.

Through the states and the cooperation that we can and must bring to all levels of participation—not only just local governments but all of the traditional and non-traditional resources that are available to deal with the issue in all of our states—that's already starting to happen. That gives me great hope. If we look at that \$1.8 billion and think that's going to solve the problem, it's not. But it's so imperative that we do a fantastic job with what we have right now so that Congress and the Administration can look at that \$1.8 billion as a start toward a

level that we must continue if we're going to involve the entire nation and be successful.

JOHNSON: Other thoughts on local involvement? Jaime?

PINKHAM: I'm pretty optimistic about it. I think the relationship that has been created with the Governor's Office has been pretty positive. When I reflect back on the floods that we had up in northern Idaho back in '96, I'm optimistic that the doors will be open and that the tribes will be walking through that door to be a player.

JOHNSON: Other thoughts on that question?

SMALLEY: The National Wildland/Urban Interface Fire program, which is sponsored by a number of agencies, including the Forest Service, DOI agencies, and the NFPA, offers a series of workshops directed at local communities to start redefining what those paradigms are, what those responsibilities are, in concert with the American Planning Association, the National Association of Homebuilders, and others. It's designed to move those efforts down to the local level for local decision-making, collaborative planning, creative decision-making, and creative mitigation strategies and to get people to talk about these issues from all aspects. We're already seeing some success in a number of places, and we just completed the first year of the workshops. We're already seeing builders offering fire-wise communities, already seeing the American Planning Association and their chapters doing some special planning techniques and studies, and seeing the National Association of Homebuilders urging all of their members to attend the workshops. It stimulates the dialogue and comes long before litigation or reaction to legislation.

LITTLE: On the question of local control on these resource issues, I guess I have a question for Darrell. The biggest impediment to local control is the comfort level of the national environmental organizations, to be sure their concerns are addressed down to being very site-specific. You get to some of these communities, you need a green card program for environmentalists to bring them in. What would make the national environmental groups comfortable with some sort of local decision-making process

on forest health and fire management?

KNUFFKE: When you say “local decision-making process,” I think it depends on what you’re talking about. If you’re talking about local governmental control of national public lands, then we’re going to have a big problem with it. If you’re talking about the active day-to-day involvement of these people who live close to these places, we’d be very supportive of that. I would have to offer a caution, though. You have suggested that the Quincy Library process was a model of its kind. We think that it was not what it was cracked up to be and that there was a good deal less to it than meets the eye. The suggestion that only national conservation groups opposed the Quincy process misses the fact that just about every California-based conservation organization also opposed it. The reason they opposed it was that it was not inclusive. We weren’t at the table; our partners in California, in the main, were not at the table. They had a couple of local activists from Quincy, the industry, and the county commissioners, and that’s pretty much the totality of that enterprise.

LITTLE: I think you answered my question.

RILEY: Darrell, do you have an example of a local, empowered, decision-making process that has worked from the Wilderness Society’s perspective?

KNUFFKE: We’re involved in one in Lakeview, Oregon, a sustained management unit there. The successes have been pretty remarkable. The consensus has been remarkably easy to come to. Not everyone in the environmental community thinks we have any business being part of that process, but we are, and we like the results so far. In our mind, what made it succeed is that it flowed from consensus in the community about what they wanted from the forests that were in their back yard. They want them healthy. They see them as a backdrop for economic development of other kinds and not just for their forestry values. They do see a lot of promise in value-added wood production from those forests but at much-reduced levels from what’s historically taken place.

Yes, there are some models, but there aren’t very many around the country that anyone can point to that we think work.

RILEY: We seem to have this standard around the country that I believe in local decision-making as long as it comes up with the answer I like. If not, it’s a bad process. A lot of people are applying that test. But I think the answer to Marc Johnson’s question is that it has to truly be an empowered process, and it has to be able to bring finality of action. People have to be able to implement it even if there is not 100% consensus, because you’ll never get that, given the fact that some people empower themselves by being professional combatants. That’s the reality. How you get there has to be led by local governments, I believe.

JOHNSON: Let’s go to some questions.

FREEMUTH: There is one important group of players in all this whose interests are not quite represented on the panel. So we’re going to start with is a question from Dave Mills, who is a long-time Idaho outfitter, and also a question from Grant Simonds, who is the Outfitters and Guides Association’s executive director and lobbyist. That will start us off, and then we’ll go through either your written or stand-up comments.

DAVE MILLS: I’ve been outfitting on the Middle Fork of the Salmon for 24 years, and we haven’t heard any conversation about the impact of wildfires on recreation. I guess that’s the question. What’s going to happen next time?

The outfitters supported the closing of the Frank Church River of No Return Wilderness. It was a hard call on the part of the Forest Service and not a pretty picture financially for all of us, but we’ve made the most of it. From my experience in watching how the fire was run, there were a lot of management problems, and I could give you several examples. For instance, we use the air services, so these people were basically out of work. Well, the Forest Service hired them on a fourteen-day rotation, but there wasn’t a lot of communication among the various fire managers that made the decisions. For instance, you had professional pilots who knew the wilderness area, and they hired these air services. On the next rotation, a guy comes in who is the manager from Wisconsin, and he says, “Oh, single engine places aren’t safe,” so these guys are flat out of work immediately. Then they have to help these twin-engine pilots that they bring in from another part of the

country and tell them about the landscape, besides having it filled with smoke.

JOHNSON: Dave, what's your estimate about what the economic impact was, the dollar impact?

MILLS: I'll have to defer to Grant on that, but it's horrific. We work out of the town of Salmon, Idaho, and there was a major impact on the city. Another example: handling the laundry system. Keep in mind that the laundries work with the outfitters and do a great job. Now they're handling the Forest Service and the fire-related stuff. All of a sudden, the fourteen-day rollover comes along, and that manager brings in somebody with a portable laundry service, and our local guy is just out of work. So in the fire bureaucracy and management systems, there are people who are building businesses on that short time period to service these fires, and it's an interesting false economy.

JOHNSON: The American entrepreneurial culture.

LITTLE: The old forest rangers I know talk about the audit function that took place during the fire and the rehab. I'm not calling for another GAO audit, but I do think in some of these situations, there needs to be inside this \$1.8 billion particularly in relation to rehab projects where they spend more money on one acre than they can buy the adjacent acre for some kind of an audit function for both rehab and firefighting. You really don't want to get in and tinker with why they're doing it, but it sure isn't conducive to have it happen over and over. It leaves a bad taste in a lot of people's mouths, and that's not in anybody's interest.

FREEMUTH: Part II of the question, Grant Simonds.

GRANT SIMONDS: Several panelists dealt a little bit with the wilderness fire regime. Let me just answer Marc's question. At the height of the fire season, we had a 150 businesses that were locked out of designated wilderness due to closures. That amounted to about \$2.4 million worth of lost business in Idaho. Our brethren in Montana were also impacted dramatically.

Our folks operate in ecosystems that are not natural. We forget that about designated

wilderness in Idaho because preceding the 1964 and 1980 legislation to designate, we dealt with the 1935 policy of putting it out by 10:00 AM the next morning. So we have this unnatural buildup whereby we had half a million acres burn in the Frank, and yet when we go just a little farther north, as Gary Wolfe said about the Bob Marshall, we have a different situation with the Selway/Bitterroot, what I call the asbestos forest. You can't get a fire to burn in the Selway, and we're losing our elk herds quickly.

My point is that we need to keep in mind that while our industry generally supports natural ecosystems, they are not natural, and we have to find some way to bridge that gap from the seventy years of fire suppression to something that will approach whatever this pre-1870 or pre-350 year forest was. As Brad mentioned, these areas have been managed, whether by Native Americans or cattle persons, and that's what missing in the equation for us today.

We ended up being in a position where we had 65 business operators trying to make a decision about whether to start a trip, abort a trip, or change it. Yeah, the web sites and the E-mail were nice, and I applaud the folks I dealt with on the phone, but we have to get better information so we avoid near casualties like we had at the Flying B on August 18th. That's a little nuance that I want to bring to this discussion. We fine-tuned the system after Storm King Mountain, but we have to take a look at some of these nuances that affect the outdoor industry and our need to get information on a more timely basis.

FREEMUTH: Do you have a comment on that, Darrell?

KNUFFKE: One of the things I have found a little troubling in the wake of the fires is the extent to which we seem, yet again, willing to scapegoat the U.S. Forest Service. Since its creation, the Forest Service has behaved, in the main, the way we in the society have told them to behave. We said put them out, all of them, leave them out, and keep them out. Now we're beginning to reap the consequences of that. In some of our forests, we have ten times the number of trees per acre that we had 100 years ago. If that's not a prescription for trouble, I don't know what is.

If I could use an example from my neck of the woods, a year ago last July 4th, in the Boundary

Waters Canoe Area Wilderness, a windstorm came up and leveled a swath of trees fifty miles long and 12 miles wide. When I say “leveled,” I’m not making this up. These things were stacked 12, 15, 20 trees deep. The question in that part of the world is not whether it’s going to burn but when. The Forest Service was superb in the wake of that blowdown, and it has been tremendous ever since. There has been real willingness in those communities, some of them right outside the wilderness, to pull together, to settle on what’s important, and to leave the rest of the baggage behind. The agency is working very hard to come up with a plan of prescribed burns inside the forest with the single goal of interrupting that swath because the blowdown continued outside the wilderness to the east, and there are an awful lot of homes there in the trees.

So I think we ought to be a little less eager to beat up on the Forest Service.

FREEMUTH: Darrell, along that line, there are a lot of federal people in this room who are really glad they came to the conference. We have here at least 70 people from BLM, who are having their own conference, and a lot of people from the Forest Service. They have asked me to ask this question: How do they avoid being set up to fail? They have all this money, but in a year from now, if some miracle hasn’t happened or we’re thinking too short term, then everyone turns to them as having failed once again. They’re nervous about it; they want to succeed; there is all kinds of money there. What help do they need so they’re not the Congressional whipping boy in a year for having failed?

LITTLE: I’m sure they’re going to fail. We heard earlier figures that it’s going to take maybe three or four billion dollars a year. In some areas, they will have great successes, but in some areas, there is going to be failure. We know there is. And there are people who will say, “Look, right there. We gave them \$1.8 billion, and they didn’t take care of it.”

I think they’re dead on. They’re going to fail because \$1.8 billion, given the situation we have, is not going to get it done. It is a tough deal. I think that’s why we have to go back to the model Marc alluded to where the local people have some kind of responsibility. You can see it. \$1.8 billion; what do we get for it? Somebody standing in front of a burned-out

home; it’s going to happen.

WOLFE: It didn’t take twelve months create this problem. We’re not going to solve it in twelve months.

FREEMUTH: Is the Congressional staff in the room hearing this? You could be of help here, you know.

WOLFE: To follow up on that, I agree. This problem has been created over a period of 50 to 100 years. There is not enough money in the world to solve it in one year. You couldn’t solve it in one year if finance wasn’t even a problem. The reality is that, as a society, we tend to get worked up and concerned about issues when they occur, and catastrophic fires throughout the country are cyclical. They don’t happen every year. They happen periodically. What we’ve done is respond and get very concerned over a one to two-year period, and then it fades off.

What we have to do is recognize that this can’t be a one-year effort. It can’t be \$1.8 billion for one year; it has to be significant funding for a significant number of years, recognizing that we’re going to be working to resolve this problem in wet years when people are saying, “Why are you spending all this money to do something about forest fires? We haven’t seen a major forest fire for ten years.” We have to keep in mind that those are cyclical and that you have to work on the problem incrementally and constantly.

SMALLEY: We also have to remember that when we get all heated up here and try to make a quick decision on things, the decisions that we make now may impact things later on, and we create contradictions. Florida, for example, got all upset about the decreasing black bear population, so they instituted a statewide vanity license plate to protect the black bear. The extra money from the license plates went into protecting the black bear. It’s ironic because the automobile is the biggest killer of black bears in the state. The money in this protection fund was going to set aside land in the core of the state where the black bear habitat is so no one would be able to build on it. That now means that the population densities are going to be even greater along the coast, which then puts them in hazard of hurricanes and flooding and more wildfires.

RILEY: While most people recognize that this is a multi-year problem that we have to work through, you can't deny, when you look at the legislative history of the \$1.8 billion, that members of Congress were very serious about some level of accountability. At the end of next year, they want to see something more than a long list of the new green pickup trucks that were bought and parked behind the fire offices. They want to see something real in terms of a strategic approach to land management, fuel treatment, and other things. That's what it's about.

SMALLEY: I think you'll see that, in part, on the local level. If you go back to Jaime's comment and the need for land-use planning in local communities and where and how they put structures in there, that will be a local decision, and I think you'll see some impact in that.

HULL: Since the states are somewhat involved in this, I'd just make one comment. Based on what you said a while ago about the number of BLM and Forest Service people that are here, as I look at this, we have Rick Gale, Larry Hamilton, Lyle Laverty. If we look to those people and say, "You're going to fail," they're going to fail. To the many people we have in here that aren't part of BLM and the Forest Service, let me say we're all going to fail if we don't work together to take advantage of this magnificent opportunity we have with \$1.8 billion. That's all of our responsibility, and we'd better get behind it and make sure we don't fail.

FREEMUTH: The next question is going to come from somebody who represents another level of government that's pretty vital with the fire money and some of the Craig-Widen legislation that's come up. That person is John Foard, a county commissioner here in Idaho.

JOHN FOARD: This question is for Darrell, and it's not county-based, but it is in a lot of ways. For the last several years, Idaho has had a process that is attempting, because of the gridlock on our forests, to identify some sample projects that might be put into place to test alternative methods of managing our federal lands. It comes to a close here next week, and the group working on it will present its recommendations to the Idaho Land Board.

I'm going back now to your comment on the

Quincy Library project. During its three to four year process, the group has attempted to involve the Idaho environmental groups, both the Wilderness Society and the other groups. Particularly in the last thirteen months, they have attempted to get their input and have them at the table during this process. Those groups have declined to participate. Does that mean, based on your comments on the Quincy Library project, that the Wilderness Society and the other national environmental groups will automatically oppose anything that comes forward from Idaho in this regard?

KNUFFKE: I don't think "automatically oppose" is even close to accurate. No, not automatically oppose. All we ever sought in the Quincy Library Project was a seat at the table, not just California regional groups. You're telling me that the Wilderness Society, the Sierra Club here, the Idaho Conservation League—none of them show any interest in this process? Are these on state lands or federal lands? Well, if we didn't show up to play, there must have been a reason for it, but finally it seems to me we might have surrendered our opportunity to comment intelligently on whatever you guys show up with. I need to know a lot more about it than what you've just sketched out, but that doesn't strike me as the way the Wilderness Society typically comports itself in these processes. We're always willing to sit down and talk. What we're not willing to do is negotiate existing law usually. Those processes are not the forum for that. The process for that is the United States Congress. Set that aside, and let's see what we can come to agreement on. I'm surprised to hear your description of that process; it's not at all like us.

FREEMUTH: Does anybody from the local Wilderness Society or ICL want to comment? Craig?

CRAIG GEHRKE: I remember addressing the Public Lands Task Force about three years ago. It was on a Saturday. I remember because I had to come up with day care for my kids to go do that. Fundamental thing on the Public Lands Task Force, from our standpoint, was that they are aiming toward state management of public lands. We don't support that. It's not part of our agenda; it's not something we are pleased with, and we will not help the process that goes

toward state management of federal public lands. It's as simple as that; we have better things to spend our time on.

FREEMUTH: I know something about this, but I'm not going there. Dennis, you had a question about this?

FOARD: One of the fundamental premises of this project is that it does not involve state management of federal lands. It is alternative methods of federal land management; all five projects are going before the Land Board next week. It involves federal managers managing federal lands and has nothing to do with state management of federal lands.

AUDIENCE QUESTION: Then why is it going before the State Land Board?

DENNIS WHEELER: John, one of the best ways we can help the federal and state land managers here is for us as the public to stop sending conflicting messages to them, expecting them to solve things. When I listened to the panel this morning, I was kind of astonished. I hear some saying it's OK to create conditions that kill salmon through siltation or that it's even OK in the short term to let wildlife die in uncontrolled fires if it's going to be healthy for us to have wildlife in the long term. We've learned as humans that, through preventive health measures, we can extend our quality of life. Why don't we take a preventive health approach to our forests in solving these problems rather than to suggest that in the short term, we have to let salmon and wildlife die in the process.

WOLFE: John, if I can respond to that. If you took my comments to mean that we thought this was OK, I didn't intend them to mean that. What I was trying to explain was that if you're looking at the long-term impacts on wildlife, specifically elk and deer, which is what our focus is on, the long-term impacts are probably going to be beneficial. I followed up by saying that we don't think that's the way to do it. We think there is a better way to do it. I just wanted to clarify that we weren't trying to say that we think that was OK. We wish it would have happened in a much different way, but we think that the reality is that the long-term impact on deer and elk habitat is probably going to be

positive, down the line.

FREEMUTH: OK. Let me read a question, and then I'll take some hands. It seems that there is fundamental disagreement on this question: How do we reach consensus on what we're managing both forests and fire for: property protection, habitat protection, endangered species protection, community enhancement? Do we not need some agreement on the purposes of the national forests again before we can move ahead on this? Any reaction to that?

KNUFFKE: I would take a shot at it. I think that agreement has been emerging over the last decade. Some of us would say that the strongest voice for consensus is reflected in the roadless policy. If you look at the numbers of Americans in the millions who commented in support of that policy, that speaks, I think, about strong support for defending our forests in something approaching a natural state even though the scientists tell us we don't know what the heck that might be. Letting them be as close to natural as possible, putting fire back in its appropriate role—I don't think we're as far from consensus as the question might suggest.

The Wilderness Society has put together a forest vision. We think we ought to make decisions on the national forests subject to this vision. It comes down with one very significant feature. We ought to manage our national forests for that range of values that have essentially disappeared from other lands. That's a good place to start, and that takes in many of the values mentioned in your question.

SMALLEY: And wouldn't it be nice if the fires stopped at the borders of the national forest lands or the state forest lands. Unfortunately, it can't see those designations, and I think it has to be a national-state-private combination that comes up with how these forests are managed and used. Probably the biggest challenge is to redefine what those responsibility areas are and how those responsibilities are actually carried out. We do a big disservice when we tell the Forest Service or BLM or the county or a state or any jurisdiction, "That's your responsibility." If the national forests and national lands are truly national lands and belong to everyone, then it's everyone's responsibility to look at how these things should be managed and used. I think that if we somehow come up with a key to do that

on a regional or local level, consensus or agreement possibility. Litigation used to be our national pastime, but now watching litigation on television is what we like to do the best. The limits of liability should go along with that responsibility.

RILEY: I think consensus is very hard if not impossible to obtain on these issues. You just have to face that reality. The most surefire way to never get consensus is to insist upon it as a criterion for moving forward. That will make sure we never agree to anything.

Let's see what we're talking about here. The Wilderness Society's vision for management of the national forests we would disagree with as a matter of general principle. We think there are ways that man can interact with the federal forest lands that mimic the processes of nature and utilize the opportunities, ways that provide for the good of the economy and the good of mankind. I suspect we will forever disagree with the Wilderness Society about that.

What I'm wondering if we can agree upon is the set of lands, the 39 million acres, that the scientists tell us over and over again are beyond natural ecological conditions because of the activities that have occurred on them. They are over-dense, they exhibit conditions today that have never existed before under any natural conditions, and they are not natural stands of forests. Can we engage about a process of restoration forestry that we can all agree upon to bring them back within what the Wilderness Society would agree are natural conditions and what we would agree is a rational way to get there? If we can get agreement there, we'll have a much better platform on which to carry on our historic discussion about this. But agreement will come within a group of folks; it will not be consensus.

KNUFFKE: That's probably true, and I think that may be an area that would be fruitful to pursue. There ought to be some things we can agree upon so long as we know darn well going in that there are some places we will disagree. I did not mean to suggest for a second that you ought to advocate for your issues on the basis of my forest vision policy. I meant only to describe it as the document that governs our thinking about forest management.

RILEY: And certainly you didn't expect that I was going to agree that the roadless policy was a consensus policy.

LITTLE: You asked about what parameters. I think generally the old principle that we used to use of taking care of the soil and the water very long term—not short spikes in one-plant communities because that happens to be helpful for one species or another—but the long term, very long term health of the soil and the water should be the key component. Really, everything else is secondary. If it means building a road in there to do something to get some trees out of there to stop a catastrophic fire, if I got to send out the poll west-wide with that question on there, people would come back and say, "That's correct." The long-term health of the soil and the water for our children and grandchildren is the most important thing.

FREEMUTH: I'd remind everyone before we stop that we sort of came to consensus on how we were going to elect the president, and we called it the electoral college. Maybe that consensus wasn't such a good one, or maybe it was.

ANDRUS: We're going next door for lunch. First of all, Dave Mills made the comments about the impact on recreation. Remember what Jim Hull said about setting aside 10% for prevention and getting more from it than he gets from the 90% for suppression. With the \$1.8 billion, maybe you could divide it up with one project in each forest that would be a sampling, but what Dave Mills didn't have the opportunity to say is that the cost of fires goes clear across the whole spectrum of our economic society. One motel in Stanley lost \$42,000 in cancellations when the river was closed. The service station across the road stopped selling gas. Grant could give you a list of others that I don't have in my head. It impacts everything, so some way we have to come up with an answer, and we hope that's what we're here for today.

I had a note from a gentlemen from FEMA. It says that FEMA pays only for those uninsured properties, not the insured properties. In Idaho, the total claims paid this year were \$14,000.

We're going to have lunch now, and then I'll see you back in here. We want to keep this thing moving along.

THE FIRES NEXT TIME

Thursday, December 7, 2000

Boise State University

Boise, Idaho

LUNCHEON ADDRESS

Richard T. Gale

Chief, Fire and Aviation

National Park Service

CECIL D. ANDRUS: Good afternoon, ladies and gentlemen. Thank you very much for coming in here to break bread with us. I appreciate the participation of all the people in the morning session. Once again, my thanks to the *Idaho Statesman* and its staff. We will, in fact, have a white paper for you, but I doubt that it will be finished by Monday.

We have the opportunity today to hear from a very experienced individual when it comes to fire. I'm going to put him on now, but we need to have you back in the other room by 1:50 because we have a satellite hookup from Washington D.C. with some Congressional members, and we need to begin promptly at 2:00 PM.

Rick Gale has been in the National Park Service for more than 40 years. He is a second generation Park Service official, and he and his wife have three daughters, all three of whom are employed by the National Park Service. Doesn't that cause a little conflict?

RICHARD T. GALE: They don't work for me.

ANDRUS: Rick is now the National Commander for Fire and Aviation for the National Park Service, and is stationed here in Boise. He was also the Fire Commander during the Yellowstone fire, and I'm sure he'll use that someplace in his comments. He's an outstanding individual who can tell you the way it is, has enough time in grade that he doesn't have to kowtow to ex-governors or anyone else. He can tell it straight, and that's the way you're going to hear it today. Rick Gale.

GALE: Thank you, Governor. Good afternoon. Given the day it is, I have to digress for one moment because nine years ago today, I had the distinct honor and privilege of being the Incident Commander for the commemoration of the 50th anniversary of the bombing of Pearl Harbor. The reason I mention that today is that I get a flood of wonderful memories every December 7th. I haven't really thought about fire this morning; I was thinking about the Pearl Harbor commemoration. What an experience. More fun than Yellowstone, more rewarding than Yellowstone.

I'm here as the third string or something for Bob Barbee, the Superintendent of Yellowstone in 1988. Six weeks ago, he retired as Regional Director in Alaska, and when he retired, he did two things. He immediately moved to Bozeman, Montana, and he got a hip replacement that prevented him from traveling, so you're stuck with me.

I'm going to talk about some lessons and reflections on Yellowstone, but I'm also going to do a few other things. The Governor said I could talk about any aspect of wildfire that I wanted to, so I'm not going to miss this chance for a bully pulpit.

The first thing I would tell you is this: My second favorite general, Colin Powell, says something that I think is absolutely right on target. He says, "The role of the leader is not to be the great organizer; it's to be the principal disorganizer." I hope this afternoon to provoke and stimulate you a little bit by disorganizing some stuff for you.

At Yellowstone, one of the things that kept me (a) sane and (b) out of trouble was the

executive director of the Greater Yellowstone Coordinating Committee, who had to do that about twelve times a day. He is now the Deputy Regional Forester for the Intermountain Region in Ogden, Utah. I'm going to ask him, when I get through with some reflections, whether he'd like to say something. Jack Troyer. The only reason I was successful at any of it was thanks to Jack

What I'm going to do is share some reflections and then share some lessons learned. I would tell you that we probably learned these lessons in Idaho in 1985, in northern California in 1987, in Washington in 1994, in Florida in 1998, and in Texas, Oklahoma, Idaho, and Montana in 2000, and any year you want to take back from that, we've been there and done that. We're going to talk about that a little bit.

Some reflections, and here I think I'm reflecting mostly Bob Barbee's thoughts. It was an interesting summer as you might guess. One of the things we learned is that neighbors once friendly can become anguished and hostile. We learned that cohesiveness can give way to recrimination and blame. Yet, during that summer, there were numerous acts of what I would call heroism and certainly thousands of examples of selfless cooperation. I think the fires that summer brought out the best and the worst in human nature. We learned that good communication with the public is essential. There is a corollary here. Good communication works very well when you're winning. It's an entirely different matter when you're getting your ass kicked. To quote one of my colleagues in southern California, "I've had a lot of difficult times on fires, but this is the first time I've had my butt kicked 28 consecutive days." I had it kicked for 39.

We learned that the media is not necessarily a window to the world. There was a lot of hype. There was even more distortion, but there were a lot of attempts at honest reporting. The thing we learned out there—and I don't think we've learned it very well yet—is that we weren't prepared to deal with the media on that scope with that level of focus. I don't think we are any better prepared to deal with that same kind of situation today than we were in 1988.

We also learned that there is no shortage—in fact, there is an overabundance—of pundits, pontificators, and polemicists. It's sort of like Florida today. Maybe that's where they all went.

We learned once again that mechanized

equipment is not a panacea, especially when you sit in the Madison River Canyon, watch the fire come to the south rim of the canyon, and jump the half mile across to the north slope. Multiply half a mile by the eight feet of a bulldozer blade, and tell me how many blades wide you have to have a fire break.

We learned, once again, that during extreme or severe fire conditions, all the firefighting resources in the free world aren't going to make one whit of difference. They never have, and they never will. In fact, I will tell you this—although even I had enough sense not to say this publicly at the time—the best thing we could have done in mid and late August and in early September would have been to send all the firefighting resources home except those who were doing structural protection. How do you suppose that would have played politically? or in the media? You couldn't do it.

But we weren't doing any good. I will tell you about the day that my Co-Area Commanders and I gave thirteen incident commanders the order—because that's what it ended up having to be—that we were going to stop fighting fires on the internal lines. We just about had an insurrection on our hands. If we can't get our best and brightest incident commanders to understand extreme conditions, how do we ever expect anybody else to do that who isn't in that game?

We learned there, although I wasn't smart enough to realize it then, and we've learned again that the challenges from now on out in fire management aren't in the physical sciences. They are in the social sciences. I don't know that we have come to grips with that or are even aware of that. But to me, that's something we have to look at. That goes across any social science you want to talk about, whether it's economics, organizational psychology, whatever you want to get to, I think that's where the challenges are. Just look at the mixed messages between Smoky the Bear and the message that prescribed fires are good.

Jack Troyer, do you want to say anything?

JACK TROYER: Well, if I had to come up with more lessons learned, they would be these. First, in the world of television, if you don't have a prescribed burn policy that can be explained clearly and completely in 30 seconds, then you are perceived as having no coherent policy. "Let burn" wasn't really let burn, but that's what

came across.

Second, in 1988, for the first time, the fire behavior that was observed was of a much greater magnitude than anything we had observed before. We weren't prepared for it, and it was a glimpse into the future.

Third, what happened in 1988 really emphasized that fire recognizes no political boundaries. The fire was running back and forth from private to public lands controlled by various federal, state, and local entities. It was the same with the aftermath and the noxious weed problem. They don't recognize political boundaries either. It underscores the need for coordinated efforts.

GALE: Thank you, Jack. Having Jack around was one of the great pleasures there. The final lesson we learned at Yellowstone, although there are a thousand more, was that Mother Nature is not always a gentle hostess, but she always bats last. I would submit to you that we did not learn anything new at Yellowstone. Steve Pyne's a far better historian than I am, so I probably have this quote a little wrong, and you've probably all heard this: Those of us who do not learn from history are doomed to repeat it.

That leads me into some other topics, and I'll be happy to answer any questions about Yellowstone as long as you don't get too much into rehab because I've only been there five or six times since 1988, so I'm not going to be able to get into any details there for you.

I want to talk about some other things. I heard this morning—and I cringe every time I hear it—the words “catastrophic fire season.” Having said that, I certainly recognize that one's definition of catastrophe depends on whose ox is being gored. If you lost your house, that's a catastrophe. But I would submit to you that 1988 and 2000 were not catastrophic fire seasons. I say that for one simple reason. With very few exceptions, in both those years, the same number of people we sent out to the fire line in the morning came back to the fire camp in the evening. To me the catastrophic fire year was 1994 when we killed 34 people.

Here's something I believe you can take to the bank. If we had not killed 14 of those people in the same place and at the same time, we would still be doing business as usual. We would not have done one thing about that. The only reason we ever had some of these reviews, safety awareness studies, and maybe even the 1995 fire

policy was that we had an unmitigated disaster at South Canyon with 14 individuals.

Now we react to disasters, and usually we do two things. First, we wring our hands, and then we point fingers. We're good at doing studies about the disasters. You go to any fire management office, whether it's state or federal or local around the country, and there is a stack of disaster review reports, gathering dust. I would bet you that if you looked at the recommendations, you could almost tape record one and replay it again for the next.

So what's wrong with this picture? I think what's wrong with this picture is that we're looking at the wrong thing. In addition to looking at the disasters, we ought to look at the “There but for the grace of God...” events, those “almost” situations. We don't look at those, and we don't learn from those. Yet to me, those are the ones that will tell us the lessons learned. Why didn't it go sour? What was the difference there. We need to be smarter about what we are really analyzing and reviewing here, ladies and gentlemen, if we're really going to learn lessons and change the way we do business in the fire game.

Now one other thing we all know but don't do. We learned again in 1988, we learned it many times before, and we learned it again this year. During extreme or severe fire conditions, we can't do much for the fire. Yet, we persist, each and every one of us—whether we are politicians, policy-makers, or practitioners—with the myth that we can put the fire out. We don't put the fire out in extreme or severe conditions until those conditions change.

What do we do? We have severe conditions, so we adopt the same strategies and tactics that work well for us in normal times. Then we wonder why they are not working in an abnormal situation. We fail to understand that we are trying to handle abnormal conditions. We believe we can make a difference with the addition of a few more firefighting resources and keep hammering away, day after day after day.

Let me give you an example of that. The Dome Fire, which occurred in an infamous place called Bandolier National Monument in the Sante Fe National Forest, was a wildland fire. New Mexico had been in a drought, and the wind was blowing. A strategy was selected that the review team said, given the conditions, meant it wasn't a question of whether we were going to have an entrapment; the question was

where, when, and how many people were going to be involved. We did have an entrapment with 49 people into shelters. Fortunately, there were no injuries and no fatalities, and we burned an engine.

Now here's my favorite quote to the review team from one of the people involved in the fire. "Well, our strategy would have worked if this had been a normal year." We can laugh, but every practitioner in this room has said the same sort of thing. I know that's true because I have. We have to get smarter about this, folks. We have to back off and think about what we're doing here.

I'll probably raise a few hackles, but let's talk about the Clear Creek fire in Idaho. We would look at the daily situation report, double the amount of resources assigned to the fire, and the percentage of containment would go down. In these kinds of years, as Jerry Williams so eloquently put it, we have to do what the fire will let us do and not what we would like to do. Or as another IC [Incident Commander] colleague of mine puts it, "We've got to learn to back off to the best ridge, not the next ridge." We've also got to learn to say, when we're thinking about adding more resources to one of these bottomless pit fires, when is enough, enough? What are we doing besides putting people in jeopardy and spending money?

All right. That, I hope, has stirred up a few folks. If I'm not, I'm missing my charge up here.

We had a lot of talk this morning and we'll have a lot more about the National Fire Plan, which is to build off the President's Report and the appropriations stuff. I agree with Jim Hull that it's one of the most unique opportunities we have ever had, and we need to do it right.

Let me talk about three things, just to give you a snapshot of how this might work. They all involve wildland fires in 2000. They all involve National Park areas, and they all involve the effectiveness of hazard fuel reduction. The first of these is Mesa Verde National Park in Colorado, which is a pinion-juniper fuel type. Because of the threat to cultural resources and structures, there was no way that you were going to reduce fuels in that fuel type with prescribed fire. So for five years, they had a variety of mechanical reduction programs, and in 2000, when the Bircher Fire hit, as it came toward those structures, that park infrastructure, and those irreplaceable cultural resources of Mesa Verde, it laid down, engines got in there,

and they stopped the fire. Success Story Number One.

Success Story Number Two. Jewel Cave National Monument in South Dakota. Fuel type: Ponderosa pine, typical Ponderosa pine with successful suppression for 70 years. Thick. Too thick to prescribe burn. So we did mechanical fuel reduction first to reduce some of the fuels, then we prescribe burned it twice, in 1996 and 1999. The Jasper Fire, 2000. Full head of steam, the head of the fire was bore-sighted right for headquarters and the park infrastructure. There weren't any resources out in front of it because you could hardly fly an airplane fast enough to keep up, let alone anything else. It hit where the fuel reduction had been done, and the head of the fire split and went around that park and that infrastructure.

The final success story was in Jim's state of Texas, Lake Meredith National Recreation Area. It's an interesting place because it's one of three places where the National Park Service actually manages oil and gas resources. Never mind. We won't get into that. Anyway, here grassland is the fuel type, and they burned it in 1998 and again in 1999. There was a fire just outside that park, 16,000 acres, which basically had every single resource tied up. There was a single engine left. A fire started at Lake Meredith and headed toward the town of Sandford and toward the gas and oil field development that we had prescribed burned. The fire came, it hit where we burned, it laid down, and one engine took care of it.

Those, to me, are the kind of success stories we need to build on, a hundred-fold over, with this new money we're getting. I think we have the opportunity and the ability to do just that, and I'm pretty dang excited about it, frankly. I'm as excited as Jim Hull is.

We are going to need to be collaborative. You have to understand that I'm talking about collaborative here in the sense of, according to the dictionary, "cooperating with an agency or instrumentality with which one is not immediately connected." I'm not talking about the collaboration definition that talks about giving succor to the enemy. That's supposed to be humorous.

In addition to the National Fire Plan, the Secretaries of Agriculture and Interior, re-commissioned the original team that put together the 1995 Federal Fire Policy to look at that. This is the 2000 edition in final draft form,

ready to go to the two Secretaries for, we hope, their signature and adoption. I'm not going into a lot of detail about that. Suffice it to say that the principal finding was that the 1995 policy is sound and should continue. But it strengthens and mirrors the National Fire Plan in the sense of collaboration among the feds, the states, the locals, and the tribes. So they are to work together, and I think that is an excellent thing.

Our challenge, it seems to me, is that we have to look beyond these immediate 2001 projects. We have to look beyond hazard fuels. We have to look beyond focusing the fire issue on the intermountain west. We need to develop a long-term, strategic plan that includes all aspects of fire management across the nation and involves all our partners.

I'm going to give you a couple of examples, and I will slightly exaggerate, but not much, for emphasis. The Olympic Peninsula of Washington. Right here in the core, you have a national park. Surrounding that core, you have a national forest. Surrounding that forest core, the area is the responsibility of the Washington State Department of Natural Resources. So what do we have on the Olympic Peninsula? It doesn't take a rocket scientist to figure out that we have three fire management organizations, we have three discreet fire management plans, we have three separate response capabilities, and we have three dispatch organizations. Do the park, the forest, and the Washington DNR coordinate? Absolutely. But are they joined at the hip with one overall fire management plan and one united response and one dispatch center? You know the answer as well as I do.

That, to me, is what we're talking about when we talk about collaboration. It's more than just, "Yes, we'll work together." It's not just the Olympic Peninsula. That was an easy one to get to because it's so obvious. That's the question. Why aren't we doing that? That's our challenge, to do those kinds of things and use these resources we have. We may have a billion, and it sounds like a lot of money, but as Senator Dirksen said, "A billion here, a billion there, and pretty soon you're talking about real money." Our finite resources are not maybe the financial ones; they are human ones. So we had better start thinking about how to use this money in the most effective, cohesive, collaborative manner.

I'm going to go back to Cerro Grande. That was Jerry Williams idea, but first, I have to tell

you a story. When you get a situation like Cerro Grande, you can have about three options. You can cuss, you can laugh, or you can cry. But about five days after Cerro Grande occurred, I got an E-mail from a friend of mine who is a park ranger in Scotland. He said, "I thought you be interested in what the BBC is playing on this fire. The quote he sent was, 'American Park Ranger Burned Down the Alamo.'

I'm not going to talk about whether prescribed fire should or should not have been lit in Cerro Grande or whether there were or were not contingency resources or whether the strategy and tactics after it was declared a wildfire were adequate or whatever. Let's look at a bigger picture here. If the objective was to provide defensible space and reduce threats to Los Alamos, we went about this backwards. We should have started out doing fuel reduction in and around the city of Los Alamos. Then we should have gone out to protect stuff in the Santa Fe National Forest. Step 3 would have been the hazard fuel reduction that we attempted to do at Cerro Grande. There are a lot of reasons why that didn't happen, but again, we have to start working smarter, not working harder, and thinking through what we are really doing here. I think we need to plan and execute every fire management plan in a cohesive, holistic manner among all our partners. We have an opportunity to do that, and if we don't take it, we're silly.

I'm noted for my tactical truths. I'm going to give you a tactical truth and then a strategic truth and then, if we have time, we can take questions. Do we have time?

ANDRUS: That depends on how long it takes you to tell the truth.

GALE: All right, here's the tactical truth. Remember it is almost impossible to undervalue the status quo. Think about that.

Here is the strategic truth, and it emphasizes what I've been trying to say but in a different way. The most important principle is that the strategy be correct. If the strategy is wrong, no amount of tactical brilliance, dogged determination, superior morale, or material can compensate. That again is what I'm trying to talk about with the big picture.

I always enjoy an opportunity to tip over the apple cart, and I hope I have provoked and maybe even irritated a few of you. So let's take a

couple of questions.

ANDRUS: We have time for about three questions. It depends on whether you make a speech or ask a question. Who has one?

AUDIENCE QUESTION: Do you agree with the other gentleman who said today that the 10% he spent on prevention was worth more than the 90% he spent on suppression?

GALE: That was Jim Hull, talking about prevention, right? Yes, I agree with that. Again, I think that's working smarter. Does that mean we never have to do anything with the 90%? No, it doesn't, but I think prevention is where you get the best bang for the buck. I agree entirely.

AUDIENCE QUESTION: What do you think of the moratorium that was placed on prescribed

burns after Los Alamos? We held up a lot of prescribed fires last year on national forest and BLM land. What is your response to that?

GALE: The moratorium for everybody but the National Park Service was lifted thirty days later. It only applied to prescribed fires west of the 100th meridian. The moratorium was lifted after 30 days for every agency but NPS. You need to get someone from the BLM or Forest Service to see whether they continued it for other reasons, but there was no moratorium from either secretary after that period of time for other than the NPS.

ANDRUS: Rick Gale, thank you very much. I have to have all of you back in there in about eight minutes. We have a satellite hookup, but you're free to go as long as you're back in your seats in eight minutes.

THE FIRES NEXT TIME

Thursday, December 7, 2000

Boise State University

Boise, Idaho

POLICYMAKERS' PANEL

Marc C. Johnson, Moderator
Andrus Center Board Member
Partner, The Gallatin Group.

Dirk Kempthorne, Governor
State of Idaho

Mike Simpson, Congressman
Second District of Idaho

Tom Udall, Congressman
Third District of New Mexico

Lyle Lavery, Regional Forester
USDA Forest Service, Region II

Larry Hamilton
Director of Fire and Aviation
Bureau of Land Management

MARC C. JOHNSON: We had a very good discussion this morning on the history and science of wildfires, a review of their impacts by our stakeholders just before lunch, and some practical words of wisdom from Rick Gale about fighting fires in the west, who talked about some of the lessons we've learned and maybe need to re-learn over and over again. We're going to conclude our conference this afternoon with a discussion among the folks who are charged with developing and implementing fire policy.

We're extremely pleased to have the Governor of Idaho, the honorable Dirk Kempthorne, with us today and we are truly pleased to have, by satellite from Washington, D.C., Idaho's Second District Congressman, Mike Simpson, and Representative Tom Udall from the great state of New Mexico. It's a pleasure to have them both with us.

I also want to introduce Lyle Lavery who has the enviable or unenviable task of developing for the Forest Service the National Fire Strategy

and one of his counterparts in the Interior Department, Larry Hamilton, Director of the National Interagency Fire Center.

Governor, welcome to you, sir. The Western Governors' Association had a meeting in San Diego last week. Could you begin by giving us a little background on where the western governors are coming from with regard to this National Fire Strategy?

GOVERNOR DIRK KEMPTHORNE: Marc, thank you very much for being down there for that session. Governor Andrus, I commend you for the convening of this gathering and this exchange of good information. Lyle Lavery was one of our speakers. The WGA had two plenary sessions, and virtually the entire first day of the meeting, we discussed the condition of the forests with regard to the ecosystem and health. Then we talked about where do we go from here, the restoration, etc.

I thought it was an outstanding presentation.

I wish that somehow I could appropriately encapsulate some of the good things that were discussed there. I will try to touch on them, but again, Lyle, I want to compliment you. You did very well, and I'm looking forward to your comments here. Larry, I'm delighted to be with you.

In September, the Western Governors' Association had a meeting in Salt Lake City. A number of western governors met with the Secretary of Interior, Bruce Babbitt, and with the Agriculture Secretary, Dan Glickman. I don't think anybody doubts that the current forest policy is not working. We have just come off probably the worst forest fire season that Idaho has ever experienced. 1.3 million acres, one billion board feet of lumber from which you could probably have built 100,000 single family homes, went up in smoke. That's what I contend happened to the forest policy; it went up in smoke.

The two secretaries concurred with the governors that the states need to be full partners in dealing with the forest health. Language from that meeting was then included in the Interior appropriations bill. That language is very straightforward. It calls upon the secretaries to work with the states as full partners in developing a ten-year plan for forest health.

The WGA meeting in San Diego was a continuation of that to see some of the progress that's been made by Lyle and his team. We were impressed with what we heard. We were also concerned with some of the findings, the statistics that have been pointed out. I know it's been referenced, but here's the GAO report, *Western National Forests*. "A cohesive strategy is needed to address catastrophic wildfire threats." This estimates that 39 million acres are at what they call "high risk of catastrophic fire."

The game plan that's been devised suggests that we could probably treat 3 million acres a year. If you run your math, you could say, "Well, in perhaps ten to twelve years, we'll have something that perhaps is fire safe." Not fire retardant but fire safe forests. The trouble is that we will continue to have these catastrophic fires in the meantime. One of the quotes that struck a chord with me was from Wally Covington, who is a professor of the Ecological Restoration Institute at Northern Arizona University. He said, "Trends over the last half-century show that the frequency, intensity, and size of wildfires will increase by orders of magnitude

the loss of biological diversity, property, and human lives for many generations to come." There is also concern that this report by GAO was even conservative, that it's many more million acres than has been reported.

So we now have a partnership that has been established, Marc, between the states and our federal partners. We certainly have the attention and support of the Administration. The governors felt good about the presentations made by the Forest Service and by BLM. There is much more I'd like to discuss about this, but, Marc, do you now want to make this into a conversation?

JOHNSON: I would like to do that, Governor, with your permission. I'd like to bring Congressman Simpson and Congressman Udall into the discussion. Gentlemen, we had a lot of talk here this morning about the \$1.8 billion that the Congress has appropriated to deal with some of these fire issues. Knowing what both of you know right now about how the national strategy is beginning to unfold, are you comfortable with the way the Forest Service and the BLM, in particular, are establishing this national strategy? Mike Simpson?

CONGRESSMAN MIKE SIMPSON: I'm not sure "comfortable" is the right word. As you know, when you appropriate \$1.8 billion to address fire suppression, fuel reduction, and rehabilitation, what we need to see and what Congress wants to see are solid results. We're going to need to see that this money actually goes on the ground and is doing those things that, in fact, were promised to us. We need to see that stakeholders and state and local governments are involved. That's one of things I'd like to discuss with Lyle. Since he's going to be implementing this plan, how sure are we that the states and local governments are going to be involved, to what degree will they be involved, and what type of results can we expect to see out of this?

This is going to have to be an ongoing appropriation from Congress even though this is a one-time appropriation. If we don't address wildfires in the west effectively, we're going to have to appropriate more and more money. If you look at the fires that have happened this past year and in previous years, everyone wants to point fingers, and there are plenty of places to point fingers. Congress has its share of

responsibility and blame to take on these wildfires. For years, the Forest Service has requested money for fire suppression, fuel reduction, and other things. The Administration has then reduced that amount, and generally Congress has reduced that a little bit more. Over the last four or five years, the Forest Service had about a 15% reduction in what it has requested for fire suppression and fuel reduction.

Congress needs to take some responsibility for the condition of our forests, and we're going to have to appropriate more money. Unless we see a cohesive strategy, why we need to appropriate this money, what results we can expect to see, it's going to be difficult to get it through Congress. So I'm optimistic that when we see how this \$1.8 billion was spent, we will see some positive results from it.

JOHNSON: Congressman Udall, same question, sir. How are you feeling about the way the strategy is unfolding at this point?

CONGRESSMAN TOM UDALL: Thank you, Marc. Let me also say hello to my friend, Cecil Andrus, who is out there and with whom I have worked. I think Mike is correct on the approach Congress needs to take here. This is very early for us to buy into whatever strategy and proposals are out there. We're not even going to learn until next week, with the publication of the Federal Register, which communities are being targeted, which ones are at the highest risk, and how the monies are going to be spent. Until we start seeing what the communities and strategies are, it's hard to buy into this whole thing.

Another point that I think is very important to me and my Congressional District is that there are rural areas, which we call "forest-dependent communities". I hate the term, but I use it because we're all on the same wave length. The people who live in these communities are very independent, and they don't think of themselves as being dependent. Those communities have a real opportunity to revive and grow as a result of this, and I believe we can use the contracting and fuel reduction efforts in a way that will give communities close to the forest some economic opportunity. I think it would really help in many rural areas across the west. So I am looking for the Forest Service, the BLM, and the other agencies to organize themselves in such a way so that there are small contracts so

that smaller operators in local communities can be involved in this process. I think we would really be missing out if this turns into a Washington-run operation.

I liked very much what Governor Kempthorne said about partnerships. We really need a partnership among the federal government, the states, local governments, and in my area, the Native American tribes, who have some real concerns about the forests. Several of the tribes had lands burned in these fires.

So I think it's early, but I think we know where we want to go. We want to thin, and we want fuel reduction. I think prescribed fires have to be a part of the process. If we can come to agreement and move forward, this is an area in which we should all be able to cooperate.

JOHNSON: Lyle Laverty and Larry Hamilton, these gentlemen are from Idaho and New Mexico, but they sound as though they could be from Missouri. They need to be convinced. Show me the money, and show me how you're going to spend the money. Show us where the results are going to be on the ground. Can you give us today some reassurance that you're off to a good start?

LYLE LAVERTY: Marc, a great question, and I appreciate the comments of both congressmen. I feel as though I have a whole load of hay to drop off, but I don't want to choke everybody.

The first piece is that we really have changed behaviors. As the Governor addressed, we have been working very closely with both the Interior and Agriculture agencies and, more important, in a different relationship with the western governors. Probably the first element that models what we've been doing is this list of communities that Tom mentioned. This list has been generated as a result of a session that the western governors called in Denver, and they addressed the need to bring this list together. It is being generated by the governors, by the states. This is not a federally-generated list of communities.

JOHNSON: This is a list of communities that you governors see as being at particular risk for fire?

LAVERTY: That's right. The conference report speaks about identifying these communities that are at high risk. The real value in that will be to

do just what Congressman Udall spoke about. We can begin to identify where we can begin to make the investments in land treatments or activities that will begin to address some of the issues that surfaced this morning, where we can have some targeted opportunities, again developed in collaboration, to help these communities.

We spoke to Senator Domenici's staff the day before yesterday, and we talked about the list of communities. As you might expect, many of the projects for 2001, because of how this process works, were started two or three years ago and are finally coming to the point where we can implement those projects. We've racked up the communities. As of last week, we had thirty states that had submitted their lists of communities. Again, this is a nationwide approach, and that was the intent of the legislation. We had about 4300 communities and 500 projects on a very coarse screen that we've been able to match up with that list of communities.

As we work on into 2001, we'll get into the collaborative ideas that Governor Kempthorne talked about. We'll begin working with states and local communities, working with the National Association of Counties about how we can begin to identify targets, what opportunities we should be looking for.

If there is a quick take-home message, it's that the behavior has changed already. Congressman Simpson and Congressman Udall, we're looking forward to the opportunity to come back and visit you next week.

JOHNSON: Larry, before Lyle has a full...

LAVERTY: Do you want some more? I have some more.

LARRY HAMILTON: I have a couple of bales myself. I'll unload one of those. I'd like to go back to some things that were said this morning, and I'd like to thank Bob Nelson for talking only about the Forest Service, not the BLM. I really appreciate that.

I've worked at BLM for 27 years, and I never felt as though I worked in a theme park. As a matter of fact, I've had some days when I've actually had to pinch myself to make sure I hadn't gone straight to hell, and I'm hoping this isn't one of those days before this is over.

I'm commonly called what's referred to as a "bureaucratic bottom-feeder," and I really

appreciate the opportunity to come to the surface here today and take a look around. But I have this urge and propensity to go back to the bottom before this is over with. But I think there were some really good comments made this morning, some great observations. One of them was about the '95 policy and the review that we just went through. Rick talked about that a little bit at lunch. Another major finding in there was that the policy was sound, as Rick talked about, but there were 83 action items in that '95 effort. The other finding in that review is that the agencies really didn't have the capacity or wherewithal to implement them. It's not a question of not having the right policy; it's a question of being able to implement those policies.

That brings us to the \$1.8 billion that's been appropriated here. We think that's a huge sum of money, one that will enable us to get a lot of things done. I'm actually more excited than Jim Hull or Rick Gale about having this money, and I think the plan we've put together is an excellent start.

Another thing that was mentioned was this notion of leadership. Eventually, we're going to get some new leaders here, but I'm hoping we have an opportunity not to go through what we've had here in the last eight years, at least here in the Bureau of Land Management, where we had five different directors and no director at all in two of those eight years. That's probably one of the things that was recommended in the white paper, and I think that's a great recommendation.

The other thing that's important is to take a look at our organizations. I'm not sure we're organized in the most appropriate, elegant fashion. Lyle, Rick, and I work very well together, and I think it might be nice if we had the same boss so we don't end up with these organizational divisive exercises when things go up the food chain and other people disagree with our recommendations. If there is a new organization established and someone in here ends up being the director or chief of that organization, I'd like to put my pitch in. I'd like to be had of the Department of Duh. I'll explain that to you later, how that works.

I think the point has been made here in collaborative management. There's an old adage: Think globally and act locally. We need to figure out a way to start diluting the divisiveness that comes between us in getting the job done.

This \$1.8 billion has a lot of potential, and we need to take advantage of it.

I have one last comment on research because that was talked about here today. The research that I would like to see some of these researchers get behind is to develop a drip torch that won't ignite if we're not in prescription.

JOHNSON: Gentlemen, let's talk about specifics for a moment. We had a discussion about these 500 communities that were going to be identified soon. Thinking about Idaho in particular, what do you think is going to happen when those 500 communities are identified? What actions do you expect to see on the ground to deal in the near term with these problems?

KEMPTHORNE: Marc, I would expect to see a reduction of fuel load. That's what I think this is all about. We have too much fuel out there. I can tell you that in the state of Idaho, our state forested land is in far better health than the federal land. We look at it on stems per acre. I don't know, Lyle, whether you have the charts you showed, but they show stands of trees in 1909, 23 trees per acre, that today are up to 1,000 trees per acre. We wonder why one ignition can cause this to take off?

What I anticipate, Marc, and what I expect is to see a reduction of fuel load, just as Congressman Simpson raised the point at our meeting of the Western Governors' Association. I asked Lyle specifically to please put a probability—I want a number—as to how successful you believe you can be in treating three million acres of forest land and one million acres of BLM land. Then a year from now when you come back to the Western Governors Association, you can show us how successful you were. That's critical.

Then the second year—because right now, there is momentum and enthusiasm—we need to see whether we sustain this process. I think, too, that we should not waltz around it. When I talk about reduction of the fuel load, there are three elements to that: prescribed burns, thinning, and logging. Among different governors, you'll get different thoughts and different phrases to describe it, but all three of those are tools that must be utilized. You can't eliminate any one of them. That goes back to what Tom was raising, and there has to be economic benefit that will be derived by these local communities, but we're

no longer putting it in terms of a quota of logs taken off or how many we're going to cut. It's based upon forest health. As part of that strategy, you have three elements, and one of them includes logging.

JOHNSON: Congressman Simpson, you said earlier you had some questions for Lyle. Do you want to pose one of these questions?

SIMPSON: What I'd like to know, Lyle, is exactly how much local discretion you're going to have in making decisions and how much is going to be decided by bureaucrats in Washington, D.C. What do you describe as involving state and local communities? Just advising them of what you're going to do? Or does it involve making them part of the decision-making process as the language of the appropriation suggests?

One of the other concerns that I have is that reducing the fuel load requires more than just prescribed burns. It requires thinning and logging. How much of this \$1.8 billion do you anticipate is going to be used up in Washington or in lawsuits?

LAVERTY: I thought I might have the answer. I was anticipating the question. Then when you said lawsuits, it's not in here. I guess a couple of things, Congressman, to go back to your first question in terms of what do we mean by local involvement. It's very clear. Tim Hartsell, on the Interior side, and I are working on this, and we really believe that it's very clear what they expect. It's not just that the feds design a project and then walk up to the county or the governor and say, "What do you think about this?" It's actually engaging those folks early in the planning and conceiving where we should be making these investments. It's a radical way for us of doing things differently, and we are really conscious of that.

So as we move ahead to accomplish this whole task, there are several pieces that the governors identified in Salt Lake City. One of those was to develop a ten-year comprehensive plan that talks about how we are going to treat fuel conditions across the country on all lands, not just the federal lands. We do have a cohesive strategy that the Forest Service developed, and Tim and I have talked about how we're going to be able to expand that to include all the federal lands. It becomes a nice

walk-in component that fits right into this broader, comprehensive strategy.

To make that happen, we have a small group that's working on how we design and move ahead on the framework of that. We've had the governor's staff, we've had the National Association of Counties involved, and we're involving the tribes to help us begin to frame how we going to approach this. If there is a message that comes out of this, it is that the behaviors have changed, and we're starting to see that already. This work group met in mid-November and December in Denver, we talked about the issue, and we had a first-cut discussion draft for the governors in San Diego last week. That group worked over Thanksgiving to do this, and it's really a very collaborative effort. It's not just the feds putting together a white paper and saying "What do you think about this?" These folks have actually been involved in the crafting and design of that.

So there are some things that are happening. The governor spoke about performance, expectations, and accountability. He asked pretty pointed questions in San Diego, like "What are you going to do?" Tim and I are committed to doing all we can to make sure we come back and deliver the goods, and I would hope, Congressman, that I can change your mind that this is not just a one-year shot. We need to recognize that this is the first of many years and that we can in fact show that things are different across the country.

I'm convinced that government is good; I've shared this with folks, and I think we can show that government can work well across all levels whether it's local or state or federal.

SIMPSON: I agree with what you've said. I, too, hope this is not one-year shot. What I was trying to emphasize is that this is a one-year appropriation and that if Tom and I are going to be able to sell this to our colleagues back there, we need that ten-year strategy about how we're going to reduce fuel load on all lands. Without that long-range plan, we're going to have difficulty selling this, but if we can put together a long-term strategy, that gives us something to fall back on as we continue this appropriation process. Like you, I hope it isn't a one-year shot.

LAVERTY: The real test for us is that we've set a fairly tight window to have that strategy done by May 1 with almost a final discussion draft

ready for those folks when they come back in February to Washington. We're putting the pressure on people to deliver the goods as well. I think that performance is going to be absolutely critical for all of us, not just for the feds but for the states working together. There is a huge chunk of the appropriation that provides funds for the states to do some treatments on some of the landscapes as well, so we're going to need to again work collectively to make that happen.

JOHNSON: Congressman Udall?

UDALL: May I ask a followup question here on what Mike's been talking about? This is changing direction just a little bit, but it seems to me that the way we got into this over 80 or 100 years has a lot to do with what's happened with the population growth in the west. We have a writer by the name of Charles Wilkerson out there in Boulder, who talks about the last generation and the "big buildup" here in the west and about the doubling of population that has occurred. So with these population pressures and new people moving in, I'll bet every day we're creating new acreage that's at risk in terms of people moving into what we're now calling the urban/wildland interface. I'm just wondering, from the agency perspective, how much thought you've given there to where we're headed? Are we going to continue to create more at-risk areas? How are we going to work this through in terms of states and local governments? Each one of them has a piece of this problem. It seems to me that's an issue that increasingly we're going to be asked about if we stay committed over this ten-year period.

HAMILTON: I'd like to take a shot at that one. We have a fire-wise program, and the purpose of that program is to get out in the local communities and talk about mitigation and the way to do things so we're not creating the problem over and over. It was real interesting this summer. We had over 80 firefighters, managers, and supervisors from Australia and New Zealand, and they were here sixty days and worked on some of these large fires. We did a debriefing with them before they went home, and they were absolutely aghast at what we do in this country, at the amount of resources we put into protecting structures. In their country, it's a much different approach. The approach there is that if you're going to build or move out

into the wildland/urban interface, the fire engine doesn't show up there, the retardant plane doesn't fly over, and there are all kinds of things you're responsible for and have to do. So I think we're confronted with a mindset in this country, a cultural value, that we're going to have to change. It will take a lot of education and will have to start in elementary school and work its way through the adult population.

I had an opportunity this summer to be out on a fire where the local fire department was brought out. It was an inholding on a national forest, and the fire department said there is no way we can protect those structures because the roads are one-way, and we can't even turn our equipment around in there. I said, "Have you ever talked to these people about what they need to do?" They said, "Absolutely, we talked to them." I said, "What kind of response did you get?" They said, "The reason we live out here in the first place is because of the trees. We want to live in the trees, and if you think we're going to cut down a tree, forget it. If the place burns down, guess what? We'll go someplace else."

That, I think, is one of our major challenges. We've got to start this educational effort and get this turned around. That's going to take us a while to do because you're not only talking about changing behavior, you're probably talking about changing some deep-rooted values in the culture.

JOHNSON: Governor, Congressman Simpson mentioned a moment ago, let's assume for a moment that we have lots of agreement about this strategy, a lot of different buy-in from a lot of different people and different constituencies, real consensus, but we get down to the actual implementation on the ground, and one 33c stamp on an appeal brings it all to a halt. Is that a concern? Do you have that concern? Could that stymie any real effort to truly move forward on this?

KEMPTHORNE: Absolutely. We discussed that, particularly at the Western Governors meeting. This all does sound good, but we know that there are some people who say this is not the correct approach. Some people say we should not cut one more tree for whatever reason. I totally disagree with that. A number of people disagree with that, and it's a very extreme position for them to take. Yes, we have to anticipate the lawsuits, but I have to ask then

the other question. So you have one billion board feet of timber that's now gone up in smoke, what have we gained? You fly over what was a beautiful landscape, now it's charred, and then you can't get in there and remove some of that dead timber, which in ten or twenty years will fall down and create a brand new level of fuel load. When it burns, it will burn with such intensity that it will sterilize that soil down to maybe 18 inches, so what have we gained as opposed to a practical pragmatic approach where we go in and try to make our forests healthy?

I would also throw in one other element. There are those individuals who say, "Well, but if we lose a stand of trees, they will return. We'll see that they will all come back." That's not necessarily true with the advent of the noxious weeds. Without that competition, here comes a noxious weed, and you have suddenly, instead of a beautiful green lush forest and a variety of fauna and flora, a monoculture. It's a sincere and critical problem for us. So noxious weeds need to be part of this discussion.

Isn't it funny. You talk about lawsuits, lawyers, and noxious weeds...

JOHNSON: ...all in the same sentence. Well, Lyle, you heard that discussion this morning with some of the people who recreate and make a living off the public lands and enjoy them for all kinds of different purposes and passions, how do we deal with that legal issue about being hamstrung, regardless of how great your strategy might be, and stymied from doing anything really meaningful on the ground?

LAVERTY: If I had the answer, I probably wouldn't be sitting here. I'm looking at some examples we have going right now on the Rocky Mountains. We have a project right outside of Boulder. We've been working on it for about three and a half years, and it will deal with this wildland/urban interface. It has been one of these very collaborative efforts with lots of community meetings. Folks have been out walking the stands, and we're almost at the point where they have each tree identified by name. We're going to leave Susie but we're going to cut Johnny. It's that kind of thing. We finally got to a point where they came to a decision, and the community applauded the decision.

In Colorado, we have groups that appeal every project; it doesn't make any difference

what it is. We were flooded with comments from the community about why do we have to hold up? Why can't we get on with this? I think it's going to take time to start building community support so people will say these are good things, and we don't want people just stopping these things. We live in this great country where we can express those kinds of opinions. Just because someone doesn't agree with us and doesn't like the project, you can't just cut them off and say, "You're not part of this." We have to go through the process. I think it's a good process, but at some point, as Commander Gale said, you have to make a decision and go on.

JOHNSON: Congressman Udall, let me ask you, sir. Let's assume for a moment that we have some consensus about using prescribed fire, maybe even thinning—and put whatever definition you might on that—what do we do about the question that the Governor raises here about logging, cutting merchantable saw timber in the national forest?

You have a reputation, deservedly so, with environmental credentials. Governor Andrus was telling us earlier, in a friendly way, about having locked horns with you over a certain little nuclear waste depository in your state that we have a fair amount of interest in up here. You care about environmental values. Tell us how we get to the point where we actually cut some timber if that, in fact, is part of the strategy.

UDALL: Well, you've raised the nub of the issues. You talk about prescribed burns, you talk about thinning, you talk, as the Forest Service Chief did in his letter, about 12 inches and under. I think there is an awful lot of agreement, and there is consensus in those areas. The big concern of people is that a lot of the groups that monitor this wonder, "Is the policy we're proposing in order to get back to the levels of logging that we were seeing in our national forests in the 1980s? Is this a legitimate policy toward lowering the risk of catastrophic fire, or is this really the big lumber companies pushing it in order to get the logging levels back up?" That's why it's important that we move forward in the areas where we have consensus.

Let me give you a local example from Santa Fe, New Mexico. Our forest supervisor out there, Leonard Atencio, has done an incredible job. We probably have more people that would protest forest plans and thinning and those kinds of

things in the Santa Fe area, and he has gone out publicly with a variety of meetings. They have tours for any citizen up in the Santa Fe watershed because Santa Fe gets almost 40% of its drinking water from this watershed, which is at very high risk. I hope it's on that list that is coming out soon, and I understand it is. What we need to do is have that kind of outreach by the Forest Service, involve the community, involve all the groups, including the environmentalists, and see if we can't do something that builds consensus on how we go forward.

The second point that I would make is one that has to do with the forests themselves overall. We got in this over 100 years, and we're not going to get out of it in one, two, or even ten years. We need to build in local communities the constituency for moving forward with this. I get very worried that's the biggest task we have.

The other big task for me and Mike is that we have put so many laws on the books about how we manage our forests that I hear some of the old-time foresters say, "What we really need to do is move back toward active management." We're really being hampered by that. I think Congress needs to take a look at all of these laws and see, in the light of what's happened, what we need to amend, what we need to work with, and what mandate we give these federal land managers in the Forest Service and the BLM.

JOHNSON: Congressman Simpson, a quick comment.

SIMPSON: I would agree with what Tom just said. I think you have to build the relationship with both the environmental community and with the stakeholders that use the forest if we're going to get anything done in the long run. But I am concerned that, even if you get the local communities together to agree on something, oftentimes the national groups oppose things, and a 33c stamp can stop just about anything. But we do need to start building this consensus.

I do agree with Tom that we have to review the laws we have on the books that hamper the decision-making process. More and more, the decisions in the Forest Service and the BLM have been moving to Washington, D.C. and away from local management. When I went out for a couple of days on the Clear Creek fire, you could talk to the local forest supervisors there and the people that actually know their forests. They can tell you what the problems are. They can tell

you where the fuel loads are excessive and where they need to do some active fuel load reduction. Rather than having a national policy saying we can cut anything smaller than 12 inches, the facts are that in some forests, you need to cut large trees as well as some other small trees in order to thin the forest out and make it more fire resistant.

So a national policy oftentimes doesn't work. What's so important about Governor Kempthorne's and the Western Governors' Association's proposal is that it involves the state and local communities, local forest supervisors, and the people that really know their forests. That's what I'd like to see developed more and more, a move back toward that type of management instead of the central control from Washington, D.C.

JOHNSON: Gentlemen? Governor?

KEMPTHORNE: Marc, thank you. I appreciate what the two congressmen said. Some of the most frustrated people are professional forest supervisors, the people on the ground. They know what they would like to do, they've been trained to manage, but they feel they have been hamstrung because of command and control from Washington, D.C.

When we talk about this work product that has been developed by the Western Governors' Association, state foresters were really some of the chief designers of it. At this last meeting of the Western Governors' Association, I asked the state forester of Colorado if he was supportive of this product thus far. He said he absolutely was and was one of those at the table helping to design it. Then I asked the state forester of California whether he was supportive. Colorado has a Republican Administration, and we thought California, with a Democratic Administration, might have a different view. They said, "No, we totally support the product thus far." So it's going in the right direction.

I think we've identified many concerns. An important part about the Western Governors' proposal is a process called "En Libra," which is coming more and more to the forefront. It's a process whereby you bring the different people, diverse people, and different views to the common table. If we can sit down, discuss it, actually listen to one another, and leave the rhetoric outside, we ultimately begin to hear what the true intent is. We can find creative

ways to get there.

LAVERTY: Marc, if I could just pick up. Probably one of the most eloquent discussions that took place at the Western Governors was a conversation that focused on this whole idea of how we begin to describe and come to consensus on what we want to leave on the landscape, rather than being driven by going in to treat this or remove that. It was great.

Governor Kitzhaber talked about some of the things that are happening in Oregon, and he talked about going in and about what needed to happen on the landscape. He said they had accomplished this objective and that objective. Then he said, "By the way, we harvested 30 million board feet of timber." That was not the driver that took them in, but this becomes a cultural change for us as a society. All of a sudden, we're no longer driven by targets. I really commend the governors because you folks came across as a very bipartisan group. It was not one side versus the other. It was encouraging to hear those discussions. As we begin to model that behavior, I'm optimistic that we can do this job.

HAMILTON: I guess the one thing I'd want to add to this is the P word: patience. We've seen several occasions on which we're getting out ahead of our head lights. One good example is in trying to identify these urban/wildland interface communities. The list is over 4300. Obviously, \$1.8 billion isn't going to fix all of those. It's going to take a lot more effort than that. So we have to have some criteria and to come up with some ways that people can buy into the criteria, realizing that they may not be at the top of the list this year but that they're on the list and will get there eventually.

We need to look at ways of leveraging capability. We're going to get a lot more done if we're working together across all the different agencies and partners we have out there on the land.

SIMPSON: Has there been any discussion of stewardship contracts and allowing for those areas where we go in and do selective thinning and logging to receive the income off the activities surrounding that thinning and logging?

LAVERTY: Congressman, we do have some pilots we're-evaluating right now in terms of

how that tool can work for us. That surely is one tool that fits into that broad scheme of how we can accomplish those outcomes. But certainly it's on the table for conversation and discussion.

JOHNSON: Gentlemen, I want to open this up to some of the 400 people who are here in Boise today and invite back into the discussion Darrell Knuffke, who is vice president of the Wilderness Society, in International Falls and Washington. Darrell, how are you feeling about what you're hearing here? There's a lot of talk about cooperation. Does it sound good? or too good?

KNUFFKE: It sounds generally pretty good although I have to say I squirm a little bit at repeated references to the fact that anybody with a 33c stamp can shut down the system. I disagree with that. I think the Forest Service's own numbers will suggest to us that timber sales have not been much hampered by environmental challenges. The National Environmental Policy Act doesn't stop much of anything. It can slow things, it can shape things, it can change things. In the end, it's not a tool for stopping anything nor is it meant to be. It is meant to be a clear-headed opportunity to understand major federal actions. To the extent that the agencies do their jobs up front, appeals are essentially meaningless or moot. I hope that we are not at the point where we're about short-circuiting those kinds of opportunities for the public or activist organizations like mine that pay attention to public lands.

LAVERTY: That was not the message that was communicated. I really believe that, as we look at the new planning regs, the whole idea is to bring those conversations up front and bring as much closure as we can before the project gets started, rather than what we've done historically. I think those kinds of discussions are valuable because we can do that.

SIMPSON: I hope that the conversation was not that we want to stop public input. You do need public input. That's the American way. But I can tell you that in conversations I've had with Chief Dombeck about the Forest Service and their budget, one of that agency's concerns is that more and more and more of their budget is being used to settle lawsuits. I'm not talking just about the environmental community; I'm

talking about everybody. With every decision they make, they're sued by somebody. Consequently, they spend more and more money fighting lawsuits. That's a concern of mine. I'd like to see more of the money we appropriate go into forest management rather than into lawsuits. Maybe that means we need to have more involvement up front and more of the stakeholders together at the table when the decisions are being made. Perhaps we can avoid some of these unneeded costs.

JOHNSON: Jim Riley is here with me. Jim is the executive with the Intermountain Forest Association, a major wood products association in the northwest. Jim, how are you feeling about what you're hearing from the policy-makers?

JIM RILEY: I'm encouraged by the enthusiasm for more locally-driven management plans and implementation. It is my understanding that in the \$1.8 billion appropriation is a requirement for the Council of Environmental Quality to come forward with some expedited procedures that could be made available to cause these things to happen, not without public comment, but in a much more expedited and streamlined process than normally exists. I haven't heard any discussion about that. Is that in the works still? What's the outlook for that? It might do a lot to address these concerns.

LAVERTY: Specifically, a group is working on that right now with CEQ. A report is due on Monday to the Congress. A group of folks have been looking at that to see whether there are some things that can be done. The folks just told me this morning, and I got a copy of it last night. I'll take a look at it. There are conversations and efforts moving along on that.

JOHNSON: Ladies and gentlemen, let's open this up. If anyone else has a question, hold your hand up. John Freemuth has a microphone, and we'll circulate.

HERB MALANY: My name is Herb Malany. I manage 200,000 acres of industrial forest lands, and I find this whole discussion here rather fascinating because I've been doing this for about 45 years. We don't have a fire problem on our lands. At this time, they look almost like parks. I've taken very strong environmentalists along on tours, and when they get done talking,

they say, "Hey, this looks good. We can live with this."

Then I think of the problems we have, trying to pre-commercial thin, which is the same discussion we're having here, on 5,000 acres a year and finding enough employees to do this work. When you start talking the numbers you're talking here, I find it absolutely fascinating to consider where all these people are going to come from.

UDALL: I'd like to comment on that. At least in New Mexico, I think there are some real opportunities here. We have very small rural communities in northern New Mexico that are very close to the forests. Some of them are heavily Hispanic; some are Native American. They have lived with forests for 400 years, and if we had the kind of investment with young people that you saw back with FDR and the CCC and if you had a Job Corps and put the young people out there, we could create some opportunities. You're right, sir. It's very labor-intensive. That's why I said early on that we need to design this in a way that gives those small communities in rural areas the opportunity to lift themselves up as a result of this effort and create economic opportunities. You have to design the Forest Service contracts in a way that allows smaller operators to participate. You have to let the word go out a couple of years in advance that it's going to happen so some of these businesses can start up and grow. I think the people are out there; at least, they are in my community. I think they're out there; I think they're willing to work. We've just got to put the structures in place and have the Forest Service, BLM, and the other federal agencies be responsive to having it move forward in that way.

LAVERTY: Congressman, one of the things that we've been talking about just this last two or three days is that we need to bring all the agencies together. Interior has a huge portion of this appropriation that deals with economic action. The Forest Service has some, and we've been talking about other agencies that generally don't come into this discussion. The Small Business Administration has some incredible programs that we can bring to some of these communities. The Department of Labor has money that we could bring in for training. It goes back to the question of where do we find

people to do this job in an almost full employment economy. It's going to be extremely difficult. We could not hire people this summer because of our pay level. We couldn't compete with UPS, which was paying kids \$12 an hour to wash trucks. That's the challenge for all of us: How are we going to accomplish the expectations of Congress and the governors?

MATT CARROLL: My name is Matt Carroll. I teach natural research policy at Washington State University. I'm wondering if this panel would care to comment on the potential impact of the Florida Supreme Court on the actual implementation of this plan.

SIMPSON: We've got our own wildfire back here, and I'm not sure we want to go any further with that. One thing that I thought was very important was that in September, I asked Governor Kempthorne to come out and testify before the House Agriculture Committee, which oversees the Forest Service, because we wanted to put into the record what the Western Governors had negotiated with the Department of Interior and Secretary Babbitt. I wanted that to be part of the permanent record, the *Congressional Record*, so that when a new Administration comes in, whichever Administration it is, we follow through with those plans that were implemented with the Western Governors. It was very important to get that into the record, and I was very pleased that the Governor came out and did that.

FREEMUTH: Marc, I have a written question that I know is on many people's minds. Congressman, Governor, what role will the regulatory agencies play in either implementing or destroying the national fire plan by regulatory oversight?

LAVERTY: Let me try to answer that one.

HAMILTON: We're looking forward to this answer, too.

LAVERTY: Part of the provisions of the appropriations bill in the conference report provided funds for the Interior agencies as well as the Forest Service to finance the Fish and Wildlife Service and the National Marine Fisheries Service staffing to get us through the

Section Seven consultation. As probably everybody in this room knows, that's one of the huge barriers in getting projects done on the ground. This last week, Fish and Wildlife, NMFS, BLM, Forest Service, the National Park Service, and the refuge site have been coming together, and we really have closure on that. My guess is that within the next week or so, Fish and Wildlife and NMFS both will be hiring the people we need to get projects cleared.

What we don't want to do is let the ESA become the barrier as to why we can't do this. The real barrier is getting through the consultation process, and that has been the piece that Fish and Wildlife and NMFS have never been financed to do, so we have this incredible bottleneck. It's almost like threading the needle, and I think this is going to open up. I'm really encouraged that we're making good progress. We have commitment from Jamie Clark [Director of the U. S. Fish and Wildlife Service], and she does not want this to be perceived as a barrier to implementing the plan. The message, again, is that we don't want ESA to be perceived as a problem in implementing the plan.

JOHNSON: Pat Shea is here, former director of the Bureau of Land Management, now—I hate to say it in this audience, Pat—an attorney in Salt Lake City. A question.

PATRICK SHEA: The question goes to the Governor and the two Congressmen. From my experience in Washington, I would hope you might try to describe what we call “breathing room.” You've been talking about how federal land managers need to make locally-based decisions, but each of us—Larry, Lyle, and others in the audience—have then been hauled before Congress where your staffs are less than kind and certainly don't give any breathing room for the experimentation you seem to be encouraging. With this \$1.8 billion, how do you anticipate lessening the “gotcha” mentality that oftentimes defines the boundaries of public policy?

JOHNSON: Governor, I know this never happened while you were in the Senate.

KEMPTHORNE: They said I was a breath of fresh air. You did good on Mountain Home. Pat, it's a fair question, and I imagine it does happen

from time to time because of the politics. But also, there have been many many times—and Mike and Tom have experienced this—that when they are out here or we're all out in the field, we hear things from the people on the ground, the local foresters who take you into their confidence. I had a policy: you never burn them. It is a confidence. Based on that conversation, yes, it gives you much greater insight so that when there's a hearing and you have some of the higher level bureaucrats before you, you're a lot sharper because you've heard it. I've always felt, though, that if you burn one of those folks, the word will spread that “you can't trust this guy,” but if the word spreads that “He is a straight shooter and you can tell it like it is,” you'll probably find that in the pecking order, some things have been improved because you gave them some insight. To be an effective public official, if you burn someone who gave you some good insight, you're going to be out of business pretty soon.

SIMPSON: I would agree with what the Governor said. In fact, as I mentioned earlier, my Chief of Staff and I spent two days earlier in the Clear Creek Fire. We talked to forest managers from all over the country, and they told us things as we sat around and had dinner, things that were beneficial to me as a policymaker. For example, the concern that we have about the fact that we're losing a lot of our forest fire managers. We have the ones who are getting older and will be getting out of the business in a few years, but we don't have any young ones moving up into that area.

Pay was mentioned earlier and the difficulty of hiring people for these projects. Those are things we have to be able to look at, so it was very educational for me to be able to just sit down and talk to these individuals and to feel that they had the confidence to tell me what was actually going on in some of these areas.

Often the money gets eaten up in the bureaucracy and never actually gets down to the forest. They don't see their forest management budgets increasing, even though Congress keeps appropriating more money. I agree with the Governor. You don't really want to burn any of those people, and yet I do agree with Pat that you have to be respectful of the fact that these people are professionals. When they're trying something, I think you have to give them some leeway. Obviously, politics gets into it

sometimes and sometimes too often.

FREEMUTH: I have another question back here.

BILL MULLIGAN: My name is Bill Mulligan from Kamiah, and among other things, I'm a member of the Clearwater Elk Recovery team, and I have a question for you, Lyle. In the Clearwater Basin, if you look at the GAO Report the Governor has there, it showed it as a red area. The Upper Clearwater Basin on Forest Service ground is the highest priority area, the worst area of the state in terms of its current condition from a forest health standpoint. It's most at risk. It's also an area where we've already lost 50% of our elk herd, and we have a very low percentage of calf survival now, which means that the premier elk herd on public lands in the United States is going to continue to decrease. The problem we have is that we have no openings or younger forests, and it is an area where we have too many 12-inch plus trees, not too many 12-inch minus trees.

My question is that, in looking at the new National Fire Plan, I was really alarmed because in the priority system, the Upper Clearwater Basin is the lowest priority of all because it is a wet forest, a forest advanced in age. Because it is a wet forest, it has a very low fire frequency. What are you going to do to help us in that kind of fuel type? It doesn't fall into the wildland/urban interface. We don't have local communities there except really small communities that apparently don't meet the criteria for communities in danger from that standpoint. The population is too low. How come those areas aren't being addressed by the National Fire Plan? I'm concerned that the \$1.8 billion will go to other areas, and we will sit there and have the fuel continue to accumulate in that area and not deal with it. Can you do something to help us?

LAVERTY: R. Really an excellent question, and maybe I can start by going back to the GAO report the Governor mentioned and its focus on these lands that were at high risk. When we began to develop a response, we took a look at those short fire interval landscapes and concluded that would be the first round of response for us. As you pointed out so well, many of the areas we're talking about were beyond that; it's that fire regime 3, 4 and 5 situation, rather than the 1 and 2, where this

wildland/urban interface has taken place. When we put our response together, though, we identified three categories that we felt we needed to look at with the investment in treating fuels. The first one was communities. We identified habitats, and we identified watersheds that we needed to target in order to address these high-risk situations.

The immediate question that came out after the fires was what are we going to do with communities? I think for the long term, we are very definitely involved in how we begin to meet those habitat needs. In Colorado, we're considering how to integrate some of the other programs as well in this strategy so that we can begin to treat some of the habitat. The largest elk herds in the country are in Colorado, and we're really serious about how to make those kinds of investments. Even though with this \$1.8 billion, there is high interest in the Congress about how to help communities, we also have opportunities with other program accounts to target other areas, such as the one you pointed out in the Clearwater Basin.

I can talk to you some more about what we're doing in Colorado.

JOHNSON: We're going to lose our satellite here in a few minutes. The congressmen will fade away into the ether, and we don't want that to happen without giving them an opportunity for a final thought. I'd like to go around real quick, maybe starting with you, Congressman Udall. What should we take away from this discussion today? What is the big theme that we should be focused on as we think about where we're going with these fire policies? What would you have us focus on?

UDALL: Well, I would say the big theme ought to be patience. We need to look at this situation in terms of history: how we got into this, what happened in the 1910 fires with the millions of acres that burned, how we changed fire policy as documented by Stephen Pyne, what impacts occurred as a result of logging and grazing, and how the Native Americans, with their close ties to the land, utilized fire for hundreds of years until government and reservation policy forced them to abandon that tool. It's all part of a big picture, a pageant that brought us to today. We have to put our minds to it as we've done here.

I think these western governors are great to

have spoken out, and I appreciate Mike's getting it in the *Record* because we need to build consensus, we need to be patient, and it takes a while to turn things around. That would be what I draw from this, and it's important that we give our managers the ability and time to do this job.

JOHNSON: Congressman Simpson, a final quick thought from you.

SIMPSON: I would agree with everything Tom said. I would also say that what I hope to see is that when we look at how we've used this \$1.8 billion, we will have used it productively and be able to use that as a selling point to continue to manage our forests. As Tom said, this is something that has been building up for the last 100 years. It's not something that happened just during the last eight years. What I would like to see in the future is to have our forests become healthier, more fire-resistant than they currently are. We have 47 million acres that are in Category 3 fire potential. Will we have reduced that number of acres? What have we done to make a healthy forest?

I'd also like to see us address what we have mentioned here earlier: the urban/wildland interface. It will occur more and more as more people move out into the country to build a cabin or home in the middle of trees because they want the trees around it. There will be some problems there. I talked to an insurance agent who said they were getting calls from people when the fire was on the ridge above their homes, asking for fire insurance. Obviously, they couldn't get that done. We need to address this issue of how we're going to solve the wildland/urban interface because more and more of our fire resource dollars are going to address that problem. Consequently, it's something we have to look at. I hope we will end up down the road with forests that are more fire resistant and are healthier than they currently are.

JOHNSON: Governor, I give you the last word.

KEMPTHORNE: Thank you. Congressman Udall, I'm glad there are no hard feelings on the nuclear waste. All we were trying to do in Idaho was get all the Colorado waste out of Idaho and over to New Mexico.

I appreciate what our congressman have said,

and it's nice to have teams like that back there, people that are so receptive and so on top of these issues. We can agree that we all want healthy forests. Maybe that's as far as we can agree, but we have that as a beginning. Then there is scientific evidence that would strongly suggest that in the near future, we will continue to see catastrophic forest fires. Therefore, I believe the logical question to ask is what can we do to try to eliminate that?

We've outlined a game plan, and part of that game plan must have measurements so that there can be accountability. It will be at the Western Governors' Association meetings. It will be before House committees, testifying before Congressman Simpson's committee, before Congressman Udall, etc. Those measurements have to be there. But I believe that we have in place and have identified the individuals that are going to raise the issue, decide where the forums will be, where the venues will be. Add to this a healthy atmosphere where consensus can be built. That is achieved by bringing the diverse groups to a common table so that people don't feel left out. We've demonstrated time and again that works. They may not agree with the final result, but they will say, "We had our day in court." As long as we can keep it in that court and not the legal court, we're all better off.

JOHNSON: Thank you, Governor. I'm going to turn the microphone over to the Chairman of the Andrus Center, the former Governor and Secretary of the Interior, Cecil Andrus.

CECIL D. ANDRUS: Thank you. Before we lose Mike and Tom, let me thank you very much. I know you can't see us, but we can see you, and we appreciate very much your being with us today via the satellite. I know that, having spoken with both of you, it was your intention and desire to be here with us, but funny things have happened this fall, and it's not over yet.

SIMPSON: It's still our wish we could be there.

ANDRUS: Well, both of you keep watching out for us, will you, on both sides of the aisle? Thanks again for being with us today, and Governor Kempthorne, thank you very much for being here today. Thanks to Lyle and Larry as well. I hope we'll come out of here with some

suggestions. A white paper will be delivered to you.

Also, I know, Mike, that you have a white paper, and I'll see that you have one, Tom, from our June meeting. It also covers some of the things that Larry talked about, perhaps the possibility of bringing the resource agencies under one umbrella, one guidance. With that, thank you very much, gentlemen, for being with us.

We have time for a couple of questions, and then Leon is going to make four or five minutes of comments on range fire and range health, a problem that was probably not covered in sufficient depth earlier today.

GENE BRAY: I'm Gene Bray, and this is a question for Governor Kempthorne. We touched on this briefly this morning, and I can summarize it by saying partnership is a two-edged sword. I wonder, in your position with the Western Governors' Association, are the western states and their governors inclined to support fuel reduction activities right across public lands and onto private lands that are similarly overloaded? Also, would they also support land use changes, zoning, and building code changes to prevent placing more acreage and more new private dwellings at risk over the ten-year life of this program? If we keep adding to that inventory, \$1.8 billion a year is not going to cover it.

KEMPTHORNE: With regard to private land, I think we can identify what an objective may be, but we have to respect private property rights. This is something we discussed. The fact of the matter is that when we look at the 39 million acres that are at high risk, those are public lands. We also discussed that state lands and private lands also need to be examined in the same light, respecting private property rights, respecting the sovereignty of the states. My contention is yes, you can find examples where maybe there is as much overgrowth, but in many of the private lands, as was evidenced back here, there have been thinning and prescribed burns. Yes, we all need to be in this, but we need to respect sovereignty lines as well.

ANDRUS: Thank you very much, Governor. I'm going to excuse you. I appreciate your coming from the office. I know you have over a hundred legislators clamoring at you to

do something.

KEMPTHORNE: Please, can I stay here?

ANDRUS: Feel free to stay. We appreciate your being here. Thanks again.

Before this crowd leaves, I want Leon to have the opportunity to visit a very, very important topic for four or five minutes with regard to range fires. We have a tendency to talk about forest fires and trees, and many things have to be done on the range out there as well.

LEON NEUENSCHWANDER: Thank you very much, Governor. I'll tell you a little bit about rangelands. It has to be really a little because I don't know all the issues on rangelands. I haven't been working down there on those issues for about three or four months.

The first thing I want to tell you is a story about cheat grass. Do you all know the story about cheat grass? In the olden times, I'm told that there was no cheat grass here. It was bunch grass and sagebrush, and we had sage grouse. A lot of the sagebrush in this country was winter range for deer. With frequent fire, every time a fire comes through, it kills some of the grass and kills the sagebrush. Historically, that grass would grow and the sagebrush would come back. The introduction of a weed from Eurasia called cheat grass has changed the fire story. The fire story is Catch 22. As you get more fire and as those native grasses and sagebrush are killed by the fire, in its place comes cheat grass. The cheat grass spreads out and becomes more uniform and makes a field much more conducive to having the next fire. And of course the next fire kills more bunch grasses and sagebrush, and then we get another fire. As this gets more and more filled with cheat grass, the intervals between those fires becomes shorter and shorter to the point where it kills the sagebrush before it can produce a lot of viable seed. It gets so thick that it competes with the sagebrush and bunch grass seedlings, and pretty soon we have lots of cheat grass. This cycle ends only in the story of having more and more and more cheat grass.

The BLM has recognized this problem quite adequately I believe, and they have attempted many things to try to change this fuel bed because the bunch grasses are needed for grazing into the fall, well beyond the cheat grass, which is an annual, dries up, and doesn't produce very much forage. Of course our sagebrush and

bitterbrush are the browse for our mule deer and were really important on this former winter range that we call Boise.

Now the rest of the story is that the sage grouse depend on the sagebrush, which is no longer there. Now we have to go to the R period here because traditional fuel treatments don't work. I don't think there are enough chain saws in the room to go out and mow down all that cheat grass, certainly not every year.

Then we get to one of the alternatives that shows some promise to stop the fires. It's called greenstripping, which means planting perennial grass, which means usually crested wheatgrass or one of its varieties along the highways to help reduce the frequency of fire. It's had mixed success in its results, but at least it's one effort. Catch 22. Removing one exotic grass, cheat grass, and planting another one, crested wheatgrass, is not necessarily a popular activity in this part of the world.

Let's go to another quick issue. Let's talk about juniper. Over many of our range lands in Idaho, Washington, Utah, and Nevada and other places, we are seeing the encroachment and density of juniper increasing across our rangelands. Many of these junipers, young small trees, would have been burned by the fires, keeping the rangelands open for sagebrush, bunch grass, and bitter brush and creating a wonderful winter and summer range for wildlife and livestock. Well, as juniper becomes thick, it shades everything out and stops the fires to the point where they burn into the juniper, no longer kill it, and die down. When the fires stop, the junipers continue to grow and shade out everything underneath it. It becomes very bare.

Some time later, the juniper becomes so thick that when a fire comes, it burns through the crowns of the trees, creating the same set of fire problems we've already talked about. The result on the juniper is to burn them when they're young or wait until they get very old and thin them out.

Again, the most important part of trying to reduce these fires is figuring out where the fires are most likely to start. That's along roads, along right of ways, and around houses. Well, that's it.

ANDRUS: I'd like to express my personal appreciation to the *Idaho Statesman*, to Margaret and Carolyn, for being here, for helping to sponsor what I think has been a very productive session today. We will come up with a white paper, similar to the June one, that will summarize and make recommendations for the enhancement and health of the range and the timberlands in Idaho and the western United States.

Let me speak just one minute toward the June white paper. Note the recommendations on page 5. Let me tell you, from personal experience, the easiest time to make change in the public arena and bureaucracies is at the very beginning of a new Administration. I speak from experience because I was there – Darrell remembers – when the Department of Energy was created. It would never have been created had President Carter not said, "It shall be created," and he gave all of his incoming cabinet officials that charge: "You shall do this." At Interior, we gave up a lot of different ingredients that went into it. At that point, you can accomplish some of these things that won't happen if you wait six months because the internal bureaucracy takes over, and the protection of personal turf becomes much more important than what the boss says at the cabinet meetings.

So I would urge you, take a look at this white paper. Take a look at the one that will come out of this meeting. I hope we will have a new Administration soon. Duh. I don't believe I'll go any further.

I want to express my appreciation to you people who are here today because you care. If you didn't care, you wouldn't be here. We have to do something to stop these little individual civil wars and litmus tests about how pure you are, how pure I might be, and come together to find consensus on some of those proposals that will improve the life we enjoy here.

With that, thank you very much for being here. Margaret and Carolyn, thank you very much for the newspaper's involvement. I ask you to continue to be involved because you're our vehicle for educating the public.

Ladies and gentlemen, thank you very much for being with us today.

THE FIRES NEXT TIME

Thursday, December 7, 2000

Boise State University

Boise, Idaho

PARTICIPANTS

Cecil D. Andrus: Chairman, Andrus Center for Public Policy; Governor of Idaho, 1987 to 1995; Secretary of Interior, 1977 to 1981; Governor of Idaho, 1971 to 1977. During his four terms as Governor of Idaho and his four years as Secretary of Interior, Cecil Andrus earned a national reputation as a “common-sense conservationist,” one who could strike a wise balance between the often-conflicting conservation and development positions. That reputation resulted in part from his pivotal roles in the passage of the Alaska Lands Act and the National Surface Mining Act of 1977 and in the creation of the Frank Church River of No Return Wilderness Area, the Snake River Birds of Prey Area, and the Hell’s Canyon National Recreation Area. He grew up in logging country where his father operated a sawmill, and he attended Oregon State University until his enlistment in the U. S. Navy during the conflict in Korea. Following his return to Idaho, he worked in the northern Idaho woods as a lumberjack and helped operate a sawmill in Orofino. He was elected to the Idaho State Senate in 1960 at the age of 29. During his years in public service, Governor Andrus has championed local land-use planning laws and protection of wild and scenic rivers, and he helped engineer a comprehensive agreement between industry and conservation to assure the protection of Idaho’s water quality. He elected not to run again in 1994 and subsequently established the Andrus Center for Public Policy to which he donates his service as chairman. The Center is located on the campus of Boise State University. His awards include seven honorary degrees, the William Penn Mott Park Leadership Award from the National Parks Conservation Association, Conservationist of the Year from the National Wildlife Federation, the Ansel Adams Award from the Wilderness Society, the Audubon Medal, and the Torch of Liberty award from B’Nai Brith.

Margaret E. Buchanan: President and Publisher of *The Idaho Statesman*. Ms. Buchanan earned both a B.A. degree in marketing and an M.B.A. in finance from the University of Cincinnati. Upon graduation, she worked for Cincinnati Bell and IBM. In 1986, she joined the Gannett Company as a general executive for the Cincinnati Enquirer. Preceding her move to the *Statesman*, Ms. Buchanan served as president and publisher of the *Star Gazette* in Elmira, New York. She is active in the Boise community and serves on the boards of the Boise Chamber of Commerce, Fundsy, the Idaho Shakespeare Festival, St. Alphonsus Medical Center, and the YMCA Foundation. She and her husband, Greg, have two sons.

John C. Freemuth, Ph.D.: Senior Fellow, Andrus Center for Public Policy and Professor of Political Science and Public Administration, Boise State University. Dr. Freemuth’s research and teaching emphasis is in natural resource and public land policy and administration. He is the author of an award-winning book, Islands Under Siege: National Parks and the Politics of External Threats (Univ. of Kansas, 1991), as well as numerous articles on aspects of natural resource policy, including five recent publications: “The Emergence of Ecosystem Management: Reinterpreting the Gospel,” Society and Natural Resources (1996); “Ecosystem Management and Its Place in the National Park Service”, Denver Law Review (1997); “Science, Expertise, and the Public: The Politics of Ecosystem Management in the Greater Yellowstone Ecosystem” (with R. McGreggor Cawley); Landscape and Urban Planning (1998); “Understanding the Politics of Ecological Regulation: Appropriate Use of the Concept of Ecological Health,” (Proceedings of the International Conference on Ecosystem Health); and “Roadless Area Policy, Politics and

Wilderness Potential," International Journal of Wilderness (with Jay O'Laughlin), (April 2000). He is the author of three Andrus Center white papers on public land policy, based on Center conferences in 1998, 1999, and 2000. He has worked on numerous projects with federal and state resource bureaus, including the Forest Service, Bureau of Land Management, and National Park Service at the federal level and the Departments of Fish and Game, Parks and Recreation, and Environmental Quality of the state of Idaho. He also serves as chairman of the Bureau of Land Management's National Science Advisory Board. In earlier years, Dr. Freemuth has been a high school teacher and seasonal park ranger. He holds a B.A. degree from Pomona College and a Ph.D. from Colorado State University.

Richard T. Gale: Chief, Fire and Aviation, National Park Service. Mr. Gale is a second generation National Park Service employee. He began his NPS career in 1958 and served in a number of western national parks, usually in park ranger positions. He was assigned to the National Interagency Fire Center in 1988 and to his current position in 1994. He was one of the original National Incident Commanders in 1985 and one of four National Area Commanders in 1995. He also served for seven weeks as the Area Commander in Yellowstone National Park in 1988 and was the Incident Commander for the recovery effort from Hurricane Andrew for four south Florida national parks in 1992. Mr. Gale holds a B.A. in history from California State University, San Francisco. He has three daughters, all of whom are third generation National Park Service employees and are involved with wildland fire management.

Ross W. Gorte, Ph.D.: Senior Policy Analyst in the Natural Resources Section of the Congressional Research Service. He joined the CRS as an analyst in 1983. In his current position, Dr. Gorte provides objective, non-partisan data, information, and analyses on existing federal policies and on proposed changes in policies and programs for the members, committees, and staffs of Congress. The specific issues he addresses include federal lands and resources; multiple use and sustained yield; wilderness and other management systems; timber management, taxation, and trade; and appropriations, finances, and

economics of federal land and resource programs. Dr. Gorte has a B.S. in forest management, an M.B.A. from Northern Arizona University, and a Ph.D. in forest economics from Michigan State University. His doctoral dissertation was on fire effects appraisal. He worked as an economist for the National Forest Products Association in Washington, D.C. from 1979 to 1982. In 1991, he took a sabbatical from the CRS to direct a study of Forest Service planning for the Congressional Office of Technology Assessment.

Larry Hamilton: Director of the National Office of Fire and Aviation for the Bureau of Land Management. Earlier in his career, Mr. Hamilton was state director of Montana and the Dakotas, associate state director for the BLM's Eastern States office in Virginia, and director of the BLM's National Training Center in Phoenix. He has also held positions in Washington, D.C., Alaska, Nevada, and Colorado. Dr. Hamilton holds a Ph.D. from the University of Denver and completed undergraduate work at California State University in San Francisco. His honors include the Department of Interior's Meritorious Service Award and the President's Award for Outstanding Leadership. He has served on the Interagency Grizzly Bear Committee and the steering committee for the Interior Columbia Basin Ecosystem Management Project. Larry and his wife, Kniffy, have two grown children, Gina and John.

James B. Hull: A 33-year veteran of the Texas Forest Service and a graduate of the School of Forestry at Stephen F. Austin State University, Mr. Hull has extensive experience in all areas of forestry, especially forest management, policy, and wildfire protection. In June of 1996, he was selected by the Texas A&M Board of Regents to become the seventh State Forester of Texas. As director of the Texas Forest Service, he is responsible for all matters pertaining to forestry in Texas, a vast statewide responsibility not only for the Piney Woods of East Texas but also for urban forestry, tree insect/disease control, and rural fire protection in all 254 Texas counties. Mr. Hull provides leadership on numerous forestry boards and organizations at the state, regional, and national levels and serves as chairman of the Fire Protection Committee of the National Association of State Foresters. He has received a number of prestigious awards

throughout his career, including the Outstanding Public Service Award from the National Association of State Foresters and election as a Fellow in the Society of American Foresters. He is married, has two married "Aggie" children and four grandchildren.

Marc C. Johnson: Boise partner of the Gallatin Group, a Pacific Northwest public affairs/issues management firm with offices in Boise, Seattle, Portland, and Spokane. Mr. Johnson served on the staff of Governor Cecil D. Andrus from 1987 to 1995, first as press secretary and later as chief of staff. He has a varied mass communications background, including experience in radio, television, and newspaper journalism. He has written political columns and done extensive broadcast reporting and producing. Prior to joining Governor Andrus, Mr. Johnson served as managing editor for Idaho Public Television's award-winning program, *Idaho Reports*. He has produced numerous documentaries and hosted political debates. Several of his programs have been aired regionally and nationally on public television. He is a native of South Dakota and received a B.S. degree in journalism from South Dakota State University. His community involvement includes a past presidency of the Idaho Press Club and the Bishop Kelly High School Foundation and service on the Boards of Directors of the Idaho Humanities Council, the St. Vincent de Paul Society, and the Housing Company, a non-profit corporation devoted to developing low-income housing projects in Idaho.

Dirk Kempthorne: Governor of Idaho and Chairman of the Western Governors' Association. Elected to the governorship in 1998, Governor Kempthorne has been chosen by the citizens of Idaho to serve at every level: Mayor of Boise from 1985 to 1993, United States Senator from 1993 to 1999. Since his inauguration as governor, he has put forward an ambitious agenda to improve Idaho's public schools, early childhood development, and immunization rates. During his term in the U.S. Senate, he wrote and won passage of a bill to end unfunded federal mandates on state and local governments. He served on the Armed Services Committee, the U.S. Air Force Academy Board of Visitors, and the Helsinki Commission, a North American/European international human rights monitoring group. Prior to his years in public

service, Governor Kempthorne worked as Public Affairs Manager for FMC Corporation. He is a 1975 graduate of the University of Idaho where he earned a degree in political science and was elected student body president. He has received numerous honors, including the *Idaho Statesman's* "Citizen of the Year" award, the Guardian of Small Business award from the National Federation of Independent Business, the Public Service Award from the Association of Metropolitan Sewerage Agencies, Legislator of the Year Award from the National Hydropower Association, and the Idaho National Guard's top civilian honor, the Distinguished Service Medal. He and his wife Patricia, an outstanding advocate for children in her own right, have two children, Heather and Jeff.

Darrell R. Knuffke: Vice President for Regional Conservation, The Wilderness Society, Washington, D.C.

Mr. Knuffke oversees the work of the Society's eight regional offices, works with grass roots organizations, the general public, and the media on wilderness protection programs. He joined the Wilderness Society in 1985 as regional director in its Denver office. After a decade in that post, he served as western outreach coordinator before assuming his present position in 1997. Prior to coming to the Society, Knuffke worked in Washington, first as press secretary for a U.S. Senator from Colorado, then in the Interior Department during the Carter Administration. A Colorado native, he studied journalism at Denver University and worked at a number of Colorado community newspapers as both reporter and editor before going to Washington. His wife, Barbara West, is a national park superintendent. Knuffke splits his time between International Falls, Minnesota and Washington, D.C.

Lyle Laverty: Regional Forester for the U.S. Forest Service's Region II, which includes Colorado, Wyoming, Kansas, Nebraska, and South Dakota. He will soon have a new title, following his recent appointment to direct the National Fire Plan. Before becoming Regional Forester, Mr. Laverty was a senior executive in the Forest Service's Washington, D.C. Headquarters Office after moving there from the Pacific Northwest Region. Mr. Laverty's first assignment with the Forest Service was in timber management on the Six Rivers National Forest

in Orleans, California. From there, he went to the Bear Springs Ranger District on the Mt. Hood National Forest and then to the Skykomish Ranger District on the Mt. Baker-Snoqualmie National Forest in western Washington. He was supervisor of the Mendocino National Forest in Northern California from 1983 to 1987. A native of California, Lavery received a B.S. degree in forest management from Humboldt State University and a M.A. in public administration from George Mason University. His hobbies include skiing, hiking, and biking. He lives in Colorado with his wife, Pam, and they are the parents of two grown children, Lori and Chad.

Brad Little: President, Little Land and Livestock. Mr. Little owns and oversees a cattle, sheep, and farming operation in southwest Idaho. In addition, he has found time to devote his talents and a large amount of time to a great number of civic, business, and charitable enterprises. He is currently chairman of the American Land Resources Foundation, which educates the public about the biological, economic, and cultural benefits of livestock grazing, and the Idaho Association of Commerce and Industry. He is a past director of the Idaho Heart Association and a past chairman of the Idaho Business Week Foundation and the Public Lands Committee of the American Sheep Industry. He has served as a member of the National Wild Horse and Burro Study Committee, the University of Idaho Vet School Advisory Committee, the Idaho Fish and Game Bear Management Task Force, and the Public Land Law Review Committee of the Western Governors Association. He also serves as a director of the High County News Foundation and the Idaho Community Foundation. In the last five years, Mr. Little has spent a considerable amount of time meeting with national livestock, political, and environmental leaders to resolve grazing controversies. Mr. Little graduated from the University of Idaho and lives in Emmett with his wife, Teresa, and his sons, Adam and David.

Robert H. Nelson, Ph.D.: Professor of Environmental Policy, University of Maryland, School of Public Affairs. Dr. Nelson's particular expertise is on land and natural resource management with an emphasis on management of federally-owned resources. He is the author of several journal articles and five books: Zoning

and Property Rights (MIT Press, 1977); The Making of Federal Coal Policy (Duke University Press, 1983); Reaching for Heaven on Earth: The Theological Meaning of Economics (1991); Public Lands and Private Rights: The Failure of Scientific Management (1995); and, most recently, A Burning Issue: A Case for Abolishing the U. S. Forest Service (2000). He has written for broader audiences as well, including the *Washington Post*, *the Wall Street Journal*, *Forbes*, *the Weekly Standard*, *Reason*, *Society*, and *Technology Review*. Nelson has served in the principal policy office of the U.S. Secretary of the Interior, the senior economist of the Congressionally-chartered Commission on Fair Market Value Policy for Federal Coal Leasing, and as senior research manager of the President's Commission on Privatization. He has been a visiting scholar at the Brookings Institution, visiting Senior Fellow at the Woods Hole Oceanographic Institution, and visiting scholar at the Political Economy Research Center.

Leon F. Neuenschwander, Ph.D.: Professor of Forest Resources at the University of Idaho and nationally-recognized expert on fire and restoration ecology, Dr. Neuenschwander is also Associate Dean for Research and International Programs at the University's College of Natural Resources. He teaches graduate courses in wildland ecology, prescribed burning, and fire management and ecology. His recent and current research includes fire effects and processes in forest ecosystems, restoration of fire dependent ecosystems, regeneration of forest and range important species. Dr. Neuenschwander earned his B.S. and M.A. degrees at California State University and his Ph.D. at Texas Tech University. He has taught at the University of Idaho since 1976. Author of more than 50 journals, a book, and many popular fire articles, he frequently testifies before Congressional committees, is often quoted in the media, and works to help journalists prepare accurate accounts regarding fire in natural resource management.

Jaime A. Pinkham: Member, Nez Perce Tribal Executive Committee. Mr. Pinkham was elected to the NPTEC in 1996 and currently chairs the Budget and Finance Subcommittee and the Enterprise Board. He has been president of the Board of Directors of the Intertribal Timber Council since 1994 and serves on the Governor's

Council of the Wilderness Society, the Columbia River Intertribal Fish Commission, and the Trust for Public Lands Indian Lands Initiative Advisory Council. Past board service includes the American Indian Science and Engineering Society. He worked formerly for the Washington State Department of Natural Resources and was staff forester in fire management for Oregon, Washington, Idaho, southeast Alaska, and western Montana for the Bureau of Indian Affairs. He holds a B.S. degree in forest management from Oregon State University and completed a two-year leadership program at the Washington State Agriculture and Forestry Education Foundation.

Stephen J. Pyne, Ph.D.: Professor of Biology and Society Programs, Arizona State University at Tempe. Dr. Pyne is also the author of a dozen books, mostly on fire. His most widely known are *Fire in America: A Cultural History of Wildland and Rural Fire* (1997) and *World Fire: The Culture of Fire on Earth* (1995). Two more are scheduled to appear next summer: *Fire: An Introduction* will summarize his view of the principles that have governed fire's geography and dynamics since its origins, and *Year of the Fires*, a narrative history of the Great Fires of 1910 and how they shaped America's fire policies and programs. Dr. Pyne was born in San Francisco but grew up in Phoenix, which he considers his home town. Shortly after high school, he began working on a forest fire crew at the North Rim of the Grand Canyon, to which he returned for a total of fifteen summers and from which experience all his writing stems. He received a B.A. from Stanford University and an M.A. and Ph.D. from the University of Texas at Austin. He taught at the University of Iowa before joining the faculty at Arizona State University in 1985. His awards include the Robert Kirsch Award from the *Los Angeles Times* for a living western author "whose career contributions merit body-of-work recognition," the ASU Alumni Award for Research, a B. Benjamin Zucker Environmental Fellowship at Yale, a MacArthur Fellowship, and the Theodore Blegen Award from the Forest History Society. In 1998, he was Distinguished Visiting Professor at the University of Alberta and was named a Fellow of the American Academy of Arts and Sciences in 1995. He is a prolific writer, and his published articles, interviews, monographs, reports, and essays number in the hundreds. At this moment,

fourteen articles and two books are in progress.

James S. Riley: Chief Executive Officer, Intermountain Forest Association (IFA), headquartered in Coeur d'Alene, Idaho. IFA's focus is on advancing scientifically-based forestland policies that promote active management compatible with environmental stewardship. Among IFA's accomplishments under Mr. Riley's leadership are: a voluntary conservation planning program for small private forest landowners in Montana with endangered fish species concerns; a Citizens Management Committee program to manage reintroduced grizzly bear populations in the Selway-Bitterroot Mountains of Idaho; land stewardship contracting approaches to the management of federal forest lands; and completion of the community-based "Flathead Common Ground" forest management plan for portions of the Flathead National Forest in Montana. His professional affiliations include the Forest Industry Labor Management Committee, the Idaho Forest Products Commission, the University of Idaho Policy Analysis Group, the American Forest and Paper Association, and the Pend Orielle Lake Watershed Advisory Group. He has also provided expert testimony and analysis on forest resource policy issues to numerous Congressional committees and members of Congress. Mr. Riley completed his graduate and undergraduate studies in forest management and economics at Utah State University. He currently resides in Hayden, Idaho where he is active in community and family activities.

Mike Simpson: U.S. Representative from Idaho's Second District, Congressman Simpson has just been re-elected to his second term in the House of Representatives where he serves on the Agriculture, Resources, Transportation, and Veterans Affairs Committees and on six subcommittees. Prior to his election to Congress, he served fourteen years in the Idaho Legislature and three terms as Speaker of the Idaho House of Representatives. During that time, he was appointed Vice Chair of the Legislative Effectiveness Committee for the National Conference of State Legislatures. He also received the Boyd A. Martin Award from the Association of Idaho Cities for exceptional contributions benefiting Idaho city governments because of his diligent work to pass legislation

stopping unfunded state mandates. Mike Simpson attended Utah State University and graduated from Washington University School of Dental Medicine in St. Louis. He began practicing dentistry in Blackfoot in 1978 and has recently received the Idaho State Dental Association President's Award in recognition of outstanding service to ISDA and to the people of Idaho.

James C. Smalley: Senior Fire Service Specialist, National Fire Protection Association, located in Quincy, Massachusetts. Mr. Smalley manages the National Wildland/Urban Interface Fire Program, an initiative that provides information, research, training, and education materials concerning the severity and impact of wildfires that threaten homes and other structures. From 1983 to 1992, he managed several programs for the NFPA relating to wildland and wildland/urban interface fires and produced video programs on firefighter safety and fire behavior in interface areas. He spent weeks covering the 1987 fires in southern Oregon, northern California, and Yellowstone. While working for the U. S. Fire Administration in Washington, D.C., he managed a national technical assistance program in fire protection and fire service planning. Previous to his work at the national level, Mr. Smalley served as director of the Arkansas State Fire Training Academy and worked for fire departments in three Arkansas cities. Mr. Smalley holds an A.S. degree in Fire Protection and a B.S. degree in Education. He is a member of the American Planning Association, the Society of American Foresters, the Institute of Fire Engineers, and the Society of Fire Protection Engineers.

Tom Udall: U.S. Representative from New Mexico's Third Congressional District, Congressman Udall serves as a Democratic Floor Whip. Born in Tucson, he earned his B.A. degree at Arizona's Prescott College. He studied international law at Cambridge University in England, where he received a Bachelor of Law degree in 1975. In 1977, he earned his J.D. from the University of New Mexico Law School. Prior to entering the political arena, he served as a law clerk for Chief Justice Oliver Seth of the Tenth Circuit Court of Appeals, Assistant U.S. Attorney,

and Chief Counsel for the New Mexico Health and Environment Department. Following a five-year tenure as partner and shareholder with the Albuquerque law firm of Miller, Stratvert, Torgerson & Schlender, Congressman Udall entered the race for New Mexico Attorney General and was successful. He served in that capacity for two four-year terms and was elected president of the National Association of Attorneys General. The congressman has served on the boards of the Santa Fe Chamber Music Festival and the Law Fund, a regional environmental public interest law firm. He comes from a family distinguished for its devotion to public service. His father, Stewart Udall, served in the U.S. House of Representatives from 1954 to 1960 and subsequently as Secretary of the U.S. Department of the Interior during the Kennedy and Johnson Administrations. His uncle, Morris Udall, represented Arizona in Congress from 1961 to 1991, serving as chairman of the U.S. House Interior Committee for 14 years. Congressman Udall is married to Jill Z. Cooper, a former New Mexico Deputy Attorney General, and they have one daughter.

Gary J. Wolfe, Ph.D.: President and CEO of the Rocky Mountain Elk Foundation. Dr. Wolfe was born in central Texas and grew up in Albuquerque, New Mexico. He attended the University of New Mexico where he received a B.A. degree in chemistry in 1971. He later obtained an M.S and Ph.D. in wildlife biology from Colorado State University. Before joining RMEF in 1986, Dr. Wolfe spent 12 years at Pennzoil Company's 500,000-acre Vermejo Park Ranch in various capacities, eventually serving as vice president and general manager. While at Vermejo, he was responsible for managing one of the southwest's largest elk herds and directed North America's largest private land elk-hunting operation. Dr. Wolfe received the New Mexico Wildlife Federation's Conservationist of the Year Award in 1978, Ducks Unlimited's "Distinguished Service Award" in 1983, and the Northwest Section of the Wildlife Society's "Wildlife Administrator of the Year Award" in 1991. He and his wife, Rita, enjoy hiking, camping, hunting, and fishing as their primary recreational activities.

SPONSORS

American Forest Resources Council	Potlach Corporation
American Forests	Skinner Fawcett
Bechtel BWXT Idaho	Stimson Lumber Company
Boise Cascade Corporation	Trout Unlimited
Bracke & Associates, Inc.	Trout Unlimited, Idaho Council
Coeur d'Alene Mines	Weyerhaeuser Company
Elam & Burke	Wilderness Society
Hawley Troxell Ennis & Hawley LLP	USDA-Forest Service
Idaho Conservation League	USDI-Bureau of Land Management
Intermountain Forest Association	USDI-Fish and Wildlife Service
Perkins Coie LLP	USDI-National Park Service



Cecil D. Andrus, Chairman

John C. Freemuth, Ph.D., Senior Fellow

Boise State University

P.O. Box 852, Boise, Idaho 83701

208.426.4218; Fax 208.426.4208

E-mail: andruscenter@boisestate.edu

The Idaho Statesman
www.idahostatesman.com