

TRANSCRIPT

USDA FOREST SERVICE: *The Next 100 Years*



A CONFERENCE ON FIRE & FOREST HEALTH

**THURSDAY, FRIDAY, NOVEMBER 18-19, 2004
IN THE JORDAN BALLROOM, STUDENT UNION
BOISE STATE UNIVERSITY**

TRANSCRIPT

USDA FOREST SERVICE: *The Next 100 Years*

THURSDAY, FRIDAY, NOVEMBER 18-19, 2004
IN THE JORDAN BALLROOM, STUDENT UNION
BOISE STATE UNIVERSITY



The Idaho Statesman
IdahoStatesman.com • Always Idaho

CONFERENCE SCHEDULE

NOVEMBER 18, 2004, THURSDAY

- 8:30 AM** Welcome and Introduction
Governor Cecil D. Andrus, Chairman, The Andrus Center for Public Policy
Robert Kustra, Ph.D., President, Boise State University
Leslie Hurst, President and Publisher, *The Idaho Statesman*
David P. Tenny, Deputy Undersecretary for Forestry, U.S. Department of Agriculture
- 9:00 AM** Keynote Address: **“Facing the Flames: The Forest Service Takes on Fire”**
Stephen Pyne, Ph.D. Arizona State University, Tempe; Professor of Biology and Society Programs; widely recognized as the foremost expert on wildland fire, and author of the critically-acclaimed *Year of the Fires: The Story of the Great Fires of 1910* and, most recently, *Tending Fire: Coping with America’s Wildland Fires*
- 9:45 AM** Audience Question-and-Answer Forum. Moderated by Governor Andrus
- 10:00 AM** Break
- 10:15 - 11:15 AM** Discussion: **The Paradox of Success: Can We Stand Much More?**
Moderated by Marc C. Johnson, President of the Andrus Center
- Panelists:*
Elizabeth Arnold, Western Correspondent, National Public Radio
An award-winning reporter who has covered America’s public lands, environment, politics, economics, and culture
- Rocky Barker, Environment Reporter for *The Idaho Statesman*
Author of several books, including *Saving All the Parts: Reconciling Economics and the Endangered Species Act* and *The Scorched Earth: How Fire in Yellowstone Changed America*, which will be published early next year
- James A. Burchfield, Ph.D., Associate Dean of the College of Forestry and Conservation at the University of Montana, an expert in both forestry and rural sociology
- Orville Daniels, U.S. Forest Service (Ret.), Former Supervisor of Lolo National Forest, pioneer in prescribed burns in national forests
- Jim Fisher, Ph.D., Editorial Page Editor, *The Lewiston Tribune*; veteran political reporter, long-time observer of the activities and on-the-ground impact of the Forest Service
- Tom Kenworthy, Distinguished journalist for *USA Today* and Denver Bureau Chief; reporter on western public lands and natural resource issues for 15 years for both the *Washington Post* and *USA Today*
- Gray Reynolds, Deputy Chief, U.S. Forest Service (Ret.), currently President of the National Museum of Forest Service History
- Tom Thompson, Deputy Chief, National Forest System, veteran of the Forest Service, formerly Deputy Regional Forester of the Rocky Mountain Region
- 11:20 AM** Audience Question-and-Answer Forum. Moderated by Marc Johnson
- 12:00 NOON** Luncheon served in Jordan Ballroom, ABC
- 12:15 PM** **Perspective from Congress:** U.S. Senator Larry Craig, (R., Idaho) (via satellite), Chairman of the U.S. Senate Subcommittee on Forestry and Public Lands Management. Introduced by David Tenny. Location: Jordan Ballroom, ABC

- 12:40 PM** Audience Question-and-Answer with Senator Craig. Moderated by Carolyn Washburn, Executive Editor, *The Idaho Statesman*
- 1:15 - 2:30 PM** Discussion: Things Could Get Worse: The Management Challenges Ahead. Moderated by John C. Freemuth, Ph.D., Professor of Political science, Boise State University and Senior Fellow at the Andrus Center
- Panelists:*
- Hank Blackwell, Assistant Fire Chief, Santa Fe County, New Mexico
Leader in establishment of Firewise Communities
- Timothy J. Brown, Ph.D., Associate Research Professor, Atmospheric Sciences Division, Desert Research Institute; expert on climatology and fire-weather relationships
- James L. Caswell, Administrator of the Idaho Office of Species Conservation, 33-year Forest Service veteran, former supervisor of the Clearwater National Forest, Chairman of the Strategic Issues Panel on Fire Suppression Costs of the Wildland Fire Leadership Council
- Walter E. Hecox, Ph.D., Professor of Economics at Colorado College, Colorado Springs, Colorado, specializes in courses and research related to regional resource and sustainable development questions as well as international economics issues
- Penelope Morgan, Ph.D., Professor of Forest Resources, University of Idaho, holds a doctorate in fire ecology and management, conducts research and publishes articles on subjects ranging from management implications of climate changes in the western Americas to landscape trends of pine forests in the northwest
- Jerry Williams, Director of Fire and Aviation Management, USDA Forest Service, Washington, D.C.
- 2:30 PM** Audience Question-and-Answer Forum. Moderated by Dr. Freemuth
- 2:45 PM** Break
- 3:00 - 4:15 PM** Discussion: **Things Could Get Better: *Imagining the National Forests in the New Century.*** Moderated by Dr. John Freemuth
- Panelists:*
- Marc Brinkmeyer, Owner/President of Riley Creek Lumber, past Chairman of the Western Wood Products Association and past President of the Intermountain Forest Association
- W. Wallace Covington, Ph.D., Professor of Forest Ecology, Northern Arizona University, Flagstaff; Director of NAU's Ecological Restoration Institute
- Louise Milkman, Director of Federal Programs, The Nature Conservancy, Arlington, Virginia
- Chad Oliver, Ph.D., Pinchot Professor of Forestry and Environmental Studies, Yale University; Director, Yale Global Institute for Sustainable Forestry
- Jonathan Oppenheimer, Idaho Conservation League, Fire Policy and Public Lands Management Analyst
- 4:15 PM** Audience Question-and-Answer Forum. Moderated by Dr. Freemuth
- 4:30 PM** Closing remarks by Governor Andrus and adjournment

NOVEMBER 19, 2004, FRIDAY

- 8:30 AM Welcome and Introduction by Governor Andrus
- 8:35 AM **Remarks:** Jack G. Troyer, Regional Forester, Intermountain Region, U.S. Forest Service
- 8:45 AM **Perspective from the Chief:** Dale Bosworth, Chief, U.S. Forest Service.
A veteran of the Forest Service and of many western forests, including service as regional forester for both the Northern and Intermountain Regions
- 9:15 AM Audience Question-and-Answer Forum. Moderated by Governor Andrus
- 9:30 AM Break
- 9:45 - 11:00 AM **Mission Impossible? A Debate About the Future Priorities for the Forest Service –**
Debaters will consider this question: Resolved: *that the Forest Service should make forest health its top priority.* Moderated by Marc Johnson
- Affirmative**
Thomas Bonnicksen, Ph.D., Professor Emeritus, Forest Science, Texas A & M, author of *America's Ancient Forests: From Ice Age to the Age of Discovery*
R. Neil Sampson, President of the Sampson Group, Inc. and of Vision Forestry LLC, a consulting firm specializing in sustainable forest planning and forest land management; Executive Vice President of American Forests from 1984 to 1995, creator of the Global ReLeaf Program and the Forest Policy Center
Jack Ward Thomas, Ph.D., Professor of Wildlife Conservation at the University of Montana; nationally known wildlife biologist; 30-year veteran of the Forest Service, including 3 years as Chief; and author of the recently-published *Journal of a Forest Service Chief*
- Negative**
The Honorable Pat Williams, Senior Fellow, O'Connor Center for the Rocky Mountain West at the University of Montana; educator; former nine-term Congressman for Montana
Chris Wood, Vice President for Conservation Programs, Trout Unlimited, Arlington, Virginia; formerly Assistant to Forest Service Chief Mike Dombeck
Randal O'Toole, Economist, The Thoreau Institute. Author of *Reforming the Forest Service* and of dozens of studies and monographs on planning, environmental policy, and natural resource management issues
- 11:00 - 11:20 AM Audience Question-and-Answer Forum. Moderated by Marc Johnson
- 11:20 AM **Summing Up: The Next 100 Years.** Moderated by Marc Johnson
Steven B. Daley Laursen, Ph.D., Dean, College of Natural Resources, University of Idaho. Leader in applying theories and methods from leadership studies to the fields of natural resource public policy and environmental education
Dale Bosworth, Chief, U. S. Forest Service
Cecil Andrus, Chairman, Andrus Center for Public Policy, Boise, Idaho; Former Governor of Idaho and Secretary of the U.S. Department of the Interior in the Carter Administration
- NOON Conference adjourned by Governor Andrus

FIRE AND FOREST HEALTH

THURSDAY, FRIDAY, NOVEMBER 18-19, 2004
IN THE JORDAN BALLROOM, STUDENT UNION
BOISE STATE UNIVERSITY
BOISE, IDAHO

TABLE OF CONTENTS

NOVEMBER 18, 2004, THURSDAY

WELCOME	Cecil D. Andrus, Chairman	1
	Dr. Robert Kustra, President, Boise State University	2
	Leslie Hurst, President and Publisher, <i>The Idaho Statesman</i>	2
	David P. Tenny, Dep. Undersecretary for Forestry, USDA	3
KEYNOTE ADDRESS	Dr. Stephen Pyne, Arizona State University	6
QUESTION FORUM	Moderated by Governor Andrus	10
DISCUSSION	The Paradox of Success: <i>Can We Stand Much More</i>	13
	Moderated by Marc C. Johnson, President of the Andrus Center	
	<i>Panelists:</i>	
	Elizabeth Arnold, National Public Radio	
	Rocky Barker, <i>Idaho Statesman</i>	
	Dr. James Burchfield, University of Montana	
	Orville Daniels, U.S. Forest Service (Ret.)	
	Jim Fisher, <i>Lewiston Tribune</i>	
	Tom Kenworthy, <i>USA Today</i>	
	Gray Reynolds, Deputy Chief, USFS (Ret.)	
	Tom Thompson, Deputy Chief, National Forest System	
QUESTION FORUM	Moderated by Marc C. Johnson	24
LUNCHEON ADDRESS	Larry Craig, U. S. Senator, Idaho	27
DISCUSSION	Things Could Get Worse: <i>The Management Challenges Ahead</i>	34
	<i>Panelists:</i>	
	Hank Blackwell, Assistant Fire Chief Santa Fe, New Mexico	
	Dr. Timothy J. Brown, Desert Research Institute	
	James L. Caswell, Administrator, Idaho Office of Species Conservation	
	Dr. Walter E. Hecox, Professor of Economics, Colorado College	
	Dr. Penelope Morgan, Professor of Forest Resources, U. of Idaho	
	Jerry Williams, Director of Fire and Aviation Management, USFS	

QUESTION FORUM	Moderated by Dr. Freemuth	45
DISCUSSION	Things Could Get Better: <i>Imagining the National Forests in the New Century</i> <i>Panelists:</i> Marc Brinkmeyer, President of Riley Creek Lumber Dr. W. Wallace Covington, Northern Arizona University Louise Milkman, The Nature Conservancy Dr. Chad Oliver, Director, Yale Global Institute for Sustainable Forestry Jonathan Oppenheimer, Idaho Conservation League	48

QUESTION FORUM	Moderated by Dr. Freemuth	57
----------------	---------------------------	----

NOVEMBER 19, 2004, FRIDAY

OPENING REMARKS	Jack G. Troyer, Regional Forester Intermountain Region	62
KEYNOTE ADDRESS	Perspective from the Chief: Dale Bosworth, Chief, U. S. Forest Service	64
QUESTION FORUM	Moderated by Governor Andrus	69
DISCUSSION	Mission Impossible? A Debate About the Future Priorities for the Forest Service Moderated by Marc Johnson <i>Affirmative:</i> Dr. Thomas Bonnicksen, Professor Emeritus, Texas A & M R. Neil Sampson, President, Sampson Group, Inc. Dr. Jack Ward Thomas, University of Montana <i>Negative:</i> Pat Williams, O'Connor Center for the Rocky Mountain West, University of Montana Chris Wood, Vice President, Trout Unlimited Randal O'Toole, The Thoreau Institute	73
QUESTION FORUM	Moderated by Marc C. Johnson	85
DISCUSSION	Summing Up: The Next 100 Years. Moderated by Marc C. Johnson <i>Panelists:</i> Dr. Seven B. Daley Laursen, University of Idaho Dale Bosworth, Chief, USFS Cecil D. Andrus, Chairman, The Andrus Center	88

FIRE AND FOREST HEALTH

The Forest Service's Continuing Management Challenges in the New Century

THURSDAY, FRIDAY, NOVEMBER 18-19, 2004

JORDAN BALLROOM, STUDENT UNION

BOISE STATE UNIVERSITY

CECIL D. ANDRUS: Good morning, ladies and gentlemen. Welcome to another in the long series of public conferences convened and organized by the Andrus Center for Public Policy, domiciled here at Boise State University. On behalf of all of those who worked so hard to put this together, I welcome you to Boise and to the campus of the University. You'll hear from our president in just a moment. This is a unique opportunity for all of us to bring about a resolution to some of the difficult problems we've been facing. It will be an intense day and a half as we debate forest health and fire.

The Andrus Center began in 1995, right after I retired from the gubernatorial post here in Idaho, with the belief that the difficult, important, controversial public policy issues can only be addressed when we sit and reason together. We believe that no one position has all the answers or all the knowledge or should have all the power to make decisions we all have to live with.

Let me acknowledge the two co-sponsors to this symposium: the *Idaho Statesman* and the U. S. Forest Service as it sits on the eve of its 100th birthday. There is a long list of sponsors on the back of your program. Without their help, it would not be possible to put this conference on. I hope when you run into any of them, you will express your appreciation.

We're together today because it was almost exactly 100 years ago that the American Forest Congress convened in Washington, D.C. They convened to consider the future of the nation's forest lands. Today, we've come almost full circle to consider the future of the national forests, beset by an entirely new set of challenges. Our goal with this conference is to consider the specific challenges of forest health and fire.

In many respects, everything has changed since the Forest Congress in 1905. In other respects, nothing has changed at all. Speaking to the delegates at that Congress, made up of representatives of industry, agriculture, mining, and the conservation

movement in its infancy, then-President Theodore Roosevelt said,

"We can make little progress apart from you. Whatever may be possible for the government to accomplish, its work will ultimately fail unless your interest and support give it permanence and power. It is only as the producing and commercial interests of the country come to realize that they need to have trees growing up in the forests no less than they need the product of the trees cut down that we may hope to see the permanent prosperity of both safely secured."

Wise man. It takes management and it takes intelligence to do that. We face essentially that same challenge today. Teddy Roosevelt was saying that we must work together, plan for the long term, use the national forests but also preserve them for all those people who come after us.

We'll hear a range of perspectives here today and comments over the next day and a half from this convention to address President Roosevelt's challenge to that long-ago Congress, and we believe that we can bring about a resolution. I'll quote him one more time.

"I think you have the right combination of qualities: the quality of individual initiative, the quality of individual resourcefulness combined with the quality that enables you to come together for mutual help."

As I look out at this group, it applies to all of you. We have a diverse group here today, a group of intelligent men and women who want to see it resolved. If we will bring our efforts together, it will be. In that spirit, we open this Andrus Center conference, and we welcome all of you here this morning.

After we adjourn, there will be a white paper, completed in about a month. It will be posted on our web site and will be available to you.

Let me now introduce Dr. Bob Kustra, our dynamic new president of Boise State University, who is making a name for himself. He will be followed by Leslie Hurst, who is the president and publisher of the Idaho Statesman, and then by David Tenny, the Deputy Undersecretary of the Department of Agriculture, who is here representing the U. S. Forest Service.

Dr. Bob, Your Eminence...

DR. ROBERT KUSTRA: Well, good morning and welcome to Boise State University.

It is a real honor for me, as the relatively new president of Boise State, to welcome you this morning. Let me begin by telling you how proud and privileged we are to have the Andrus Center for Public Policy on this campus. The fact is that we don't care too much about those words "Center for Public Policy." What we're really excited about is that word "Andrus."

There is no question but that Governor Andrus has stood throughout his entire career for informed, centrist, rational, common-sense solutions to our nation's problems, and that's exactly what this center does. I am proud to reach this point in my career where I could get the opportunity to hang around with Cecil Andrus. Thank you very much, Governor.

I want to focus for a moment on the importance of this subject. I've had the privilege in my career of traveling around the country quite a bit, and I've come to enjoy and care a great deal about our national forests from the Ottawa in the Upper Peninsula of Michigan down to the Nantahola in North Carolina back up in Kentucky to the Daniel Boone where I fished. I've been to all these and enjoy them immensely. I now live in the state that holds more public acreage on a percentage basis than any other state in the union. That is really impressive, and I've had a chance to get around and enjoy our national forests here as well.

So I think it is very appropriate that we gather here on the site of what is Idaho's metropolitan aspiring research university. The word "metropolitan" is the word I want to focus on because, indeed, it's the encroaching urbanization, the larger numbers of people settling here in southwestern Idaho, that creates a challenge for national forests in Idaho, especially those that are near this population base.

I understand that what you do here today and what you do every day of your lives, when it comes to forest health, is collaborative in nature. As I had a chance to meet some of you from across the country and the northwest, it's clear that you share information, that you work together, that you lean on one another. Those of us in higher education, especially in Idaho today, know exactly what that's all about. It is indeed our job in Idaho, as public institutions of higher learning, to work together toward common goals.

I would like to acknowledge the very strong role in forestry that our sister institution, the University of Idaho, has played over the years here in Idaho. I understand that Dale Bosworth, the current Chief of the Forest Service, is a graduate of the University of Idaho. I understand that Steven Daly Laursen is here, the Dean of College of Natural Resources at the University of Idaho, and will be one of the speakers as will Dr. Penny Morgan, one of the nation's pre-eminent fire ecologists, again from the University of Idaho.

So this is a partnership of public higher education that has come together today along with the Statesman and our good friends in the Forest Service to solve a problem that obviously is one that only gets worse tomorrow if we don't solve it today. We have in this room, without a doubt, the people who can address the issue of forest health across the country and in Idaho in particular.

We hope you find everything you need here. If there is anything we can do to make your stay here at Boise State more comfortable, please let us know.

Governor, thank you for bringing this all together. And now, Leslie Hurst, *Idaho Statesman's* president and publisher.

LESLIE HURST: Good morning. Welcome. *The Idaho Statesman* is proud to partner with the Andrus Center for the fifth year to bring you this conference on an important public policy issue. This year, we appreciate the participation of our friends in the U. S. Forest Service as well. It's impressive that they want to be an active partner in a serious discussion about their very own future.

As I thought about the conference, it occurred to me that all of our Statesman-Andrus Center conferences have focused on achieving balance in our future. In rural Idaho, in managing forest fires, in media coverage of the west, and in striking a balance between freedom and security. Balance is a theme,

too, of a conference we are working on for next year, a discussion about the best uses of water for the future of the west and the world.

It is a key part of the *Statesman's* mission to create coverage that provides leadership that brings new ideas to the table. Part of that mission is to create forums that provide people with access to thinkers with great experience. Over the next day and a half, you'll get to hear them debate and struggle over many issues, some of them in very grey areas. You'll get a chance to ask them questions, and I hope you'll take advantage of that opportunity. It's not often that we get access to experts like those who will be here.

This is an important discussion for our community, our region, and our nation. What role do you want the Forest Service to play in our future, particularly in light of the many conflicts over the uses of our forests? Today, you have a say.

I'm pleased that the *Statesman* is part of the discussion, and that you've made time to be here, too. It will be stimulating and thought-provoking, in part because it involves experts but also because of your interest and involvement. I thank you for your participation.

ANDRUS: Now David Tenny, representing the U. S. Forest Service.

DAVID TENNY: Thank you, Governor. I'm really happy to be here. It really is coming home. I have to tell you, Governor, that when I first met you, I was a very little boy. When I was much younger, it was our practice on Halloween night to go to the Governor's Mansion. You will probably remember what you were handing out to all the little boys and girls who came trick-or-treating at your house: Idaho Spud Bars. My mother was a great fan of Idaho Spud Bars, and we would dutifully march up to the Governor's Mansion and bring back at least five of them for her on that night.

I'm also happy to be here at Boise State University. I'm a little bit of a researcher myself, and my research has revealed the very interesting fact that Boise State now has one of the premier football programs in America. I think a 20-game winning streak is really good. If I can prognosticate, that will extend to 22 games before long. I was here when Boise State won its national championship back in 1980, and a guy by the name of Joe Alioti was throwing touchdown passes to a receiver by the name of Kip Bedard. That was a long time ago.

I would also like to thank the *Idaho Statesman* for being part of this conference and helping us celebrate the Centennial of an agency I've grown to love. As you know, I'm an Idaho native, and I want to tell you a little about my life here because I think it's relevant to the discussion. I graduated from the premier public high school in the Boise metropolitan area. It wouldn't be possible to tell you which high school that was, especially because there may be some folks here who graduated from Boise or Borah or Meridian and would be offended by that.

Nonetheless, I remember growing up in this area. I remember when I was very young, for example, going to Grimes Creek fishing with my dad. I probably spent more time chasing the cows that were in the meadows along Grimes Creek or trying to catch snakes than I spent fishing. But I was experiencing something that has stayed with me ever since. As I grew older, my Scout troop spent a great deal of time in the Sawtooth National Recreation Area. We hiked to places like Barren Lakes, Warbonnet Lakes, and Feather Lakes. We climbed to the top of Reward Peak, only to find when we got there, contrary to expectations that had been raised by our Scoutmaster, there really was no cash award at the top. Once you reached the 10,000 foot mark, there was just a lot of clean air to appreciate. That was our reward.

I also spent a fair amount of time at Bogus Basin when I was in high school. We would go there to study for exams. As a result, I barely graduated from the premier institution. Each of these experiences had a lot to do with our national forests. They became a part of who I am. Maybe those of you here are thinking about experiences you had growing up where some great place or experience having to do with the national forests became part of who you are.

As I stand here today, on the eve of the Centennial for this agency, the very first thing I feel is gratitude. I want to thank my friends and colleagues in the Forest Service, many of whom were around managing the place when I was growing up and were very involved in the business of making sure that I had those special experiences that became part of who I am. Thank you for the wonderful service you have provided to me.

I've had other experiences that have produced quite a different response. One of the favorite places that my dad and I would go to fish was a stretch of the Payette River between Lowman and Stanley. If you're familiar with that area, there are lots of little tributaries that flow into it and lots of great places to fish. The thing that I remember most clearly is

cresting the summit just before you drive down into Lowman and seeing this wonderful sea of green. It was a beautiful and inspiring sight. Often when we were driving early in the morning, there would be a little cloud nestled over the hamlet of Lowman, and it would just be awe-inspiring to me to be above the clouds and to see this sight.

I loved it so much that I decided I wanted to bring my family to see it. Not having been in Idaho for a while and not having driven up Highway 21 for quite some time, I brought my family, a few years ago, to take the drive from Idaho City to Stanley. Expectations were high, but you might imagine how I felt when we crested that hill and saw something quite different from what I experienced as a child. We had to stop and pull off to the side of the road. A part of me was gone. My oldest son noticed that there was something wrong with dad. He asked me what was wrong. I said, "Son, you just don't realize how beautiful it was." That's quite a different experience and one that I will never forget. Maybe some of you have had an experience like that, and part of the reason for our being here is to talk about why those experiences happen and what we should do together to make sure my experience isn't repeated over and over again for others, who also treasure this wonderful national forest system resource.

We have all seen in recent years the horrific images on the nightly news, names like Rodeo Chedokei Heyman and Rabbit Creek have become part of a lexicon in recent years that have reminded us, time and again, of the potential horror that lurks around the corner with the next lightning strike or the next burning cycle. It's part of what has emerged as a dominant issue facing the Forest Service as it moves into a new century of service.

In February of 1905, the Secretary of Agriculture, James Wilson, wrote a letter to the foresters of the Forest Service. He said to them that they were charged "to manage the National Forest System from the standpoint of the greatest good for the greatest number for the longest time."

Let me start by suggesting that the greatest good for the greatest number has everything to do with what we're going to talk about today. Our future, the future of the National Forest System, the future of the treasures we hold dear will be there or not, based upon what we are able to do, going forward from here. From its inception, the Forest Service has always been able to rise to challenges.

I'm going to ask you a question. That question

is: What is it that will most likely unleash the can-do spirit of the Forest Service today to meet the challenges of managing wildland fire in a way that will keep our forests and preserve them for the future? In a word, it is trust. Let me explain what I mean by that. Trust is a word that we often use in the context of natural resources management. Most often, it's referred to as something that needs to be earned. Trust is something that you earn after you've proved you're not untrustworthy. That puts the whole concept of trust on its ear. It implies that inherent in trust is mistrust. That doesn't seem to me to make sense.

There is another application of the principle of trust that I believe is much more powerful: to view trust as a gift. Trust is something I give to you up front as an expression of my confidence in you. When you give trust as an expression of confidence, it has a very powerful effect on behavior.

Let me give you an example of what I have seen during my brief tenure at the Department. In December of last year, Congress passed its Healthy Forests Restoration Act. It had some tools in it and provided some needed methods for managing the national forests, but it was much more than that. Apart from the tools, apart from the words on the paper, the passage of that legislation was a demonstration of trust. It passed by a margin large enough to pass a Constitutional amendment. The members who spoke on it coalesced around a common view that this agency could be trusted and needed to have the tools to carry out its trust responsibilities.

What happened thereafter is remarkable. I stood with others at the Department of Agriculture when the President came to sign that piece of legislation. With bipartisan members of Congress standing there, showing their strong approval for what was happening, on the stage was the leadership of the Forest Service, standing shoulder to shoulder with the President and these members of Congress. The feeling in the room was electric, and I can't describe it adequately. Shortly after that event, the Forest Service was put in a position to perform. The agency had high expectations for itself, and certainly there were high expectations by those who were standing on that stage.

The Chief of the Forest Service issued that challenge to the agency: "Let's show what we can do." The agency was willing to show what it could do before it actually had the ability to implement the legislation. It takes time, as you know, to put projects on the ground after a bill is passed. The agency convened

a meeting in Nebraska City, Nebraska in February. All the forest supervisors were there. The Chief urged the agency to meet this trust responsibility that had been given.

While they were meeting in that conference, one of our forest supervisors took out a piece of paper and wrote a pledge to the Chief of the Forest Service that he and his colleagues would do everything they could to meet the objectives that they had set together to improve the condition of the land through the treatments that they would undertake that year. He passed it around spontaneously, and before long, nearly every supervisor at the conference had signed this pledge to the Chief. At the end of the conference, they presented it to him as an expression of trust and confidence in his leadership and confidence in their own ability to perform.

Here we are at the end of the fiscal year during which the agency was to perform. What happened? The agency not only met its objectives but exceeded them by a significant margin. Of course, the agency was helped by weather, and that's always a nice thing. But I believe that the more compelling reason behind the agency's success was trust. That's a compelling underpinning for what we are going to be talking about today.

As you proceed in the conference today, I would like you to ask yourself a question: Where do I stand on the issue of trust? Do I believe it is something that is yet to be earned, and am I going to expect something first before I give it? Or do I stand in the camp where I am going to give my trust as an expression of confidence? I'd like you to ponder that. It has everything to do with whether we are going to succeed in the future.

To be sure, the kind of trust I'm talking about is not a passive trust. It's not the kind of trust that says, "I believe you will do the right thing, so I'm going to sit idly by and watch you do it." It's an active kind of trust. It requires engagement. It requires collaboration and hard work. It involves asking critical questions at appropriate times about whether we are doing enough or doing the right things at the right pace. I'm certain that we are going to see active participation from the Congress as we go forward, but an important nuance is that the kind of participation we will receive from the Congress will be a robust oversight focused on whether we are working together to get the job done. It will be the kind of cooperation and engagement that exudes trust. That's a very inspiring way to manage what we are about.

To close, a word or two to the Forest Service. I want you to know that from where I stand, where the Department of Agriculture stands, and where the President of the United States stands, we trust you. We have extreme confidence in your professionalism and the way you go about doing your work. We have a lot of pride in what you are accomplishing now on behalf of the American public. We stand shoulder to shoulder with you in this atmosphere of trust, and we want to get our work done together. I will modify the words of the poet philosopher and apply them to our situation now: "Thee lift me, me lift thee, together we will ascend." We will accomplish our responsibilities in an atmosphere and a spirit of cooperation and trust. Even though we won't get it perfect, we will have come a long way toward achieving the greatest good for the greatest number for the longest time.

Have a wonderful conference. Thank you for letting me share it with you.

ANDRUS: Thank you very much, David. I've been on that vista above Lowman he mentioned, as many of you have, before and after that wildfire, and I'm sure that still today it gives a dramatic look into what takes place. David, if you'd take back to the Department of Agriculture that we'll work toward that trust if they will make it a two-way street and continue appropriations for some of the things that have to go on, like firefighting, forest management, and other things. You can't live with a six-month window of time with your appropriation. We'll trust you, but you and the Administration have to trust us.

OK, ladies and gentlemen, on with this. It is my very great pleasure to welcome back to the Andrus conference an old friend, a distinguished historian, an outstanding scholar, and a thoughtful observer of the American west, Dr. Stephen Pyne. He is widely recognized as the foremost historian of fire in the west and of our efforts to combat fire. His critically-acclaimed books include *Fire in America* and *Year of the Fires: The Story of the Great Fires of 1910*. He has been honored for his teaching and for his scholarship. Dr. Pyne is a recipient of a MacArthur Fellowship and is currently on the faculty of Arizona State University. If any of you think that he brings you his message today from the ivory tower of academia, let me remind you that for 15 years, he was on a fire crew in Grand Canyon and wrote the fire plans for the National Park Service in the early 1980's. He's been there and knows what he is talking about. Please join

me with a boisterous welcome back to the Andrus Center for his keynote address, “Facing the Flames: The Forest Service Takes on Fire.” Dr. Stephen Pyne.

DR. STEPHEN PYNE: Well, good morning. This story has many beginnings. It began when the first hominid picked up a burning stick and then sought to beat out what he had kindled. It began when George Perkins Marsh linked devastated forests with declining civilizations. It began when a rider to the 1891 Civil Appropriations Bill authorized the President to set aside Forest Reserves from the unpatented public domain. It began when the big blowup of 1910 traumatized a still-inchoate Forest Service.

But there are good reasons for starting the story in December 1871 in British India. The recently-organized India Forest Department assembled for its inaugural conference. The first questions posed were the most basic: Was fire control possible? If possible, was it desirable?

The answer to the first was “maybe.” The answer to the second was a more complicated “possibly.” It may seem strange to begin a quintessentially American story with a British crown colony, but the incident should remind us that state-sponsored forestry was part of a global project, that Forest Reserves appeared throughout the imperium of an expanding western civilization—in the American West no less than the central provinces of India or the Atlas Mountains of North Africa; that American conservation originated in Europe and saw fire as Europeans did; that the administrators of those Reserves, foresters, whom David Hutchins likened to “soldiers of the state,” saw fire as their first and foremost foe.

In his autobiography, Gifford Pinchot wrote that he hoped to achieve in the United States something of what his mentor, Dietrich Brandes achieved in India. Pinchot’s chosen successor, Henry Graves, had also gone through the educational regimen of the British colonial forester. They understood, of course, that the American scene was different, and they appreciated particularly the power of public opinion as a political force. But they would do for America’s Forest Reserves what the British were doing in Cyprus and Cape Colony and Australia and what the French were attempting in Algeria. What all shared was a common understanding of fire as a founding menace. Revealingly, when Mowgli, the protagonist of the *Jungle Book*, grew up, Kipling had him become a fire guard with the Indian Forest Department.

The America the conservationists observed, the savage extravagance that V.L. Perrington characterized as “The Great Barbecue,” was awash with fire. The year the Indian Forest Conference met, a million acres burned in the north woods along with towns like Peshtego and cities like Chicago. John Wesley Powell’s 1878 map of Utah plotted burns from the grassy edge of the desert to the rims of forested plateaus. Charles Sargent’s map for the 1880 census charted an America where settlement was a synonym for fire. Franklin Hough’s 1882 overview detailed an extraordinary range of burning. America’s fire scene in the 1880’s resembled Brazil’s in the 1980’s. Flames seemed everywhere and, to critics, everywhere abusive.

That at least was the perspective of America’s educated elite. This select company and their political allies saw holocaust. They saw fire as increasingly frequent and increasingly lethal. If fire was the great enabler of settlement, it was also its great nullifier. Critics fumed that the worst flames were not the conflagrations that blasted into public spectacle, but the relentless slow burns: field, pasture, fallow, woods, and the sloven husbandry that encouraged them.

As the Prussian-trained Bernard Fernow famously remarked, the fire scene was the “result of bad habits and loose morals.” Still the general public was of a mixed mind as to what to do. One group said these explosions were simply part and parcel of frontier violence; wildfires existed because wild lands existed. Once those untamed landscapes were domesticated into farms and villages, the fires would disappear. Others insisted that some fires were bad, but many were benign, even necessary. Another group held that some intervention by government was warranted. If the state had to pick up the pieces, it had an interest in stopping the breakage. Moreover, as the country industrialized, it was argued that the nation’s economic future depended on preserving forests, not clearing them.

Industrialism was, in truth, the deep driver. For fire history, industrialization refers to the burning of fossil biomass, contained combustion. It rapidly replaced open burning as a tool of factory, home, and field by a process both of technological substitution and outright suppression. The earth is fissioning into two rival combustion realms: one reliant on burning fossil fuels; the other still clinging to surface biomass—neither tolerant of the other. The period of transition, the pyric transition, is typically a time of excessive and abusive burning. All the old fire

practices persist while new ones and new heaps of combustibles are added. Eventually the process snuffs out flame, but this can take 50 to 60 years.

When the Bureau of Forestry acquired the Forest Reserves in 1905, the United States was still in the midst of this immense transition. What the agency confronted was not America's natural state of fire but an exceptional one. The process of revamping America's fire regimes was thus well underway before the first Fire Guard trekked to a Rocky Mountain lookout. It began when steel rails cracked open remote forests for ax and plow and encouraged massive overgrazing. It began with nitrogenous fertilizers. It began when the country reached for a steam engine instead of a torch.

America's transformation from a fire-flushed landscape to a fire-starved one would have happened with or without Smoky Bear and with or without the Forest Service. It would have happened whether or not Ed Pulaski had invented his eponymous tool and whether or not a smokejumper ever leaped from a Ford Trimotor.

The curiosity is not why fire vanished but why it persisted on such a scale. The answer is a commitment to state-sponsored conservation. What halted the full-scale conversion was the creation of a permanent public domain, and this was a global enterprise. But paradoxically, instead of evolving into the fire-free zones these Reserves were intended to be, many of them became permanent habitats for fire. They ensured that free-burning flame would not vanish.

It matters greatly that it was during the upheaval of this pyric transition that the federal government got serious about fire and that professional forestry declared itself the oracle and engineer for free-burning flame. The Transfer Act that created the modern Forest Service bisects almost exactly the epoch of historic holocausts, from roughly 1870 to the mid- 1930's. Even more precisely, it bisects the paired 1902 and 1903 fire seasons that savaged west and east and the paired 1908 and 1910 seasons that repeated the havoc.

In 1902, there was little one could do about large fires except flee or backburn around fields or muster for a futile stand at a village. In 1910, the government could marshal forces to fight back, and it did at considerable cost in money and lives. Something had changed. That something was the existence of an agency not only empowered but eager to fight. That something was the Forest Service.

In retrospect, we can see fire protection as part of a package of progressive-era programs that included, in the name of efficiency and populism, damming rivers, hunting down predators, and cleaning up slash. The Forest Service did not invent specious arguments for fire exclusion. It was the demand on the part of progressive conservationists for fire protection that had led to the Forest Service.

Prior to the Transfer Act, the National Academy of Sciences had reviewed the state of the Reserves, and the U.S. Geological Survey had mapped them in detail. Both industry and conservationists had denounced fire as ten times more damaging than logging. Nearly everyone agreed that America was sending its future up in smoke. Gifford Pinchot thundered with abolitionist zeal, "Like slavery, the question of forest fires may be shelved for a time at enormous cost in the end, but sooner or later it had to be faced." Right-thinking critics demanded government institutions to stop the wreckage. They mis-read the pyric transition as a permanent condition.

America's foresters, like their colonial colleagues, were appalled, overwhelmed, and obsessed by the fires. Henry Graves had declared that fire protection was 90% of American forestry. Years of hard labor allowed William Greeley to downgrade the status to 75%, but after the great fires of 1910, smoke in the woods remained his yardstick for progress and for forestry success in America. The Forest Service recognized that fire's apparent devastation was a trump card in the realm of public opinion. It accepted willingly that fire protection was the most visible public test of its achievements. The nation's founding foresters were avid and proud to face the flames.

When this grand experiment began, no one knew really what it would demand. Overseeing a landscape rife with true wildland fires was a novel task; yet the agency had to act. Fires happened. They happened often, sometimes hugely. The young foresters acted on what they knew. They knew European forestry, which taught them that all fire was bad and that fire control ultimately meant social control. They knew urban fire services, which urged on them the need to detect and attack fires as rapidly as possible. They had the recommendations of the National Academy of Sciences, which had the sparkling example of the cavalry in the national parks, which seduced all of them with the notion that fire protection could follow a paramilitary model. They had the vogue of efficiency studies, which argued that Taylorism could

reduce waste in forests as fully as in factories. They knew their circumstances were unique, which lent them the conviction that fire protection would be America's big contribution to world forestry, and they went at it with a zeal that bordered on fanaticism. That zealotry was their power, their glory, and their ironic undoing.

In one of my favorite photos from the National Archives, a large fir tree has had the top blasted out. It's punky, partly rotted, and smoking. Two smoke chasers have been sent out, and they are going to do what they can. They felled the tree. The leaning tree is one they dropped into this so that they could "coon up" the side. There he is at the top, standing on a branch, and here is the bucket they are hauling up and pouring it into the smoldering punk at the top of the snag. Certainly a world before OSHA. I think we should honor them for their dedication. I think this kind of commitment is unprecedented in all of human history—to go at fire in remote settings with this kind of intensity. But now we can see that there was an ironic twist to it as well.

The irony came because forestry rooted in European agronomy did not include fire. Fire protection was something that had to happen before forestry could flourish. It was a pre-condition to silviculture and woodland economics and not a core practice. Aggressive fire control was a phase callow nations passed through before they matured as though open flames were the fevers of a childhood disease. So even as the Forest Service boldly argued that fire protection was one of its legacies to international forestry, implicit was the belief that the heroic age of great fires and grand fire fights would fade away, once the land was properly pacified.

That was the Forest Service's second great misreading because nothing of the sort happened. Instead of domesticating the wild, the national forests often became less stable and more fire-prone, and the cycle of violence intensified. A bold campaign to conquer fire, initially successful, sank into a bottomless insurgency. In recent years, some 40% of the Forest Service budget has been committed in one fashion or another to fire. Tending to fire was not a single event but a relationship—relentless, insistent, indispensable.

We know, reasonably well, the broad contours of the last century's history, and there is scant reason to restate them all now. Instead, we might better sketch some aspects of their legacy. There is, for example, a science of wildland fire. None existed before the Forest

Reserves, and none is likely to persist if those reserves dissolve. Fire science is government science, funded to meet government needs. Academic research is no substitute, for the only Fire Department on a campus is the one that sends engines when the alarm sounds. This achievement has its dark side. We have hardly any scholarship that is not embedded in the natural sciences. Yet the drivers of fire management lie in areas of economics, esthetics, and ethics—arenas of public choice animated by social values, disputes synthesized by politics. Fire's fundamentals lie not in labs but in legislatures.

There is also a legacy of practical knowledge and experience and policies. The industrial transition swept away millennia of human fire knowledge and folklore. We have, at great cost, been forced to reinvent and rediscover that learning. That recovery is far from complete. Briefly what we have learned most fundamentally is that there is no single strategy of fire management. We can't cut our way out of the problem. We can't burn our way out. We can't suppress, and we can't walk away. We need compounds of these techniques with their portions adjusted to particular sites.

So, too, we have learned that no one agency can oversee the whole. We need institutional compounds, not only among the federal bureaus but among state agencies, NGO's, and private landowners.

It is not simply what was done that troubles fire's past history. It's how it was done. It was that legacy of empire or its modern-day stepchildren, judicial decrees and presidential fiats. It would be a sad irony if we only replaced state-sponsored forestry with state-sponsored ecology. The politics—not merely the policies—matter.

There is, not least, perhaps the most marvelous legacy of all: that a place for free-burning fire persists, that an agency exists to face its flames. We have extensive wildland fires because we have extensive wildlands. If Bill Gates bought the Bitterroots or Disney, the Mimbres, or if suburbs and shopping malls were allowed to sprawl over the San Gabriels, we would have a very different geography of fire. That domain demanded institutions to oversee it, to shelter it from fire. The U. S. Forest Service not only sought that task but brilliantly elaborated its charge into a national and even international infrastructure and fashioned a master narrative of what it all meant. In fact, it did the job so well that it made possible the extinction of its own hegemony in favor of interagency cooperatives and

common policies, and it pushed fire protection beyond fire's simple suppression into its multitudinous management. This, more than Pulaskis and B-17s converted to air tankers, is its truest achievement.

Well, a century has passed, then and now. The eras are eerily symmetrical. In 1905, the Forest Service confronted rapacious logging, reckless mining, damaged watersheds, and boundary threats in the form of agricultural encroachments and fire. In 2005, it confronts sick forests, endangered species, invasives, boundary threats in the form of urban encroachments, and fire. In 1905, all sides exploited America's fire scene to animate their messages, for nothing else mattered until we had fire properly in hand. The perception was that the nation had a surplus of bad burns, that the way to solve the problem of abusive fires was to abolish all fires, and that the public was unable to absorb anything other than a much-simplified message. There was vigorous dissent, however, over what fire management meant and whether, in particular, it should be based on fire fighting or fire lighting. The great achievement of this, the agency's heroic age, was systematic fire protection and a story to sustain it.

In 2005, all sides are again exploiting America's fire scene to animate their messages. For nothing else matters until we have fire properly in hand. The perception among the fire community is that the nation has a deficit of good burns, that the way to solve this shortfall is to reinstate fire across the boards, and that the public is unable to absorb anything other than a much-simplified message. This time, there seems to be muted dissent over whether management should be based on the ax or the torch. The great achievement of this era of reformation is surely the indelible bonding of fire to land management.

It is testimony to the complexity of that concept that we have as yet no story to tell about it sufficient to the task. Then, fire protection was part of a global program of state-sponsored conservation. The debate in India is almost wholly interchangeable with that in the United States. Today, fire management must again situate itself in the global context. State-sponsored forestry has run its life cycle. The imperial model has imploded. The past half century has been a time of dramatic de-colonization. Relic institutions have been scrapped, hollowed out, retrofitted with new interworkings better suited to an urban and industrial society.

Today, fire persists at the nuclear core of what has become global change. It does so directly in the

case of global warming, which at base is a question of combustion. It does so indirectly for problems of land conversion, nature preservation, biodiversity, etc. Fire has been inserted into places that can't accept it and withheld from places that need it.

Then, big fires kindled a sense of crisis. They were visible emblems of a nature knocked out of balance, careening into chaos. Looming over all stood the big burn of 1910. Today, mega-fires have returned, again as powerful tokens of a nature out of whack with its evolutionary heritage and humanity's aspirations. But the giant smokes rising over the Northern Rockies in 2000 or the flames riding a shattering wind into the fringes of San Diego in 2003 are not the big burns of today. For that, look to the often-invisible spumes of industrial combustion. The big burn is all around us, so vast it has begun to perturb the earth's atmosphere. The rhythm of fire follows climate. The pressure of anthropogenic combustion is now causing the earth's climate to wobble, casting off big fires as it strikes suitable timber.

The contained combustion in our automobiles, chain saws, power plants, and leaf blowers—these are the fire practices of our times and, increasingly, the drivers of fire in our wildlands. The big burn accounts for the maldistribution of fire globally: the developed world with too little of the right kind of fire; a developing world with too much of the wrong kind; a planet stuffed with combustion and starved of flame.

Fire's future will follow these trajectories. It will compete with industrial combustion. It will morph as climate and land use serve up or withdraw suitable fuels. It will depend on the character or even the survival of public lands. It will tack and twist with the various institutions that society commits to its oversight. It will join a global forum. We will have to explain why a million acres burned in Brazil is bad but a million acres burned in Yellowstone is good. We will have to justify a world that combustion's greenhouse gases are turning into a planetary crockpot, why uprooting and burning sequestered carbon in tens of millions of acres in the American west is healthy and justifies keeping our SUVs running. We can, but it's going to be tricky, and these issues will multiply.

A century ago, foresters controlled the global agenda of fire management. Today, they do not. Yet, the originating question posed in 1872 endures: How much can we apply and withhold fire? How and why should we try to do so?

Fire's primacy. That much the raw rangers of a fledgling Forest Service understood only too well in 1905. They struggled mightily to control those flames. By our reckonings, they got it wrong. By the standards of a century from now, we also will be seen to have gotten it wrong. As always, fire will adjust to its context, and the future's context is beyond our knowing.

What we can do is to grant fire its central casting and to face it with all the wisdom, dedication, gusto, humor, and humility we can muster, for we will never know all we need. What we do know is that, for a century, whatever and wherever the flames, the Forest Service was there to face them. Over and over again, the agency sought to put fire behind it, be a real Forest Service, not simply a fire service. But the fires have always called it back. To its credit, the Forest Service has always responded.

It should be clear by now that whatever it has been and is today, the institution will always be, in its fundamental, a fire agency, for fire is the great synthesizer of the lands under its stewardship. This means the Forest Service will have to stand and face the flames again and again and yet again. We know it will do so. It will be our privilege to stand with them.

Thank you.

ANDRUS: Dr. Pyne has agreed to respond to questions. We have two men with microphones, Andy Brunelle and John Freemuth. Let me warn you that this is not your opportunity to make a speech. If you want to make a speech, write it down and mail it to me.

AUDIENCE: Could you tell us what the condition of the Indian fire situation is? Have they returned to the conditions we have?

PYNE: Indian meaning India? Let me say, first of all, all this business about "doctor" and "world authority on this and that" has got to be scrapped.

The Indian situation is very interesting. They have still not shed their colonial heritage. They simply put Indians in place of the British, and they have continued largely with the same official stand. By the 1920's, the British accepted that they would have to do some controlled burning. It was called "early burning." Officially, this was something you had to do until the system would mature. Then it would go away. The Indians still do this, but what you have

on the ground is not what the official records and agencies do. The agency is increasingly a hollow one on paper but has very little practical context. The big divide between India and the American West was that locals remained in and around the forests in India, and they could never be stopped from burning. That situation is much closer to the scene in the American South. It turned out to have been a poor model to begin with, but that was the best they had.

AUDIENCE: What do you think about linking the concept of reducing fire by reducing fuels to the concept of forest health?

PYNE: Well, I think it's going to happen, and it can be done well or poorly. What I would like to see—if I had my druthers, and I'm speaking now as an academic—is for the debate to be shifted and to put fire into a more truly biological context. Beyond fire ecology, we still think of fire as a physical force, a disturbance that slams into forests. We saw what it was before; we see what it's like afterwards as though it were a flood or a windstorm.

Fire is different from all those others because it can happen whether or not life exists in their zone or not. But fire is propagated through a biologic medium. It's much more like an insect attack. We should be looking at the contagion of combustion. We could begin thinking much more about the integration of that into a biology, even beyond an ecology of fire. If we did that, then we could begin thinking about biological controls more robustly than we do. Instead of thinking of it as just a physical problem that needs physical countermeasures, we could begin thinking about a much more integrated system where if you do something, something else is going to happen. It's not just moving carbon bullion around.

If we only tie the issue to the concept that large fires are a problem, they stimulate interest, they bring money, we'll find that with three years of wet rain, it doesn't matter how overloaded the forests are, they aren't going to burn, and the problem is going away. You need to find some other way to re-center it, and I would personally urge recentering in biological terms.

That also creates a position for ourselves to be active agents. Life created the oxygen; life created the fuel. What life did not control is the ignition until we came along. So in a certain sense, we close the cycle of fire for the circle of life, if you will, and there's a case we could make that that's what we need to do.

AUDIENCE: Looking at your fire census map from 1880, I noticed a heavy amount of fire east of the Mississippi as opposed to the west. We have the preponderance of the federal lands in the west and more state and private lands in the east. 100 years later, we see a greater amount of catastrophic fire in the western mountains. We know that there is a freer hand in management techniques on state and private lands than there is on federal. Could you comment on the difference in conservation and management techniques and their prevention of catastrophic fire on those eastern lands as opposed to what has happened in the west?

PYNE: For one thing, the eastern lands are much more densely inhabited. So this effect, the removal of fire I talked about as part of the industrial process, has gone on more fully there. In fact, it is still being removed. The thing we would say, though, is that most of the controlled burning in the country is still in the southeast, whether on private or patches of federal land. That's really where the geography of fire has always been.

We see the fire problem in the west because we created special enclaves on a huge scale. These are political institutions, so it has become something of a political issue. The other thing on the 1880 map is that there are very large intense fires in the northeast and the Great Lakes. All of that is gone. In fact, the whole geography is very closely inverted, and that is the result of political decisions and technological changes. Again, we were very much like Brazil for many of the same reasons. It was all tied basically with agriculture.

AUDIENCE: I'm Stan Davis, the Mayor of Salmon. I went through the 2000 fires. How do you see the role of the court system in the Forest Service? The Forest Service puts up prescribed burns, timber sales, or fuel reduction projects, and the court system overrides the Forest Service. If that were taken out, especially in the urban interfaces, watersheds, or municipalities, would that be a better management tool for the Forest Service?

PYNE: I think there are several answers to that. It may be time for a de facto re-chartering of the Forest Service to accommodate what really are its problems and somehow get rid of a lot of the legacies.

Another thing, for about 15 years the dominant concern of the fire community—and they deserve a

lot of credit for getting ahead of this—is this wildland/urban interface. Remedial measures and interventions are going to happen around communities. I don't see that being an issue; I think that is happening. What I think is completely undetermined is all the land in between. We're willing to do the wilderness stuff; we're willing to do something around communities, but all that huge sort of generic public land is up for grabs. That's where I think the issues are going to move next. I'll be counter-intuitive. I think we're solving the interface problem. It doesn't seem like that, but I think in five or six years, we will start seeing some other problem rise to the front. It won't have gone away, but it will have been domesticated. It will just be a part of the suite of fire things we do in those communities.

AUDIENCE: Some 6.7 million acres burned in Alaska this summer. What do you see as the future of fires further north, in Alaska and around the Arctic Circle?

PYNE: I just saw a report, maybe in Science magazine, on the warming Arctic. If that continues, then there will be a lot more fire and a lot more fire in organic soils. The whole greenhouse gas issue with methane and other releases is going to become an international issue. I could certainly see Europeans, in particular, simply insisting that we stop the fires as a way of carbon sequestration, whether that makes any sense or not. There will be pressures to do that, and we have to muster our arguments against it. If you want fire, you have to make a biological argument that it is doing ecological work that nothing else does, and we need to have it. If all you're talking about is fuel reduction, you don't need fire for that.

AUDIENCE: I understand the interface problem, but I'd like to know what you would advise a forest supervisor to do who has forest land between communities, tens or hundreds of thousands of acres, with 1200 trees per acre when historically there were 60. Should that supervisor thin that forest to prevent it from burning? Should the supervisor allow it to burn, or should the supervisor say, "I've done my best. I've tried to protect the community. I can't do any more."

PYNE: I think you have to try. You'll have to do whatever measures you can to reduce the hazard, but if the communities themselves decide they don't

want it, then at some point that becomes their choice. There is a way to avoid certain problems if you could rephrase that as a forest health issue, not simply a fire management/fuel reduction issue. Then you bring some other power to that, and we could begin thinking about large-scale landscaping. I think of fire green belts, not nuked, stripped areas, larger green belts would be the way to go.

ANDRUS: As a moderator, I shouldn't have my own opinion, but keep in mind that if you thin that as you should, you have to have a budget to do it.

PYNE: If I could interject on that. The National Fire Plan and all these wonderful programs were advanced at a time of national surplus. That has shifted dramatically, and what is Congress going to pay for? Prescribed drugs or prescribed burns?

AUDIENCE: Steve, could you just comment briefly. Imagine that you were asked to write a new piece of legislation on fire and forest health on public lands. What would the three or four key elements of that legislation do?

PYNE: Let me say first of all that I am becoming increasingly uncomfortable and uneasy here, being asked to comment on this when this room has thousands of years of fire expertise sitting in this room. Why are you all sitting and listening to me?

I can't answer that in a couple of sentences. What I would like to do is to re-charter it into a more biological framework. That allows us to sidestep and finesse around some of the other environmentalist issues. I think we can do that. They are not antagonistic, but as they are phrased now, they are. We need to find a new way to restate them so that there are possible linkages. I also reject the idea that all these choices are on a spectrum or continuum. They aren't. They are a constellation. They are all over the place, and we can connect those dots in lots of different patterns. If we think about it that way, then the options are open for us.

ANDRUS: Thank you very much, Steve. Let me say that when I called this man and asked him to come up and be our keynote speaker, he didn't put the arm on me for a fee or honorarium or anything. He volunteered because we asked him to. His books are for sale out in the lobby, and you can probably get him to sign one after you've bought it.

* * *

FIRE AND FOREST HEALTH

The Forest Service's Continuing Management Challenges in the New Century

THURSDAY, NOVEMBER 18, 2004
JORDAN BALLROOM, STUDENT UNION
BOISE STATE UNIVERSITY

10:15 AM

Discussion: **The Paradox of Success: *Can We Stand Much More?***

ANDRUS: Let me introduce to you the moderator of this panel, a long-time friend and associate of mine, Marc Johnson. Marc Johnson is a partner in the Gallatin Group, a public affairs and issues management firm with offices in Portland, Seattle, Helena, Spokane, Boise, and Washington, D.C. Marc is also president of the Andrus Center for Public Policy, pro bono. He does a lot of work to help keep this thing going. Help me welcome Marc Johnson.

MARC C. JOHNSON: Good morning, ladies and gentlemen. Thank you, Governor. Thanks to Steve Pyne for a great start of this conversation today. This gathering, as Steve suggested, is in many ways about understanding the legacy of the United States Forest Service over the last 100 years. It is also about understanding what change must come to the Forest Service in order for the agency to adequately respond to new issues and new concerns in the next 100 years.

As the title of this panel suggests, the Forest Service has been a victim of its own success in controlling fire. Now it must live with the paradox of that success, and, of course, so must we. We're hoping that this discussion will, as Steve Pyne's talk has already done, further set the context for what you might call a "tipping point" between the historical legacy of the Forest Service and its future.

To help us do some more scene-setting for the rest of this conference, we've assembled a truly distinguished panel of current and former Forest Service professionals, one of the nation's leading academic experts on forestry and rural communities, and four journalists, each with a vast amount of knowledge and experience with western resource issues and the work of the U. S. Forest Service.

Someone asked me, "Why do you put journalists in this mix?" Well, who helps us understand public attitudes about issues like fire and forest health,

and who has an impact on creating the political environment in which these decisions are made? Obviously, people like Elizabeth Arnold, Rocky Barker, Jim Fisher, and Tom Kenworthy. There will be some opportunity for questions from you before we break for lunch, so get those questions in mind. We'll have a chance to get to a lot of them.

Let me introduce the members of the panel. At the far end of the dias, Rocky Barker, environmental reporter with the Idaho Statesman here in Boise and a former Visiting Fellow at the Andrus Center for Public Policy where we basically underwrote his most recent book, which is coming out early next year. It deals with the history of fire in Yellowstone and how it has impacted our dealing with fire in the west. Rocky has also written extensively on endangered species issues and has written a book on flyfishing, although I don't think he has ever caught one.

Next to Rocky is Orville Daniels. Orville had a distinguished 37-year career with the Forest Service, including serving as supervisor on the Bitterroot and Lolo Forests, where he pioneered the use of prescribed burning in the Selway back in the early 70's. He is active in retirement in consulting and training. Next to Orville is an old friend to the Andrus Center, Tom Kenworthy, Denver Bureau Chief for USA Today. He covered western issues for over a decade with the Washington Post, prior to joining USA Today. He has covered the western fire story extensively, and he participated in an Andrus conference a while back on how the national media impacts western public policy issues.

Next to Tom is Elizabeth Arnold, national correspondent for National Public Radio. Since 2000, Elizabeth has covered America's public lands stories in all of their complexity: the resources, the environmental concerns, the social implications, and, of course, the political story. She has been with NPR since 1991. She has also covered the Congress and politics and has won numerous awards for her

reporting. Dr. James Burchfield is Associate Dean of the College of Forestry and Conservation at the University of Montana in Missoula. He is an expert in both forestry and sociology, and the connections between managing the forests and meeting the needs of the people who live near those forests. Dr. Burchfield has also worked for the U. S. Forest Service.

Next to Jim Burchfield is Jim Fisher, the Lewiston Tribune's Editorial Page Editor, a long-time Idaho journalist. He presides over the lively, opinionated—not always right but never in doubt—Tribune editorial page. Jim has a long career covering the Idaho Legislature and has taught at the University of Idaho in his checkered background. We thought it important to have an editorial writer on the panel because, as Governor Andrus has said, "Editorial writers observe the battle and then go out and bayonet the wounded." I'm counting on you to come through, Fisher.

Next to him is Gray Reynolds, who has held just about every job you can hold in the Forest Service: Deputy Chief, Intermountain Regional Forester, dozens of other jobs during his 33-year career. Once retired from the Forest Service, he managed the Snow Basin Ski Resort in Utah and got that area ready for the 2002 Winter Olympics games. He is currently serving as President of the National Museum of Forest Service History.

Last, but not least, Tom Thompson who is the current Deputy Chief of the National Forest System, a 34-year veteran of the Forest Service and a former Deputy Regional Forester for the Rocky Mountain Region. Tom now oversees 191 million acres of the national forests and grasslands, just enough to keep him busy on a daily basis. Please help me welcome this distinguished panel.

Rocky Barker, this is your moment to shine. Tell us how we should be thinking about this tipping point between the hundred-year legacy and where the agency ought to be going. Steve Pyne set it up in a variety of ways, and we want to play off some of the things Steve said. But as a journalist and as someone who has observed this for a long time, tell us how we should be thinking about this question of the Forest Service legacy, looking forward.

ROCKYBARKER: Thank you, Marc. I think you called this panel the "paradox of success." This agency largely succeeded in putting out fires, eliminating fire from its lands by the 1950's and 60's with a little help from Mother Nature, of course. This was an

agency that really organized itself around the concept of scientific management. Yet, I think it struggled throughout its history to deal with the science of fire, which was the overriding mission of the agency. The agency didn't just allow but encouraged the kind of bureaucratic inertia that succeeded in building the agency's strength but perhaps lost sight, until much later, where it would be on the land itself in terms of fires.

It ignored voices that suggested early on that fire had a role in the ecosystem, voices that actually preceded its founding. Pinchot himself clearly recognized the role of fire in the natural ecosystem. Writing in *National Geographic*, Aldo Leopold learned ecology not from books but on the land as a forester, recognizing the historic role of fire in the southwest. His work ended when he was put to work looking at good ways to utilize forest products. That essentially bored him, and he moved on to wildlife management, inventing that science. That science was lost to the agency. Finally, the agency did grasp it with the work of people like Orville and others. Then it moved into a whole new scientific direction and mission: ecosystem management, which started when Gray was Assistant Chief and was really finished and put into place by Jack Ward Thomas. If we look today at that crossover point, will it take as long for the agency to retool its bureaucracy to work through the choices that we have, both at a local level and at a national level, on ecosystem management as it took us on fire exclusion a hundred years ago?

JOHNSON: Orville, Rocky seems to be suggesting that you guys were struggling to overcome your legacy as a fire agency.

ORVILLE DANIELS: I lived through that at the time when we were starting to make the shift in the early 70's to understanding the role of fire in the ecosystem. By the way, we started in wilderness because that was a place where the environmental community and others would let us start. It wasn't that we were so naive that we thought that fire and its role was only a wilderness phenomenon, but we knew that was a place to get started, to use fire management in order to come out into the out front country as well. We knew that, socially and politically, there was little support for that. There was support in the wilderness. I'm not so sure that we didn't know which way to go, that we didn't know what was right way back in the 70's. Sometimes it's the social, economic,

and political aspects that are going to be the trouble for future, just as they were the trouble for that time.

It isn't so much that the agency was wrong in its suppression, but as it began to shift, would people let us shift? And it was not easy. Were we wrong in what we were doing? We were on the track early, but there are so many complexities in the modern world that you don't move quickly, and you don't move without others.

I think the problem for the next thirty years is going to be the same problem that we had for the last thirty: We know a lot about what needs to be done, but the issue is whether we have the social, political, and economic infrastructure to get it done. I don't think there is much question that the Forest Service knows where to go on this fire/fuels/forest health thing. We have come a long way in the last fifteen years. The knowledge is there, but now, how do you—as an agency in a modern world that really doesn't want to put trust in an agency but wants to put trust in another system—point out the problems in a way that allows society to move ahead in solving them? The agency will not solve it itself. I see it as a bigger issue.

JOHNSON: Dr. Burchfield?

JAMES BURCHFIELD: I concur with a lot of what Orville said, but I think contrition can go a long way. The agency would really benefit by saying, "You know, doggone it, we were wrong when we put out all those fires. This isn't the best thing to do." We have this bizarre, schizophrenic social contract with the public. On the one hand, it says fires are a horror. We see them. They are terrible and evil. We must stop them. There are all the benefits that go along with that. There is money. Agency guys are heroes. They make movies about them with Howie Long jumping out of planes.

At the same time, we have this understanding—and we have to be true to this understanding—that fire has an ecological role. I like the way Stephen Pyne talked about it as having a biological function. It's the responsibility of the agency to recognize that. Now we're stuck in the situation where if we keep this kind of two-faced contract, all of a sudden, now we're telling people, "Go ahead. Build that nice big house out there, right in the urban interface. We'll protect that Humvee garage for you. Don't worry about it." I don't think that's right.

JOHNSON: Tom, is it time for confession? Jim's inviting you to contrition at least, if not confession.

TOM THOMPSON: It's like a lot of issues. There are so many sides to it and so many perspectives that need to be listened to. There are a tremendous number of things we can look back on during the last hundred years and try to put in terms of the modern world and what we're facing today. We can second-guess decisions, second-guess people, second-guess policies. I think we have plenty to deal with today without looking back and placing blame on yesterday.

What we need to do—and Orville and Rocky suggested it—is to sort out the complexity in today's world. It isn't as clear as I look back at it. Even in the 40's and 50's, fire was being used by the agency in the southeast part of the country. It wasn't as if we were blind to the value of fire. Fire has been part of forest management in many, many ways over the years. I think what has happened is that when you take professionalism and then you add politics and the press and how the public responds to all that, you get a different combination. There are things that you are not allowed to do. There is politics, there is Congress, and there are laws and statutes. It gets to be quite a web of intricacy to try to work through.

We have come to about where we were 100 years ago, of recognizing that we have to learn more, we have to invest differently than we have, we have to work across boundaries differently than we have, we have to look at the world as more connected and dependent on the parts all fitting together. It's not going to be easy because we've built up some habits, some focus on our little world and what we want. We have beautiful homes and beautiful places that are right in the path of fire. We've learned how to prevent fire to the extent that we are really good at it. We must learn how to use fire and use it well. One last thought is that we are going to have to learn how to do with a lot less financial resources than we have become accustomed to. Our society is as rich as it will ever be in our ability to have discretionary capability. So we have to figure out how to make it pay and pay for itself as we go about meeting this challenge in the future.

JOHNSON: You're suggesting that the Andrus plea for increased appropriations is probably not going to be that effective?

THOMPSON: You gotta ask!

JOHNSON: Gray Reynolds, get in this conversation.

REYNOLDS: I was raised on a Ranger District, and I don't think the old guys misunderstood fire at all. My father sure didn't. When we had a fire, it wasn't just his job, it was my mother's job because she was sitting there running the telephone 24 hours a day. It was those riding horses to take messages back and forth. But the commitment was to put out the fire, to try to reduce it because of the watershed.

Anyone who was in the Forest Service back in the 1940's understood that the Department of Agriculture issued a watershed film that was historic. It dealt with the importance of water to our society. It covered the country from the south to the mountain country. That movie was shown on the Teton to everybody that lived there, and it was shown every season to schoolchildren and everyone else. It was *Water: The Lifeblood of the Land*. Once you have that in your heart at five years old, it was pretty hard to let things that damaged major watersheds become a problem.

The next issue I remember, when I was in the eighth grade, was over who was going to have control over the Snake River, whether they were going to let Californians, Idahoans, and others dam the Snake River so that we had a pond of water all the way to Jackson or whether they would dam it down on the lower stream.

JOHNSON: You've been away for a while, but we're still talking about that.

REYNOLDS: I know that! I remember Cliff Hansen making a stand on that, that Jackson Hole understood what a wonderful place it was. He said that if you wanted a dam on the Snake River, dam it on your own land, not our state's land. I grew up with all those kinds of feelings about it, then went to forestry school.

Then during my opportunities in the Forest Service, I finally arrived on the Angeles National Forest. You talk about a fire forest. I don't think there is one in the nation that has incurred more fire, suffered more damage than the Angeles. None has more expertise, more fire fighters than are on the Angeles. It was all planned out. It was not a question. It was a matter of how we dealt with what started

out as fire breaks and became fuel breaks, how we could burn those fuel breaks. We had prescribed burns. On the Angeles, in two and half years, we got all of the prescribed burning done that had been recommended.

Because it was so steep and dangerous, you couldn't put people on the ground to do the fuel break work because they might get burned up, so we brought in helicopters. Once we got that done, the Angeles hasn't had another major fire yet. If you remember the history of the Angeles, it burned all the time. They did know what to do. There was a capability of not being able to get at it.

Then you go south to the San Bernardino and look at the terrible problem they have down there with about 600,000 acres of yellow pine, 90% dead now, waiting for a major fire, a seven billion dollar private infrastructure. It should never have happened, but there is no way to even remove those trees without a significant amount of money. It's a lot more money than I think the Forest Service is going to be given to remove that fire danger.

Our biggest problem has been our inability to deal with two things. Dave Tenny mentioned one of them: trust. Until the 1960's, we maintained the trust because we have to deal with the local people out on the land, people who understood our job and what our responsibilities are. When we have to deal with the national audience, thousands of miles away, who get most of their information from TV pictures of these beautiful areas, thinking in their minds what management looked like, we lost the ball. I don't know to this day how we can portray the responsibilities Forest Service officials have to really go out and manage all that biomass in a manner to protect America's heritage. It's scenic; it's spectacular.

JIM FISHER: Trust is something I'm concerned about, too. One of my jobs, while I'm chained to my desk, is riding herd on a rather vigorous letters-to-the-editor column in an area that is affected by all of these issues. Over the years, I have seen the Forest Service called the Forest Circus by people on both sides. I have watched, along with the people writing those letters, as political appointees change with Administrations. You see the Wilderness Society people file out, and you see the timber industry people file in.

These things are not healthy for trust, but there is one positive sign out there. People have grown weary fighting the same old battles and are starting to understand that these problems are more complicated

than perhaps they thought at one time. There is an opportunity there, but I wonder how long it might be before we're sitting at a conference like this and people are asking "How could we have trusted a government that was doing nothing about global warming to then just fight the symptoms?"

TOM KENWORTHY: I think one of the issues the Forest Service faces is doing a better job of educating the public about what the natural conditions of these forests should be in the West and getting rid of the legacy of mistrust that exists out there, which is very real. There is a danger of journalists being anecdotal, but I'm going to take that risk. I live in a community west of Denver in the foothills, and it's a classic red zone community: relatively affluent, relatively well-educated professional people. We have been fighting a war in the last three years over thinning projects in my community. It's been a very bitter political battle, despite all the efforts of government agencies and the press.

JOHNSON: What has made it so bitter?

KENWORTHY: There is a huge faction of people who don't believe you should cut down a single tree. We have an extensive system of open space, primarily in drainages that need to be thinned. They talk about chaining their children to trees. The most amusing thing to me is that one of the biggest complainers in the neighborhood about the environmental damage of these thinning projects is the CEO of Canyon Resources, a mining company, which, for the past 15 years, has been trying to put a cyanide heap leach gold mine on the banks of the Blackfoot River in Montana.

The lesson for me is that environmentalism isn't what it used to be. This is not a stupid community, and the dangers are very real. Yet we've been at loggerheads for three or four years on this stuff. It tells me that both the media and the government agencies haven't really done as good a job as we should have. I think newspaper reporting has gotten a lot more sophisticated in terms of writing about fire, but I think the image that most people take away with them is air tankers dropping retardant, this heroic battle. Particularly television doesn't come back and tell the story of the conditions of those forests and how they have radically changed over the last century.

JOHNSON: Do radio reporters do any good?

KENWORTHY: Oh, excellent job!

ELIZABETH ARNOLD: I want to jump in right there. I think we're all sort of hitting on it. The language has changed, but the culture hasn't changed. As Orville said—well, you didn't exactly say the agency is a dinosaur—it takes the agency a long time to catch up. Anecdotally for me, all these great things were happening with fire in the southeast and the stuff that Orville and others pioneered in the Selway, but that story is still not told. The Service doesn't know how to tell that story. It's not a convenient story; it's not a great story; it's not a suppression story where people throw lots of money at you. But that story is still not being told.

As a journalist, I can go to any fire any season, and I can get to the fire line and do the heroic story. We'll fly over, but God help me if I want an incident commander to talk about the wilderness fire that's being allowed to burn. We don't want you to go there. We don't want you to talk about that. If they do, it's in language the public will not understand. Until the Service is more comfortable telling that story, we can begin every story with "A hundred years of suppression has gotten us into this mess," but we've got to trust the public to understand the rest of the story. The Service has to help us tell that story.

JOHNSON: Why is there reluctance on the part of the Forest Service to help you tell that story about fire in wilderness?

ARNOLD: I think others can tell this story better than I can, but I think the inherent risks deter them. When you have a big fire burning at West Glacier and you have fires that are being allowed to burn in other parts of the park, you're going to have the public calling up and saying, "What do you mean you're not putting out those fires? What do you mean you're not trying to limit them to a certain amount of acreage?" It's a more difficult story, more risky story. It's a lot better to have the yellow shirts on the front page: We have this many men fighting the fire and all the rest.

BURCHFIELD: I want to follow up on that and frame it in terms of trust. We've heard that word used a couple of times, and David Tenny came out and said, "Trust us to get the job done." For the

media, there really needs to be trust going both ways in terms of trusting the public to handle a complex story. The public can handle a complex story. They can understand that, yes, in wilderness it is acceptable to us to have fires burn for ecological benefit. Next to somebody's house? We don't really want that. We see that as a different purpose for the land. So I get concerned when I hear, "Just trust us to do the job." I think there needs to be an exchange rather than just some allocation of authority.

KENWORTHY: I think the public pressure Elizabeth referred to in West Glacier is part of the reason that, to a great extent, the default position of most land agencies is still to put fire out.

I called the Forest Service press office yesterday to get some numbers on wildland fire use, which is fires that they let burn. It's less than half a million acres over the last four years. You're always hearing stories about smokejumpers being set down into the middle of the Selway Bitterroot or the Bob when it doesn't make any sense. The Forest Service needs to get more comfortable with the idea of letting things burn though it invites massive political and public outcry.

DANIELS: I still train forest supervisors and park superintendents in fire management. I've been doing it for the last ten years, and I've met with all of them. Every time we meet, we talk about the use of fire as a major component. I get no opposition there. I did ten years ago. I deal in various ways with the fire and fuels folks throughout the Forest Service as a consultant and trainer. There is no hidden agenda as far as holding back on this story. How it all unfolds when the heat is out there is another matter, but I do not believe for one moment that the Forest Service is reluctant on that story.

I have to say—and I'm not blaming the media because that isn't a very good game to play—that we had a Smithsonian writer, who came out to do this whole story on wilderness fire and the use of fire. He also had a little piece on the fires down in Arizona, and this was in the back of his article. The editors totally turned that article around, and the whole front part was the sensationalism of fire fighting. It's news, folks. What we're doing with the other program is not necessarily news; it's public education. I have to say it isn't always good copy, so there are barriers to us in putting out this story. I don't find it within Forest Service people. You may find it on the fire line or the

fire suppression game when you're there, but you're not going to find when you go to the districts and talk to the people.

REYNOLDS: Just to follow up with that. In 1992, Dave Jolly was Regional Forester in Region I when I was in Region IV. We worked with Governor Andrus, and we were going to have a major prescribed burn in the Frank Church River of No Return Wilderness. In order to do that, we knew it was going to be at least six weeks long. We knew where all the smoke was going. The smoke was going to the Bitterroot Valley. Working with the Governor in Montana and the local people, we never did get agreement. We never did. The season got hot and dry, and by the time we were ready to go, we could not have achieved our goal, and we had animosity everywhere.

One of the problems you have with this long-term fire burn and smoke is that you have local businesses whose only time to make their money is in that summer period, which is the same time you have to burn. It's very difficult to do large burns, really do some stand replacement burns in some part of that burn, and do it in a manner that surrounding areas are willing to accept. When you get wildfire, what can you do? My sense is that we'd be better to take it when it comes and provide some kind of assistance to those communities because it's cheaper and less of an impact on the watersheds.

Somehow, in my mind, we have to always go back to the watershed and what it does. Stand replacement fires aren't good for anything, and yet when you go through the weather patterns we've seen since 1987, we've had thousands of them. When you start a fire that gets away, gets out of prescription, there is hell to pay by everybody, and there may be a lot less damage than when it burns under wildfire conditions. But that is never pointed out. That's where the Forest Service, I believe, has a problem in dealing with this overall public understanding. Yet in other occurrences, like floods and hurricanes, people seem to take whatever happens and accept it, and it isn't a major problem. But fire has become a major problem.

BARKER: Missing from this panel is a major reason that there is this struggle, and that's political leaders. Dave Tenny got up and, in tearful remarks, talked about the loss that he felt when he came over the hill after the Lowman fire of 1989. Whenever he

looked at it, it would do that, but today, we have one heck of a lot of Ponderosa pines growing up there. Yes, there was some watershed effects. I would suggest your scientists today would not necessarily call that watershed damage from a stand-replacing fire. I think people have to learn this new language that people tell us about.

I covered the 1988 Yellowstone fires, and that did leave a legacy of debate over whether fire is good or bad, even though what really should have been the legacy is that fire is. It happens. The message has been that prescribed fire is good and wildfire is bad. Now you're talking about using bad fire to do good stuff, and it's very hard for people to understand. It's that switchover and transition in message that is the real challenge. It's a challenge for us in the press as much as it is for you.

JOHNSON: Tom, is it a cultural thing with the Forest Service? Is that what you're having to deal with?

THOMPSON: In this discussion, there are a couple of things I would observe. One, I certainly do believe that communication with and understanding of the public are the keys because if we don't have their trust, we're not going to be able to use the professionalism, the science, the knowledge, and the capability that we have to use fire, to control fire, or to manage fire.

When I think about that, I go back to the Yellowstone fires, and I remember Gary Cargill was the Regional Forester in the Rocky Mountain Region at the time. His advice after that fire was, "If you can't tell your fire policy statement in 15 seconds or less, you haven't got one." That's the reality. We're faced with trying to explain things that are hugely complex in 15 seconds or less, or it won't be on the evening news. The challenge Gary laid out was really true.

There have been at least three events where the story was told, and the public did learn. Yellowstone was one, and I think you hit the nail right on the head. They learned that fire was out there and was something that had to be dealt with. They learned that it wasn't all bad. I think the public did learn that. The reason Yellowstone was important is that it was on the news every night for week after week after week.

In 1994, the South Canyon fire was on the news every night. How could we have let 14 fire fighters die? It was a different message, and it was a

different story. It was a story of precaution and safety. It resulted in new federal fire policies.

Los Alamos, six years later, was another story. It hit a different place, and it hit into the fabric of communities. It was the story of 25,000 people being evacuated. Could this happen again? Those three stories were three effective ways of getting the public's attention. The public knows a lot more about fire today because of those three stories but not because of any stories the Forest Service could have written, taken to the desk, and said, "Here's a news release, please print this." That wouldn't have happened. It had to be a crisis to do that.

You could probably say that the 2003 fires in Southern California could be added to that list. Those four stories have done more education than could have been done any other way. The question is: What do you do with that? Do we have better dialogue? Do we have better communication? Do we carry on and take a different direction? The answer is yes. I go back to what Orville was saying before: It's not the land manager on the ground. It's feeling like you have the support to do it and being empowered to do it. Some step forward and some don't, but the preponderance are stepping forward and taking it today.

BURCHFIELD: Tom said something really wonderful there about having the trust of the public before being able to move forward. I would submit that there is a lot of evidence that the public does not display that trust. One of the most compelling things I heard was the people in Colorado having their children chained to trees. That demonstrates a pretty low level of trust.

What I want to say is that we run a very terrible risk in our dialogue right now of creating another whole period of mistrust. I say this because we are really loose with our language, something that was brought up. The media, the agencies, all of us have a role in really understanding what it is we are trying to accomplish. We have to be really careful that we don't talk about "healthy forests" as "thinned forests." This is what a healthy forest is: a forest with just a few trees in it. We should not talk about trees as "fuel." These are living organisms we're talking about, and people care about them. They are going to chain their kids to them because they think they are really beautiful things, and they are beautiful things.

But if we say, "Ah, we have to cut the forest to save it," the public is not going to buy that. They will say, "What is going on here?"

What really are the components of a healthy forest?” Are we just talking about structure? Are we talking about nutrient cycling and pollination? Are we talking about seed dispersal? Are we talking about soil productivity? All those things are going on in the forest, and sometimes we get those when we have a big black burn. I’m waiting for the day that the people of the Forest Service hold up to a committee member a picture of a severely burned lodgepole-pine forest and say, “Senator, here is a photograph of a healthy forest.”

KENWORTHY: To go back a little bit, I just want to ask Tom to what extent the Los Alamos Cerro Grande fire raised the gun-shy level in federal agencies about prescribed burns. When I talk sometimes to just regular folks about prescribed fire, that subject comes up a lot.

THOMPSON: Obviously, Los Alamos raised a number of questions. The story of what happened from it is that it started the National Fire Plan. If it hadn’t been for that, we wouldn’t be where we are today. It was such a huge national situation that there was a feeling that we had to do something about it. There are options that we take in using fire. It caused us to look and make sure that prescribed fire was being used properly, but it also caused a balance of prescribed fire with other treatments to manage vegetation. Strategic, integrated, vegetative management is what it’s all about. What’s the biology? What’s the story behind it? It’s not just how you use fire. It’s how you manage vegetation in a long period of time—60, 70, 80 years. What are the consequences of doing this versus that? There are options.

Dealing with the public is a tremendously challenging job. It’s not as simple as just the people of Idaho or the people of Colorado. 85% of the public is in an urban setting. That public is a lot different than the public that lives and breathes the air around the forest. Even though a lot of folks can understand it when they see it, if you’re in a city, you believe whatever you’ve been fed lately.

JOHNSON: Elizabeth, a final thought on this, and then I want to move on to something really important: politics.

ARNOLD: I have a lot of thoughts, but none of us is doing our job if you have a community that

would opt to have a summer of smoke as opposed to a few weeks of smoke. If we in the media and the Forest Service can’t even get that across, we’re nowhere.

The language is a very important issue as well. I find myself writing stories about wildland fire use. What the heck does that mean to someone in Poughkeepsie? To keep debating thinning and using words like “fuel reduction” brings the whole issue down to vertical versus horizontal trees.

If I understand some of what Stephen Pyne was saying this morning in terms of re-chartering the Forest Service, he was talking about biology, invasive species, and ecosystem approaches. We all need to start integrating that—in common language—into our reporting, our policies. As you say, have the Chief of the Forest Service up there on the Hill talking about woodpeckers, for Heaven’s Sake, as opposed to “We need more money for suppression.”

JOHNSON: One of the things Steve and Rocky, too, have written so eloquently about is this narrative that has informed the Forest Service and the public for the last 100 years, this heroic narrative about fighting fire, about smokejumpers, Ed Pulaski, the whole nine yards. That is the narrative. We’re still living with that narrative. At the end of his talk this morning, Steve was suggesting that it’s up to the Forest Service folks to invent a new narrative to take into account what we have been talking about.

I want to shift gears, though, and ask Jim Fisher to head off a little bit in a different direction. Let’s talk about how this debate might unfold, now that we know that there is a second Bush term to place a further imprint on natural resource policy and environmental policy. What’s your take, Jim, on where this whole debate might be headed in a second Bush term?

FISHER: As I said before, I think people have grown weary of the same old arguments, at least people in the west. I don’t know about elsewhere. The people in my circulation area have just about spent their last gasp on the old argument. They are ready for something new, but I’m not sure what that new thing is going to be yet. We hear about a new direction, a new law, but on the ground, most people are still waiting. People have generally been suspicious over the years, but because they are tired, they are eager to hear something new, and nobody really knows what it is yet.

BARKER: One of the things that the Bush Administration is facing is the budget issue. It will drive both the politics and the solutions. One of the problems and paradoxes of success was not the 1910 fires. It was the 1908 blank check. That was a remarkable bureaucratic device, the ability to always turn to the Treasury when you wanted to fight fires. When William Greeley succeeded in bringing in all the states and industry under the same umbrella, we essentially put all the responsibility on the Forest Service. With responsibility came expectations that remain today in a way that is probably unsustainable. So if the budget isn't going to continue to be giant, then the responsibility inherently will have to shift to those of us who want that service, those of us who live in the west and expect them to come running to put out fires and thin forests and do all kinds of things to protect our values. We're going to have to help do that.

KENWORTHY: If there is one thing this Administration has done over the last four years, it is to eliminate the middle. On fire policy, they have the opportunity to convince people, particularly in the west, that they are serious about dealing with this and that it's not just a timber program. They have to fund it, and in the first year of the Healthy Forests Act, the funding didn't live up to the promise. It's a very tough fiscal environment, but if you talk to anybody, they will tell you it's a multi-year, multi-billion dollar problem. The question is: Are the resources going to be there for the next five, ten, fifteen years?

JOHNSON: Elizabeth, what's your take on the politics of a second Bush term with regard to this debate?

ARNOLD: I agree with Tom. I think there is an opportunity. If you look at Oregon, there's a big opportunity there with the Biscuit Fire. This whole trust thing gets batted back and forth, and it's a problem. One man's thinning project is another man's clearcut. When we talk about thinning, it means different things in different forests and in different parts of the country. There is no one-size-fits-all. Everyone in this room knows that, so it's a hard story to tell. There will always be black eyes along the way, and the press and the environmentalists will focus on those. If the Forest Service can demonstrate to the public and to the Hill and to the press that it can be trusted and that these thinning projects are, indeed,

thinning projects and aren't something else, that's the opportunity right there, and that's the way to tell the story.

JOHNSON: Gray Reynolds?

REYNOLDS: We not only have had major fires the last few years, but we were devastated this year in the southern part of the country, particularly Florida with hurricanes. When you look at the cost that is going for hurricane relief and the areas that relief is going to and you look at the fire problems, there has to be somebody out there figuring out how to put these things together because we can't expect it to be handled the way it has been. Last year with the hurricane that hit the Annapolis/Virginia/Pennsylvania area, a tremendous amount of timber was blown down—hardwoods and softwoods. Everything that had commercial use was sold; they cut it up and sold it. That money went back to the states to help pay for some of the costs. That may be something we're going to see happen a lot more in the future. These costs are getting devastating as the country continues to develop the infrastructure that is affected by these national disasters.

[PANELIST]: Does anybody really expect this thinning to take place much beyond interfaces?

DANIELS: Not thinning itself, but some sort of treatment of the land beyond interfaces. As Steve talked about, we can't just focus on the interface and the wilderness. You have the whole mass of forests in between where many of the fires originate that come out and give us the difficulties. At least as far as I'm concerned, we have to be looking at fuel build-up; we have to be looking at ecosystems in a holistic sense from the top of the mountain to the edge of the interface.

[PANELIST]: Looking at them and doing something are two different things.

DANIELS: I mean looking at them to decide what makes sense for us to do, makes sense biologically, socially, economically, and politically. It's not that that's a never-never land. If you want to look at Los Alamos and look at why Cerro Grande swept Los Alamos, it was because they had a fire back in the high country, they had an interface down here, and the fuels in between were absolutely explosive. It just

went whoosh, thirty miles, right in. We have some good research that shows how fires move through the country, which canyons they move through. If you get a strike on top of the Bitterroots, we know where it is going to come down to the interface. There are things we can do. I'm not talking about commercial cutting. I'm not talking about just exactly what form, but we can do ecosystem treatment to restore some conditions we can live with.

ARNOLD: Orville, is there anything economic you can do in that big area?

DANIELS: Absolutely, providing trust exists that we're not doing it for the timber industry, but we're doing it for the ecosystem. We talk about the politics of the short term for the Bush Administration. It doesn't mean a dang thing. These are hundred-year problems. Where is our constituency to support this agency in doing the work that needs to be done to stop these huge megafires from doing all the social and economic damage they are doing? Who is the constituency? Every time I see something in the media or in the paper, it's usually the timber industry pushing it. Where is the homeowner? Where is the insurance company? Where are the county commissioners? Where are all the other people? You tell me how to build a constituency to deal with this issue like we had with timber, like we had with wilderness, like we sometimes had with recreation, sometimes with wildlife, and I'll tell you what the political future of this administration will be. Do you see where I'm coming from? It's bigger.

THOMPSON: And the appropriations are annual.

DANIELS: Our appropriations are annual, and maybe that's something we should look at in this Congress. Should we look at a new way of funding natural resources that are not partisan, politically directed by four-year administrations when we are doing something that lasts for decades? Should we have a Federal Reserve Board system for funding and policy for natural resources? It works for our monetary system. We have to do something fairly creative. It's not that I mind defending the Forest Service and what we've done. I like doing that, but we're just one little small cog in this thing. If we're going to deal with it, we have to deal with that whole thing, and the Forest Service has to be part of it.

JOHNSON: Tom, Cece Andrus has said many times that long-term planning in government is two years. That's until the next Congressional election cycle. That is a huge problem, isn't it? And in this environment, give me some hope that you can get your arms around this.

THOMPSON: Let me say that, eight or nine years ago, at least in the ranks I was in, we were hopeful that someday we would be grappling with these things we are grappling with today. I have to tell you that I'm extremely optimistic and extremely hopeful, now that we have acknowledged this issue, it's on the table, we're able to talk about it, and Congress is able to talk about it.

The issue of resource management being able to look past four and eight-year cycles and not have the huge pendulum shifts is being resolved. I think you've seen that. This Administration hasn't had the pendulum swings that a lot of people expected. It's been tremendously encouraging to be able to deal with these resource issues with the trust of the Administration, and the agency has had a lot of capability to help guide our own future.

Strategically, we have to be able to look at these things more in the 20-year view. What are we going to do in the outback while we take care of the wildland/urban interface? Last year, of the 4 million acres that were treated by the Forest Service and the Department of Interior, 2.7 million of them were in the interface. 1.3 million were in the outback, so we are treating the outback.

We have to do it more from the standpoint of watershed restoration, wildlife restoration, not just fire and fuels. We have to connect all those things and see it as the business that we're in of managing vegetation for a lot of different reasons over a longer period of time. We cannot get caught in doing something for three or four years, then throwing it out and doing something else. We might as well put the money somewhere else if that's what we do because there won't be any gains at all. This must be a long-term thing. Professionals in the agency—forest supervisors, district rangers, field people, forest management people, silviculture people, wildlife people—understand that. It's getting geared up and being able to turn quick enough. But I think our performance in the last couple of years is starting to show that we can do it.

There are some tough days ahead as we have budget issues to deal with. But I am tremendously

optimistic that we can go past the two years because it's already gone past two years. It's four years, it's six years. I think the learning started perhaps even 14 or 16 years ago, and it's been a trajectory that's gone up. The curve really went up exponentially the last three or four years. I've got to applaud all of our partners. We have tremendous support from outside groups that four or five years ago were just worried about one aspect. They are throwing in, groups like the Wild Turkey Federation and the Rocky Mountain Elk Foundation. A lot of folks are rolling up their sleeves and owning these problems. In communities around the country, there is a huge number of good stories. From a collaborative standpoint, I don't think the agency could ask for more support from the local public especially. The national public is still a challenge. We're going to have to work to tell the story better and communicate better.

BARKER: Tom, one of the reasons the Forest Service was able to do more acres this past year was that you didn't face a lot of suppression costs. You and I know what will happen next summer if there is a big fire year. Those dollars are going to get sucked up and blown out the belly of a plane.

BURCHFIELD: I think the money issue is really front and center here. We're talking about orders of magnitude of more money to be able to do the kinds of forest treatment that are probably necessary throughout the United States and throughout the world. I just don't think there are the political legs around forestry to really be able to make it so that the deficit hawks are going to go: "Hmmm. We're going to have big fires anyway. We're going to have to spend a billion dollars. We're going to need another couple billion dollars here to subsidize treatments. We're going to need X amount of money to train this new cadre." I wish I could see the political vision in Washington to say, "Yes, this is a national commitment." I would love that. I'm going to advocate that every chance I get, and I'm going to advocate that here. Please talk to your political representatives because the land could really use the money.

There might be something that would help in framing this kind of issue to help get those resources, and I think Gray has hit it dead on in talking about watershed management. I think water will be the dominant political issue of this millennium. It is going to be the dominant issue in the Middle East.

It's already an enormous issue in urban areas to be able to supply clean water. The linkage between forests and water is something that might be the leverage to be able to allow us to be able to do the work we want to do.

REYNOLDS: I hope that somehow the national audience will allow the Forest Service to go back and utilize some of what's growing every year. Currently, there is about 20 billion board feet that grows on the national forest softwood, and right now, about 1.85 billion is sold for commercial use. 9.75 is either fire-killed or disease and insect-killed. The remainder is increasing each year. That is the biomass that is increasing on the national forests. This has been going on for a number of years, not just last year. You can't keep adding that much more to the wood pile and not have many, many serious problems.

BARKER: It's one of the traps that both the timber industry and Forest Service got itself into when it took us, the public, and us, the press, down the road toward the forest health debate. It took us out of justification for timber harvesting on public lands, in and of itself. I think it's going to be a major challenge for you to turn that around.

One of the routes that has some promise is in forest certification. No one has wanted to talk about forest certification on forest lands, neither in the agency—Why do we need certification? We're experts, and we know how to do this—nor in the public because certification was a way not to debate about a whole lot of issues that we debate about on public lands. I do think that is one of the places that offers some opportunity to bring in some of the funding necessary to offset the costs that you are not going to get from Congress.

JOHNSON: Elizabeth Arnold, before we open it up for questions from the audience, put a caper on this political discussion for me. Put on your Congressional correspondent's hat, and tell me what's likely to happen with this debate in the Congress in the next year, given the fact that the Forest Service clearly has great aspirations to do more on the ground out there to deal with forest health, however we define that, and given the political realities of the deficit situation. What are we going to see?

ARNOLD: In Stephen Pyne's talk this morning, at some point in our history, we blamed loose morals

for fire. Right? If we only crack down on those loose morals, we'll whip this thing.

JOHNSON: I think he said "bad habits and loose morals."

ARNOLD: I think that's the subject of the day on Capitol Hill. The problem with Congress is Congress. They are always behind the curve. The public is way out ahead of them. Everyone in this room is way out ahead of them on all this stuff. It takes a catastrophic fire to get their attention. Healthy Forests Initiative—that wouldn't pass without a bad fire season. We all know that. It's the shifting of the political winds, and I don't see this stuff front and center on Capitol Hill. I hate to say that, but I don't see it. It's hard enough to get it in the news. We can do it west of the Mississippi, but where our editors and bosses are, it takes a conflagration to get it in the news. Same thing on Capitol Hill.

I hate to be pessimistic. I do think there is an incredible opportunity out there. There are environmental and public lands writers who cover this stuff and who will continue to cover it. There are members of Congress from western states who are very steeped in this stuff, but I'm not going to say that it will be the debate that it was.

JOHNSON: A dose of reality. Questions from the audience. We have a couple of microphones, and we have several questions.

If you want to direct your question to a specific member of the panel, please do so.

AUDIENCE: I have a comment. One word that I haven't heard used here today is the word "dynamic" as in "Forests are dynamic, and they change." Most people think they are permanent. That picture up there suggests permanence. Because trees are long-lived people think trees they saw as children will still be there when they are old. That's a concept that we need to get across to people. Forests are changing all the time, whether we want them to or not. If we can't get that across, I don't think we're going to get very far in this debate.

BURCHFIELD: I think that's a wonderful comment. Rocky alluded to it in responding to David Tenny's grief about the loss of his forest when he came back. I applaud you for bringing up that term dynamic.

AUDIENCE: My question is for Mr. Thompson. A couple of years ago, two firefighters died outside of Salmon, Idaho. I don't understand why they were there in the first place. This gets to the message from the Forest Service and also to the comments from all of you about the need for more money. I've been to the spot and seen where those firefighters died, and I don't understand why they were there. Why couldn't the Forest Service stay home next time, save my tax dollars, and save a few lives in the process?

JOHNSON: We save the easy ones for you, Tom.

THOMPSON: Obviously, that was a question a lot of people asked. Jack Ward Thomas asked the same question in the South Canyon fire in 1994. Perhaps you could have asked the same question in 1949 in the Mann Gulch Fire. There need to be harder looks at how we use our resources, where we use our resources. We're going to fight fire, but we need to fight fire only where we need to fight fire. I don't think we ought to be fighting fire where we don't need to fight fire. We're at the beginning stages of re-examining those questions.

Later in this meeting, the Director of Fire Management, Jerry Williams, will be up here, and he could talk more about some of those inner connections. From the standpoint of having been involved in accident investigations over the last few years, I've asked that same question. We have to look at ourselves, not just the Forest Service but the whole fire community. There is a mentality that goes on when you are a firefighter that you want to do service to the public. Your service is putting out that thing you've been trained to put out. That culture needs to be re-examined, and it is being re-examined.

It will be re-examined at a faster rate when we have to make choices, as we are having to make choices now, about how to utilize our resources. You raise a valid point for all of us to consider. It also comes with consequences as well. When you make that decision not to go there, not to put out that fire, how is it going to be perceived by the public if things go worse than you thought they would go? That's the balance, whether it would be Glenwood Springs or something else. What if you didn't take aggressive action on that fire, wiped out a town, and lost 300 people?

So this is all part of the challenge we face in the 21st Century. We're starting off with good questions,

and I hope the people who continue on for the next three years will continue coming up with answers to these questions.

AUDIENCE: This question is directed to any panel member brave enough to venture a guess. The question is: Would the American public and the land be better served if the second Bush Administration considered creating a Department of Natural Resources that would include the U. S. Forest Service and the bureaus out of the Department of Interior, putting them under one Appropriations Act?

JOHNSON: A Secretary named Andrus tried that one time.

REYNOLDS: To get something like that through the Congress of the United States would cost more, in my judgment, than trying to manage the fire situation that each of the agencies is managing today. I think the biggest problem we have is getting the support—and I do mean support—to understand forest dynamics. Forests are dynamic; they don't stay the same. As they mature, they add a lot more biomass. There is a point in time when you have to enter them somehow. The “somehow” is where the Forest Service is hung up.

I hope that the Bush Administration will strongly take on this whole question of court action, look at NFMA and NEPA. There are a number of law-suits that have gone all the way to Circuit Court with different decisions that could go to the Supreme Court.

When Jack and I were serving back there, we had a list of them. If we could get legal determinations from the Supreme Court on some of these issues, it would simplify the work of the Forest Service. Right now, the Forest Service has all kinds of interpretations of what they have to do as it relates to forest planning and then NEPA. As soon as somebody comes in and raises an appeal, everything stops. That's not the way you train people to do good work. When you do good work, you want to go through and see the project completed, monitor it, evaluate it, and make adjustments to your practices. When you never get to that part in most of your work, an agency tends to get very tired and disgruntled. I think that's one of the most serious problems the agency is faced with right now. You've got a large area of land they can't go into. The tools that they have today to manage that land are not available to them. Frankly, that has to be taken

care of. That's a legislative question, a Congressional question that must be dealt with.

AUDIENCE: My question is for anyone on the panel. How do we pay for all this? Is there substantial room in the conversation, particularly in the media and the political realm, for additional commercial timber harvest, for cutting some larger as well as smaller trees to help pay for this and for some further streamlining and refining of some of our environmental laws to make this more cost effective?

REYNOLDS: When you look at the national forests, we're harvesting about 2 billion board feet a year, down from 12.2 billion ten years ago. Right now, we have a tremendous number of forests and regions that have the feeling that they could and should be putting more emphasis on timber sales, based on the needs to manage vegetation. It's one of those things we're going to have to work through carefully.

Over the course of the next 30 years, given the world situation with regard to the supply of forest products and the competitiveness of the world scene, we're not going to be able to compete for wood products as we can today. Right now, we're importing 32.3 cubic meters from Canada. The question is, can that go on? We're going to have to look harder at our own resources in this country in the years ahead, and it's one of those things the public will have to learn. There are choices to be made. Either we do without or we use some of our own resources to a larger extent than we have. That's just the way I see it in the longer term. I don't know how soon that will happen, but I think it's inevitable that we are going to re-look at how we utilize the rich resources that we have to meet the needs of society and, at the same time, to protect and enhance the environment.

AUDIENCE: This question follows up on the death of the two firefighters in Salmon. I'm affiliated with a newspaper in Idaho Falls, the Post Register. We tried to tell the story of their death, and we had a heck of a time. The Forest Service did not want to own up to it. It did not want to tell us about it. Many rules were violated, but the families and others involved could not find out what happened. I think the Forest Service would do well to be a little more open and honest and humble about their mistakes and to educate, using those mistakes. Then, second, consider the open checkbook that Rocky talked about. A lot of money is wasted that should go into prescribed burns,

healthy forests, forest restoration, instead of fighting fires with this open checkbook.

ARNOLD: Somehow, if we could just shift the energy, the excitement, the drama, and everything that gets people involved in fire fighting and suppression and move that over toward the kind of thing Orville is talking about, we'd really get somewhere. I don't know how you do that. Promise overtime? Yellow shirts? What is it going to take?

JOHNSON: It's those pickup trucks that do it.

BARKER: I think Elizabeth raises a good point. There is a sort of military/industrial complex about fighting fires. There is a huge economic engine there, and I don't know to what extent it affects policy, but it's something that doesn't often get discussed.

JOHNSON: Before I turn this back to the Governor, just proof positive that things do come full circle, we've had a lot of talk about the legacy of the Forest Service this morning. Dr. Freemuth was good enough to research up the American Forest Congress from 1905, and, Jim, we couldn't get it through the BSU Library and had to get it through the Mansfield Library at the University of Montana. I was struck by the report of Gifford Pinchot, writing immediately after the Forest Congress in 1905. He was talking about the national forests. He said, "They must be useful, first of all, to the people of the neighborhood in which they lie. Nothing stands in the way so much of effective use as delays, which are sometimes caused by official red tape and especially by referring local questions for decisions to Washington." Please thank the panel.

FIRE AND FOREST HEALTH

The Forest Service's Continuing Management Challenges in the New Century

NOVEMBER 18, 2004

BOISE STATE UNIVERSITY STUDENT UNION

LUNCHEON ADDRESS

Perspective from Congress

U.S. Senator Larry Craig (R. Idaho)

CECIL D. ANDRUS: Welcome to all of you. Senator Craig has agreed to answer questions, following his address, so if you have a question, write it on the question card and hold it up. We'll collect them and go from there.

First I will introduce Carolyn Washburn, who is the Executive Editor of the Idaho Statesman. She will make the introduction of Senator Craig. Carolyn became Executive Editor in 1999, and she has held that position firmly, consistently, and strongly ever since. When she came to our city, she became a member of the community and has participated in public affairs. Her educational background is political science and journalism. She is the appropriate person to introduce our senior senator from Idaho, Senator Craig. Carolyn Washburn.

CAROLYN WASHBURN: I am pleased to be asked to introduce Senator Craig. Senator Craig and I made a deal in my very first year here. He came by to take a tour of the Statesman. He complained to me about journalists, and I complained to him about politicians. As we walked through the building, I said, "Senator, I'll make a deal with you. I won't sweep all politicians together in the same big bucket if you promise not to sweep all journalists together in same big bucket."

As I listened to the discussion this morning about the role of the media in this, which was the subject of another conference we did, I was reminded of that deal because of reporters like Rocky Barker, for example. I am proud to think that the Idaho Statesman doesn't cover some of these issues the way many other newspapers do because we're close to it. We've made a commitment to it. So the Senator and I have had that deal. We've had bumps along the road, and we've had to remind each other of our deal. So I was honored to be asked to introduce him.

Senator Craig is a westerner with generations of perspective on the impact of the U. S. Forest Service on the people who live near federal lands. He is in a position to have significant and practical impact on the issues we are discussing this week. He serves as chair of the Public Lands and Forest Subcommittee of the Senate Energy and Natural Resources Committee.

Whether you agree with him or not, Senator Craig has a very clear philosophy about the role of the federal government in managing federal lands. He believes in multiple use and broad access, and he believes in using the lands to make a living. He says, "This is the west of Teddy Roosevelt and Gifford Pinchot, the first Chief of the Forest Service, who said, 'National forests are made for and are owned by the people. They should also be managed by the people. They are made, not to give the officers in charge of them a chance to work out theories, but to give the people who use them and those affected by their use a chance to work out their own best profit.'"

One of Senator Craig's next projects will be re-authorization of the so-called "County Payments Bill," which he co-sponsored in 2000 with Ron Wyden of Oregon. The law aimed to even out payments to states and counties for timber production on public lands. It requires local management plans for projects on federal lands. It's up for re-authorization in the next Congress, which convenes in January. With that legislation plus the Healthy Forests Initiative, Congress is directing the Forest Service to re-focus its efforts again, saying it wants to increase public involvement and decrease litigation. So the timing for this conference could not be better.

Senator Craig obviously couldn't be with us in person today, but we appreciate that he is making the time to talk with us and answer our questions through the satellite link, which does exist. Thank you!

As Governor Andrus said, please write your questions on your cards, and we'll collect them. I'll moderate the question period to make sure we cover the most topics. The more questions we have from you, the more influential this conference can be. It's a great opportunity to have direct access to the Senator.

Please help me welcome Senator Larry Craig.

SENATOR LARRY CRAIG: Carolyn, thank you very much for that kind and generous introduction. You're right. You and I have a deal, and now and then, we have to meet jointly to assure that the deal is still on the table and that we continually work it. It is work in progress, and all of us appreciate that.

Let me also thank the Andrus Center and Governor Andrus for convening what I agree with Carolyn is a very important and timely discussion for all of us. Here we are on the eve of the second one hundred years of the U.S. Forest Service, and it has had, over its life, a grand run from its beginning under Teddy Roosevelt and Gifford Pinchot through the tough times of the 60's, 70's, and 80's. Here we are now in the year 2004. I think there is a great opportunity for a whole new reality and a whole new perspective as it relates to our 192 million acres of public forested lands in this country and the phenomenally important and successful team that manages them.

Carolyn is right. I am proud to come from a long history of association with the Forest Service, whether it was my grandfather, who was there at the time it was formed, grazing sheep on the slopes of West Mountain and in the Clearwater area of Idaho or whether it was cousins of mine who were supervisors and regional foresters of the U. S. Forest Service. I began to see it through their eyes at a very young age. Now I have the great privilege of serving Idaho and, as Carolyn said, chairing the Forestry and Public Lands Subcommittee, as I have off and on for a good number of years.

Starting in the late 90's, I grew increasingly concerned as a result of a conference in Sun Valley of forest experts, which concluded that the forests of the Great Basin west were sick, dead, and dying and that if we didn't start a program of active management, we would find them swept away by stand-altering and stand-changing wildfires. That was the mid-90's. By the late 90's, that group's prediction was coming true, and we saw it. We have continued to see it across the

west for nearly a decade now, at least for the last seven years. Four or five or six million acres a year burned. Catastrophic wildfires with temperatures higher than we've ever seen before brought the devastation that takes it right down to ashes well below the soil level. All of us know the phenomenal problems with that.

Recognizing that, I began to search for and build a bi-partisan coalition in the Senate to see if we couldn't change that. We had a long way to go. Not only was I held suspect by a variety of interest groups, but the Forest Service itself was also. Most had lost confidence in the ability of the Forest Service to manage, believing that it had been dictated to for a long time by large timber interests and that environmental concerns were second or third on their list of priorities.

I worked with the Forest Service to try to change that, and in doing so, I think we've come a long way. There is still a ways to go to cause recognition that, in managing our forests in a pro-active way to reduce fuel-loading, we can in fact improve watersheds and wildlife habitat. We can secure the reality that fires will not be totally devastating and stand-altering and that they can be rejuvenating and cleansing in their character as they once historically were to our forest floors.

We were able to accomplish that in part with the Healthy Forests bill. To look at categorical exclusions and to do so in a way that all interests could see in an open and transparent process, to recognize the value of urban watersheds, to put as a third or fourth tier value commercial uses as they relate to our forests, and to do so in an open and public process.

Something very dramatic has happened since my youth in Idaho. Today—and I think the Governor would agree—most of the lands in and around the forested lands, are now inhabited. Large homes are being built on them. All of a sudden, in the last decade, our Forest Service has spent more time saving dwellings than it has saving timber or watersheds or wildlife habitat. That whole paradigm has shifted, and it has caused a great deal of concern on our part because of the tremendous costs of fighting forest fires and our ability to pay for them. So that became another problem.

We also saw, during the decade of the 90's, a tremendous reduction in timber harvest and therefore a tremendous reduction in the flow of revenue back to our counties in the form of county payments for schools, roads, and bridges, payments that had been an historic part of the stumpage fee coming from our

forest lands. As most of us know, many of our Idaho counties were wholly or largely dependent on that revenue source. They were counties with large public forests. Their schools, roads, and bridges were often funded 50% or 60% by those revenue sources. Those sources dropped off dramatically.

Senator Ron Wyden of Oregon and I, working with a coalition of counties from around the country, created the Craig-Wyden bill to resolve this issue. We have come a ways in doing so. We will re-authorize it next year, I hope, and it has been a kind of stabilizing approach to our counties.

But it went much further than that in what I believe is a tremendously positive way. We said, "We're going to provide some resources for counties, the Forest Service, and a variety of interest groups to use for encouraging or improving economic growth and development. It is to be used on the forest in conjunction with the forest management plans in a pro-active way and in a collaborative process."

Very early on, whether it was from the old days of Quincy Library or somewhere else, I dreamed of a day when all could come together in a collaborative process. Like our forefathers, we believed that there were communities of interest out there that ought to be a part of all this and that out of that collaborative process, we could develop a higher level of public confidence, not only in the Forest Service's decision-making and management but also in those who came to the ground to implement that management, be they public employees or private entities contracting with the public.

Those Resource Advisory Councils (RACs) that are now out there, using those resources, have had a run already and a reasonably successful one. All of a sudden, because there are resources to be used and resources to be directed, the collaborative process had a motivation. I've looked at the RAC organizations around the west. Some had difficult starts, but most are now working effectively, responsibly, and creatively. They are sitting down together with diverse interests, recognizing that the public forests of our great west and across the United States are of great interest to all of us and deserve to be what Gifford Pinchot believed: that those forests that serve communities of interest need to have a relationship with those communities. He was referring to communities adjacent to the public forests and thought they had to have a relationship for both to survive effectively, i.e., for the Forest Service management to be acceptable and for the communities to survive economically. I'm

transforming that in my own mind today to a much broader base of communities of interest that have been involved and are involved now.

In speaking about healthy forests or in speaking about the Craig-Wyden bill, they do come together. They serve a joint purpose to do a variety of things: to begin to instill active management on our public lands; to be able to build a new level of confidence that active management is being approached in the right way; that you have to have some active management on forests where fire has depleted the ecosystems of those forests for fifty or sixty years; and that many of the forests have populations of trees that our forests have never supported nor can support. In a drought environment of the kind we have today, catastrophic fires are the result, whether they be the result of climate change or of a cyclical environment. All of that coming together is a positive thing, I do believe.

Where do we go from here? That will depend in part on the successes of some foundational bricks that I've just talked about. At the same time, I hope that in a much broader collaborative effort, all the stakeholders in the communities of interest will come together for a single value, and that is the value of these phenomenally important public timbered lands, important for all the disparate reasons we love them, whether it is for wildlife habitat, watersheds, the economy of states and local communities, tourism, or recreation. It's a part of the great legacy that is a big chunk of Idaho and a mighty big part of the west and certainly of the eastern seaboard area.

So Carolyn, thanks so much for involving me in this. I will continue to play an active role in forest management and forest policy-making over the next several years, and I hope we're being as inclusive as most want us to be as we work through these important issues. I'm happy to stand for any questions the audience may have.

WASHBURN: Senator, we do have a few questions. A decade ago, you led an attempt to re-charter the Forest Service by re-writing the National Forest Management Act. Will you revisit this effort? What advice do you have for those who would?

CRAIG: I'm not sure I have any advice at this point. I do believe that you look at and constantly review the policy that drives management on a living and dynamic process, our public forests. We are open to input on that certainly, and we will constantly

review it to make sure it's contemporary, that it fits where we want to go, that it isn't tying the hands of the Forest Service, and that it's guiding them in a constructive way. But I don't have specific suggestions today.

WASHBURN: We had a lot of discussion this morning about the deficit and the budget situation. There was discussion about the fact that many of the forest initiatives of the last few years happened in a time of surplus. Now in this time of high deficits and debt, how much money can we expect and how much help from you to meet forest needs? I would add that Stephen Pyne asked this morning, "Will we pay for prescribed medicine or prescribed burns?"

CRAIG: That question brings up a very important issue. Let me take it out of the context of the deficit, although the deficit is driving decision-making on monies today. Let's remember that during the decade of the 90's, when we brought the level of public timber harvest down nearly 80%, we basically turned the Forest Service into a red-ink agency or sub-agency. Up until that time and from its beginning, the Forest Service had always been a revenue-maker for the Treasury and had provided all the resources that the Forest Service needed for all of its purposes. That was the timber sale program of the U. S. Forest Service. That was one of the programs that came under very critical debate in the 60's, 70's, 80's and 90's. Of course, the 90's brought it down very dramatically.

The Forest Service is now a red-ink agency, dependent upon the General Fund of the Treasury instead of its own resources. The difficulty with that—based on the current financing scheme of the U.S. Forest Service and especially with fire fighting—is that all of these funds had been established and fed historically by timber harvests. Those funds are no longer being fed because timber harvest is down so dramatically. We've been struggling mightily to figure out a way to refinance the Forest Service.

When Mark Rey left my staff on the Forestry Subcommittee and went down as Assistant Secretary of Agriculture in charge of the Forest Service and when our new Chief came along, who happens to be a graduate of the University of Idaho, I put them together and said, "You need to figure out a way to reasonably fund the Forest Service." So when we get in these catastrophic fire scenarios, when we're spending a billion dollars or more a year in fire fighting, and

when we're borrowing from all these accounts, no longer does the cash flow replenish the accounts. The General Fund has to replenish the accounts.

In budget deficits and tight budget times, from whom to you take money to put over here? What has happened is that stewardship programs and a variety of other initiatives—some of them tied to healthy forests—are going unfunded because of the fire environment we're in and the need to put fire out in an immediate sense. We don't have that figured out yet.

The Forest Service has come to us with a General User Fee approach. In fact, we are right in the middle of finalizing appropriations bills at the moment. The Governor, a former Secretary of Interior, would appreciate that. I've been on the phone this morning with the Secretary of Interior so we can try to get them funded a little more.

It is a very real struggle, but the struggle is greater today because the character of the Forest Service has changed. It is no longer what it was once referred to as the "cash cow," generating plenty of money for its own programs and money for the U.S. Treasury. It is now in deficit itself. It's a red-ink agency that has to be funded in part from the General Fund, and we are not yet there.

I'm pushing for more fire money and the ability to replenish those funds when money is borrowed away from them during fire season. We're not as successful yet as we ought to be. We just succeeded in putting a couple hundred million more in just last week, and I hope that gets us through and gets us into Healthy Forests Initiatives once again. That is an important question, and that's the current dilemma we're facing back here.

WASHBURN: So what do you think is the direction of Forest Service budgets: static, up, or down?

CRAIG: They have to go up because of the current environment we're living in, the one you're all hearing about today. These fire scenarios we're hearing about aren't going to go away. We are into them for a decade or more, no matter how proactive we become. We've let our forest become too overpopulated and too unhealthy, whether it's climate change or Pacific oscillation—better known as El Nino—we don't know how long this drought cycle will continue. So we have to bump up the dollars in the Forest Service, and my goal is to do that. It won't

be easy because we will have to take money from other areas to get it done, based on the deficits that we must deal with.

WASHBURN: This morning, Governor Andrus challenged the Deputy Undersecretary for Forestry, our Idaho native, to deliver consistent appropriations for forest management so plans can be made and work doesn't have to be done in fits and starts. Orville Daniels said, "These are 100-year issues, not on one or four-year appropriation political cycles." How would you answer their challenge?

CRAIG: Well, they are both right. It's a very real struggle. We're all going to fight for dollars back here for a variety of reasons. The economy is strengthening; the revenue flow of our government will be a little greater next year; but certainly all other priorities are going to be there. When there are not dedicated monies as the Forest Service once had and when they have to compete in the General Fund against health care and all other kinds of initiatives, then we're going to have to work extremely hard to develop consistency, stability, and reliability in the rates of increase. Only then can you bring these programs to the ground and sustain them on a decade basis, so we can make sure we are doing all the right things in all the right places.

What I hope that some of my friends will recognize is that as we clean our forest floor, as we do forest health, please allow us in reasonable fashion and in an openly transparent way to generate a little revenue so we can roll it back into the process. If we are to continue to rely on the General Fund and be denied any revenue from the process of forest health, then this struggle will go on and will have to take on all other interests.

I think that's a reasonable request that we ought to look at if we are so committed, as we are, to the general health of our public lands and our forested interests.

WASHBURN: How do you plan to build trust and collaboration with the public land agency when your office makes comments such as, "Oppressive federal land policies."

CRAIG: You know, there are a lot of people and probably a few in the audience who would like to task me with comments I've made over the years and made perhaps ten or fifteen years ago. What I suggest that

they see—and it's only they who can do it—is that the actions I've taken over the last decade, are actions I think have been extremely progressive, open, and inclusive. That's the way I continue to work.

We all agree there are very real problems out there. We all agree that we ought to work collectively to solve them. I trust some would think I am less the finger-pointer today and more the person who is aggressively going after initiatives to solve problems. Have I pointed fingers in the past? Sure. Will I point them in the future? I will when I believe it necessary to do so. When I see public policy as oppressive, I'll speak out about it. I'm a pretty frank guy when it comes to these issues.

Sometimes we have differing points of view, but I hope there are some common points of view that are talked about here today. I've mentioned a few of them: that we have a collaborative process that says Larry Craig doesn't always get his way, but someone else might not always get their way either; that we come together with a common purpose, and that is the health of our forested lands, the health of the communities of interest around them, the quality of wildlife habitat, and the purity of the water in the high desert west. That's where I am today. Some like to live in the past. I simply have to get on with living in the future.

WASHBURN: Let me ask a related question. I said in my introduction that public involvement is one of your principles. Given that, why have you not been more overtly and publicly supportive of the work of your colleagues, Senator Crapo and Congressman Simpson, in their Boulder-White Clouds and Owyhee Initiatives?

CRAIG: I guess my only answer to that would be for all of you to "stay tuned." What I have said is that I would not be destructive and that I would work with them when they asked me to. Governor Andrus and I spent a good number of years trying to craft wilderness bills. Neither he nor I was successful. The reason we weren't was that all the interested parties really weren't willing to come together. They enjoyed the fight more than they enjoyed the compromise and, tragically, weren't willing to look at the outcome on the other side.

I do believe times have changed. Mike Simpson has worked in a dedicated way with a variety of interests to solve the Boulder-White Clouds issue and maybe to help folks out in Custer County. I've met

with the Idaho Conservation League and others, and I think they came away recognizing that I was going to be a cooperator and a facilitator as Chairman of the Public Lands Subcommittee and that I would not be a roadblock to the collaborative, cooperative effort that Mike Simpson had underway.

It's interesting that you would speak of the Owyhee initiative. The county commissioners from Owyhee County and the major negotiators were in my office this morning for over an hour, meeting with me about the final proposal and the draft that is underway. I looked at a variety of issues, expressed a few targeted concerns, and we are going to work out those differences.

Another reason that I have not interceded. We are all a Republican delegation back here. I work on a variety of interests and so do my colleagues. When my colleagues are taking off in an area, I find it a waste of my time to try to duplicate it. To watch them, to work with them, to encourage them to move forward—I have done that in both instances. If those who think otherwise would simply take the time to ask Mike Simpson or Mike Crapo about that, I think they would say that Larry Craig has not been at all obstructive and oftentimes very constructive. They both recognize that I'm willing now to make sure these work products get before my committee, that they are heard effectively and responsibly, and that they move through Congress when they are in final form. That's about all I can do, and that's exactly what I will do. I will continue to do what I have been doing.

WASHBURN: Another question from the discussion this morning. What would you say if a forester sat in your committee, held up a photo of a severely-blackened, lodgepole-pine forest and said, "This, Senator, is a photo of a healthy forest."

CRAIG: I would look at it, and say, "Hmm, lodgepole pine. Climax forest. Absolutely right. Show me the picture forty years from now, and I'll show you a new stand of trees."

WASHBURN: Clearly, that was the right answer.

CRAIG: I spent a few years studying forestry.

WASHBURN: Elizabeth Arnold said this morn-ing—and others nodded in agreement—that

the public is ahead of Congress on these issues, and it takes sometimes a major fire to get Congress's attention. The Healthy Forests Initiative, for example, happened after the fires of 2000. What is your comment about that?

CRAIG: My comment is that the Healthy Forests Initiative was five years in the drafting. I had held hearings for about seven years on the general health of the forests. Ron Wyden and I had started a rough-draft initiative before the fires of 2000. The fires of 2000, tragically enough, helped us. When President Bush stood in the ashes in southern Oregon, looked around, and said we have to do something about this, the guy that had been helping me write that initiative was then the Undersecretary and was ready to move. Excuse me, that was 2001, not 2000. We began to work more collaboratively.

As we were working to finalize this, I'd been doing something else. I had spent a good deal of time trying to educate a variety of my colleagues about the forest problems. I had been working very closely with Diane Feinstein of California. We'd been on the Sierra and the San Bernardino together. The San Bernardino was a forest that was 70% dead or dying. Active timber management had left that forest in the 70's because it had become largely a recreational forest. The protests against any other use had basically stopped active management. I had convinced her that we were in a real dilemma in the Sierras, in the Lake Tahoe watershed, and in the San Bernardino. She recognized that, and we then began to work on the Quincy Library project together.

Out of that, there grew a respective confidence in our understanding of what we ought to do. If there was a fire that shoved the Forest Health Initiative over the hump—and remember, by then it had been written, finalized, and sent to the floor—it was the fire in Southern California, San Bernardino, and Lake Arrowhead. It was literally wiping out thousands of homes, had already taken many lives, and was destroying a watershed. It was people like Barbara Boxer and others who had opposed us who simply no longer could because their state was on fire, burning up, and people were at risk.

Having said that, I will say that fire has made a difference. Sherwood Boehlert is the Republican Congressman from Long Island, New York. For many years, he opposed what I was trying to do. I compromised a little; Sherry compromised a little. We were sitting side by side at the White House at

the signing of the Healthy Forests bill. I had served with Sherry in the House a long time. I elbowed him and said, "Sherry, what are you doing down here?" He smiled and said, "Larry, smoke got in my eyes, and it improved my vision."

WASHBURN: I know we have only a few more minutes of your time and of the satellite. Two semi-related questions. Will you help pass a federal budget this fiscal year or will there be a year-long continuing resolution for all of 2005? What will you do to help move things along?

CRAIG: I hope by tomorrow night, we will have an omnibus Budget Bill that will include all budgets. It will not be a continuing resolution. It will have in it most of the increases and most of the proposals that were in the authorizing process earlier this year. We are literally in the final hours of finishing that. We hope it's done by late this evening, that it can come to the floor of the House for a vote early tomorrow, and that it will get to us by tomorrow night. It is clearly our goal to do that, to keep the rate of increases in our federal budget moving upward. A continuing resolution would not do that, and it would severely handicap the Forest Service in its spending areas. That's our goal. I think we can get there. We'll come back early in 05, and we hope that we can improve the budget process beyond what it was this year.

WASHBURN: I've saved the best for last. Are you in the running for Secretary of Agriculture or any other cabinet post?

CRAIG: I was walking around the other day with a table napkin, and I had Secretary of Agriculture, of Commerce, of Energy—now Gale Norton is going to be with us, thank goodness—and I was trying to market that to a few of my colleagues, not for myself, no. I am very interested in staying right where I am, doing exactly what I am doing, and most important, I have not been asked. You have to be asked before you can think about it.

There are a lot of talented, capable people out there. I'm going to enjoy working in this Administration in the coming year. When the dust settles and the new cabinet is formed, whether you like it or not, Larry Craig is probably going to remain your senior senator.

WASHBURN: I want to thank everyone for their questions and participation, and let's thank Senator Craig for the conversation.

ANDRUS: Thank you very much, Senator. Cece Andrus here. Thank you for participating.

CRAIG: Thank you for hosting this very important conference.

* * *

FIRE AND FOREST HEALTH

The Forest Service's Continuing Management Challenges in the New Century

THURSDAY, NOVEMBER 18, 2004
JORDAN BALLROOM, STUDENT UNION
BOISE STATE UNIVERSITY

1:15 PM

Discussion: **Things Could Get Worse: *The Management Challenges Ahead***

CECIL D. ANDRUS: Let me introduce to you the moderator of this panel, Dr. John Freemuth, a professor here at Boise State University. That's how he makes his living, but his important job is being the Senior Fellow at the Andrus Center for Public Policy. He has done an outstanding job there. He is an author in the area of environmental sciences. He holds a lot of titles, but the one I'm proudest of is that of Senior Fellow. Dr. John Freemuth.

JOHN FREEMUTH: Good afternoon. I'll run this panel the way Marc ran his this morning. It's part of the Andrus Center style to make this more of a conversation than a series of presentations.

Senator Craig, in his remarks today, talked about dates of certain events. I'd like to mention another one because he was intimately involved in it. It was when President Clinton came to Idaho to look at some of the effects of the fire up around McCall. The President and the Senator had a conversation in Air Force One about what ought to be done. They began realizing that they could deal with the issue together.

Right around that time, the Andrus Center had a conference in 2000 on wildland fire, and we issued a white paper and a follow-up. I want to start these panels this afternoon with one of our conclusions that is still very much germane to today and relates to the themes of whether things are going to get worse or going to get better.

We said we thought it would be thirty to forty years before we could actually see some final results on the ground that would indicate that change had actually happened. I think we heard that a lot today. We know that, whether Congress intends to or not, they do function on a two to four-year cycle. They will have to pay attention for a long time to get there.

The other thing that came up—and this is not meant negatively but it's a sensitive thing to say—was that if NIFC looks the same in 50 years as it does

today, then we won't have changed our policies. If it's still just a suppression-response center—and they're very good at that—but if that's all we're doing, we haven't gotten where we wanted to get.

We did not intend for our speakers to be pessimistic, but we all want to see progress. There are things we're going to have to pay attention to, some of which we may be able to control and some of which we may not be able to control.

This first panel is a very distinguished group of people. They could all be keynoters themselves, and they are going to help us think that through.

I've asked them to have some introductory comments for you to think about, then they'll talk to each other, and then we'll get to questions. The first speaker over there at the end of the table is Tim Brown. He is a Ph.D. and an Associate Research Professor in the Atmospheric Sciences Division of the Desert Research Institute in the Reno area. He's an expert in climatology and fire/weather relationships. I know Dr. Pyne talked a lot about our contributions to global warming. Tim can tell us a lot about how that may affect our attempts to do things about the forest. I sat next to him at lunch, and he has his own forecasting model. His outlook is not that good for us here in the fall and winter.

Next to him is someone many of you know, Jim Caswell. He is now the Administrator of the Office of Species Conservation, but he is a 33-year Forest Service veteran, supervisor of several different national forests, including the Clearwater. He is also the chairman of the Strategic Issues Panel on Fire Suppression Costs of the Wildland Fire Leadership Council.

Next to Jim is Jerry Williams. Jerry is the Director of Fire and Aviation Management for the Forest Service in Washington, D.C. Like many folks, he began his career as a smokejumper and firefighter. He helped lead a strategy development that later became the National Fire Plan.

Next to Jerry is Dr. Penny Morgan, a colleague at the University of Idaho, a well-known fire ecologist, has a doctorate in fire ecology and management, does much research on related questions. She is now working on something that is very interesting: the management implications for agencies of climate changes.

Next to Penny is Dr. Walter Hecox from Colorado College. He does a lot of research and teaching on regional resource issues, economic change, and how to have sustainable development, a question that interfaces very well with the fact that many of our western communities are adjacent to our national forests and BLM lands.

Next to him, we're honored to have Hank Blackwell, Assistant Fire Chief of Santa Fe County, New Mexico, someone who is on the front lines of trying to help communities deal with the interface again between urban areas and small towns and the fires that occur there. He oversees a lot of land in his area.

What I'd like to do first is simply let each speak in turn and alert us to what they would like us to think about their work as it relate to our concerns about forest health and fire. Tim.

DR. TIM BROWN: Thank you. It's a pleasure to be here this afternoon. I have an idea for a movie script, and I want to run this by you. Let's warm the west up by about five degrees. We'll warm the ocean three to five degrees. We're going to dry out the west. We'll increase evapo-transpiration, so we'll put a lot of stress on the vegetation. While we're at it, let's start a drought that will continue for about 500 years. Do you think CBS would buy that?

I know a lot of decisions have been made in this country recently on fear tactics. I don't mean to instill fear, but there is some change taking place in the climate. It's hard to talk about human activity without talking about fire. I would maintain that it's hard to talk about fire and humans without talking about climate as well. They are all very closely linked.

There is scientific consensus that we are in the midst of climate change, both globally and regionally, but it doesn't happen the same everywhere. Here in the west, we may actually see an increase in precipitation during the 21st Century. That will be in the winter although that's not a problem because the water supply builds up in the winter. The demand is in the summer. The problem will be that there will be less snow pack. That could have a subsequent impact on

soil moisture, and soil moisture will be one of the key elements in vegetation stress.

During the summer, we find that warming will likely occur, and it will be very closely linked to drying as in relative humidity, very closely linked to evapo-transpiration, so will stress on vegetation. I might point out that this potential increase in precipitation will be offset initially by the idea that we are currently in a drought.

The drought will be along the lines and magnitude of the 1930's and the 1950's, but it's not along the lines of what's known as the medieval warm period, which was about 900 to 1300 A.D.

I'm starting to wonder whether we might be getting ourselves into a situation of a pretty lengthy or persistent drought pattern here in the west. It could be multi-years. I would have no problem in saying that the next 15 to 30 years have a higher probability of being dry in the west than the five or seven year period we've been through. I think we have a ways to go. There is a little less reliability on the longer-term, but we've seen it in the past.

This will be the challenge for management. Climate's dynamic, so we have to put our climate change, our drought patterns in the context of this fire business. Just three quick points here. When we talk about climate change, usually three elements come up: sensitivity (quantifying the degree of ecosystem or foreign sensitivity), climate change vulnerability (the degree to which ecosystems are susceptible to change or are unable to cope with adverse change), and then adaptive capacity (the ability of ecosystems to adjust to change).

What I'd like to suggest to this group is substituting the words "land management agencies" for "ecosystem and forest health in each of those."

JIM CASWELL: Let me start with the notion that this is a prime example right here of why we have trouble dealing with this problem. That is, John said, we're going to start this panel the same way Marc started the first panel. We can't remember from the time this morning what happened, through lunch, to now because he didn't do that at all. Marc started with a question to the panel, and the panel responded. John just handed it off and said, "You guys each make a statement." There's our problem; it's a human issue.

I want to add to Tim's script by adding the issue of climate, normal succession across the range of variety of species and forest types that are out there. Add to

that the demographic changes that have occurred across the landscape and particularly in the west over the last 20 years. The fastest growing communities in the country are in this part of the world.

Add to that this climate scenario, and what do we get? More of the same or worse. Not to be totally pessimistic, I think we can anticipate more and more of the same types of seasons we have seen in the past, more and more challenges in terms of what we do about that, and also challenges about how we pay for it.

JERRY WILLIAMS: Thank you, Jim, and thank you, John, for the introduction. They say that experience is a tough teacher because she gives you the test first and then has you figure out the lessons later. Maybe by way of my opening, I can share some of my lessons.

It's remarkable to me that in the last five years, five western states have experienced the worst wildfires in their state's history. One state did it twice in that period. You might be interested to know that the Forest Service deals with about 10,000 wildfires every year. Those are fires in which somebody thinks for some reason there is a threat and that it should be dealt with. Of those 10,000 wildfires, fewer than 1% account for 85% of everything we spend and virtually 95% of everything that burns.

Commonly, in the west in particular, the most damaging, dangerous, and costly wildfires we deal with are in short interval, fire-adapted ecosystems, often represented by long-needle pine types. These are ecosystems that have changed significantly in terms of structure, composition, and function.

Another observation: the rate of fuel accumulation remains far greater than the rate of fuel treatment. This is even after we've gotten significant funding through the National Fire Plan and now the Healthy Forests Restoration Act and despite the fact that we're treating more acres with prescribed fires nationwide than we're losing to wildfire. This is the first year we've done that nationwide, but we need to be treating much much more.

Another observation born from my and Larry Hamilton's experience as members of the California Commission last fall: There is a public and sometimes a political perception—in my world, facts are facts, but perceptions are reality—that we can match a bigger wildfire threat with a bigger hammer. If you don't believe that, I'll give you some reading material on the Boeing and Evergreen Companies'

development of the 747 as an air tanker. That's a comforting fact but a disturbing perception because it gives license to those who might not be inclined to manage the land to figure that somehow we can do a little better on this 1% failure.

Last year, when we shut down the air tanker program for safety reasons and on the heels of an NTSB report, Dale Bosworth and Joel Holtrop, my boss, would tell you that you would have thought we shut down NORAD.

Another observation is that often—and especially in these disturbance regimes like the fire-adapted types—the expectations for the land are rarely consistent with the dynamics of the land. In fact, many of our worst wildfires began incubating decades ago because we attempted to manage for wildlife or watershed or recreation or other resource values in ways that were inconsistent with the dynamics of the land, particularly in fire-adapted types.

Finally, I've heard us, for many years now, talk and argue about the means—whether it is smoke or money or thinning—when we don't yet fully understand or have not yet agreed on the risks and benefits of the ends.

I'm really pleased to be here, and I'm looking forward to this panel.

DR. PENNY MORGAN: I think our greatest management challenge of the future is balancing the need to protect people and property from fire with the ecological realities. As we heard earlier, fire is. Fire will be. Until we as a society start living in the environment and recognizing that fires are going to happen, we will continue to struggle with fire.

It is a people problem, much as my friend Steve Pyne would like to make it a biological problem. Fire is a social issue. It's a social, political, and economic issue, and that's where we need to play if we're going to make a difference. It's not just threats to people and their property; it's also smoke and the health and visibility hazards associated with smoke.

Leadership is really key. At the University of Idaho, we pride ourselves on educating leaders, working with leaders, and being leaders. I think that's what we in the fire community need to be able to do. Education is more than training. We need to foster leadership. We need to work together, and we need to be leaders, which means acting wisely and not being paralyzed by uncertainty and risk, which in the fire business is very real.

There is no simple one-size-fits-all solution. It will have to be place by place, time by time. Clearly the scope of the problem is much bigger than we are able to treat on the ground, so that means we will have to be very strategic. We need to understand where fires are severe and why and use that kind of information to help us say which landscapes and where within those landscapes we are going to do treatments. We could probably make a difference with a relatively smaller part of the landscape if we are strategic about it.

The same goes for during fires and post-fires if you look at the costs of fire suppression and post-fire rehabilitation, which get a lot of attention in Congress because they are going up so fast.

We need to find and work within the zones of agreement among people. That will be part of prioritizing where we act.

I would just add briefly a little anecdote. I was gathering puns about fire: burning questions, hot topics, etc. I asked my students for some good ones, and my favorite was “Fire works.”

DR. WALTER HECOX: As a social scientist, I am honored to be here, but I am very much in the minority. We have different views of what is going on. I want to talk about an invasive species. Normally I leave that to scientists, but the invasive species I’m studying are humans.

Fire works to bring all of us here, and as those here at the university know and as we’re all benefiting from today, former governors do amazing things. At Colorado College, our new president is Dick Celeste, former governor of Ohio, former Ambassador to India, and former head of the Peace Corps. He did a lot of things for us. At any other conference, I would say he came and lit a fire under us.

One of the things he did was to engage us in something called “The State of the Rockies”, an annual report done on eight states, 280 counties. The region we’re looking at is 24% of the U.S. land mass, 6.5% of the U. S. population, growing at three times the national average. That population is living in urban areas. Only 3% of the population lives in counties classified as rural by the Census Bureau. The Soil Conservation Service has determined by satellite analysis that only 1.4% of the west is covered by human-made structures. So we have this incredible dynamic of people flooding into a region, coming for an illusion—what I call the Marlboro Cowboy illusion—that we’re rural, rugged, and that we don’t

like government except when we get our subsidy check. We have a dichotomy between the old-timers and the old-time communities, who used to thrive and live in harmony with natural resources and the extraction of those resources.

We’ve made a major revolution towards what I call an amenity-based economy. Those resources are still extremely important, but in different ways. People come to worship them. We’ve heard about parents chaining their kids to trees to save an area that they feel shouldn’t be cut. We have an incredible phenomenon going on of people who really don’t understand much about the land. They flood into Colorado and all over the west in increasing numbers. They are building their little dream trophy home, their second or third or fourth home, paying hundreds of thousands of dollars to have their little ranchette—two acres, five acres, 35 acres—often so clueless that they don’t know that they don’t own the sub-surface rights and that the oil and gas drilling companies can come in and, under the law, have the right to drill, creating a dynamic, which is interesting to me politically. We have quite conservative people flooding in from California, people who used to hate environmentalists, joining the most available environmental group to fight off the latest threat to the environment that they think they bought into.

The average second home is owned for only seven years. Imagine those people understanding forest dynamics on a one hundred year scale. They believe the trees are frozen, that they are beautiful, that they are maybe even creatures that they would like to pet. They do not understand this rugged environment. We have this problem that our resource base is gone; agricultural natural resources combined generate 2-3% of employment and income; manufacturing is in the range of 12-14%; services have grown to 89%. We are a service-based, urban economy. Many of those service jobs pay low wages and are based on recreation. Recreation means that they don’t want smoke in the summer because it screws up the dude ranches. We can understand all these dynamics.

I want to go through a couple of myths. In doing that, I want to pick a favorite little quip from High Country News, from their section, “Heard Around the West.” This is out of the Four Corners Free Press: A man who ran a stop light, when asked by the officer why he did it, explained that he didn’t have time to stop because he was in a hurry.” We are all in a hurry. We have seven years as boomers to get up in the mountains before we realize that the elevation is

too high, and we can't breathe. Then we have to sell. That's exactly what is happening. People are rotating through very rapidly, wanting to buy 35-acre or five-acre plots.

As an economist, I sometimes wish we could go back to the rather isolated rape of the land by the few open pit mines where we could contain them instead of having hundreds of square miles chopped up by little ranchettes. As I tell my students, we have to figure out what Joe Six Pack and Mary Kay Land Rover will buy. We talked this morning about a 15-second television spot, and that won't do it. It has to be on a bumpersticker. If Smoky, The Bear said, "Fires are bad; out by tomorrow noon," that fits.

The first myth is that people are smart enough to get out of the way of fire. We know they are not. The Natural Resource Ecology Lab at Fort Collins estimates that there will be a 50% increase in people living in the urban/forest interface in the next 30 years. Calculate what that does to your need to fight forest fires.

If you look at what's going on in the hurricane zone, people will rebuild time after time in flood zones and hurricane alley when you can't do anything about hurricanes. We don't even expect the President to do anything about hurricanes except to come back in and sprinkle money on it. Wouldn't you expect, as someone moving into a bucolic recreation area, that the government ought to fix this and put the damned fires out?

Number 2 myth is that the government will extinguish all fires by noon the next day. Well, we promised them that for decades. They are not going to soon get off that. They believe it. It's like their belief that Social Security has a trust fund with a little pot of money in your name. We do really short-sighted things politically to sell something, and then they come back to bite us.

The government has a limited budget to fight wildfires. In a sense, when the public gets outraged, we will find the money, even if we have to rob it from programs that would make the forests more healthy.

Finally, the one I end up with as an economist is that homeowner's insurance is part of the solution. It's not. The automatic coverage of most sites, until the Heyman Fire in Colorado, meant that no inspector ever came out to even see if you cleared a defensible space around your house. The argument in the press for years was that there are so few houses burned up by fire that we don't want to bother. It would be too much trouble to actuarially figure out if there is a higher

category and whether we've inspected them. That has stopped. After the Heyman Fire, no homeowner's insurance was granted for six months in rural areas, to the point where the State Legislature put a clause in, saying that you could back out of a real estate contract if you could not get homeowner's insurance on a property on which you had put money down.

The natural catastrophe cycle is rising. In 1992, Hurricane Andrew cost \$20 billion. Four hurricanes in 2004 cost \$22 to \$27 billion. The Swiss Reinsurance Analysis on a thirty-year trend of losses is looking at an average of \$30 billion a year. If we can't figure it out in Hurricane Alley, how do you expect people to figure out in forests where the government is supposed to manage them? Thank you.

HANK BLACKWELL: That's why I wanted to go first. That's a hard act to follow. I think I'm the token local here in terms of looking at Small Town, USA. First of all, I bring you greetings from the Territory. I'm probably the only one that had to deal with Customs, coming into Boise.

I'm talking about values, which I hope we'll be able to talk about a little bit more during this panel. I also come from a state where do things a little differently. We actually chain our trees to our children. From the local perspective, in trying to tie a few of the comments that have been made this morning, there are a few things that are poignant, at least from an issue of local government and this problem. One of them has to do with partnerships.

That seems to be a fairly trite term nowadays, but in my opinion, that's one of the things that local government has been forced to do, especially over the last decade or two, just because of our own limited resource environment. What we are wont to do at the local level is to share our resources, and we do. The gap is that we're not doing enough partnering with our state and federal agencies. That creates a dangerous situation both ways. From the local level, we can speak to wildland issues.

Another good analogy is terrorism after 9/11. There has been a lot of talk about readiness, about bio-terrorism, about local agencies training their people. I will bet you that the vast majority of local agencies are caught in the problem of saying we can do better; we're just waiting until Homeland Security sends us the money. Instead of asking how do we manage this problem more wisely and economically with the resources we have today, we're caught in that delusion that is not only perpetuated by us but also by

the federal government of thinking prosperity is just around the corner. That's a very dangerous place to be stuck in. I think that's something I hope we'll share in terms of some of the problems we may face in the next few decades regarding fire and forest health.

There has to be a change, a shift, and a more committed effort toward partnerships at all levels, not just all levels of government, but all levels of stakeholders.

There has been a lot of talk about trust. One thing I do agree with is that trust is not to be earned; it is something to be given. I feel strongly about that. If we wait for someone to earn our trust, or if we wait to earn trust, it doesn't happen. That's a very valuable and precious commodity that we need to give to one another, individually and also as agencies. That's something we really have to focus on.

Again, speaking from the local perspective, what that means is that Congress, constituents, and voters in this country need to empower the Forest Service and the Department of Agriculture with trust. Concurrently, the Forest Service has to empower the local agencies with trust as well. That's another gap in terms of what we do, and I think that's critical.

We need to revisit our values. We talked about values at risk. Most of them are measurable. I would challenge you to look at some of those other values: the economic, the cultural, the esthetic, even the spiritual values. Those values, if we don't treat them with the same dignity and same level of importance, we lose our audience at the local level. We have to keep those values ever present, and they have to be of equal worth in terms of what we are trying to do with forest health. It's critical if we want this to trickle down and be perpetuated all the way through to local government levels.

Another issue that we don't talk about much here but was talked about at the National Academy of Sciences about two months ago had to do with technology in terms of wildland fire and forest health issues. There are two problems with that: the first is that technology is a double-edged sword. We're using it; we're relying on it, but it's moving so much more quickly than we are that it is actually creating a disadvantage. We have to find out how to deal with that. Today, we're already behind technology, and we're already struggling to find out how to use that technology and how it works tomorrow.

In addition, we don't know how to broker that information. That's again critical. There is an assumption that there is not much happening at the

local level, but again I would say that's not true. But the problem is that everything is very fragmented, so looking at the issues again, the problem to me is how do we partner, how do we pull these together.

Another issue is prevention versus suppression, whether it's in wildland fire or structural fire. That's again another issue that we have to change. It's much easier right now for a fire official to show a \$250,000 fire engine to his constituents and say, "Look what we got with your tax dollars." We can measure how many times it goes out of the barn. We can measure how many times that Type 6 has worked on Type 3, 2, or 1 fire. We can measure how much gas it's used, how many miles it has run, and how many tires it has gone through. But how do you measure what we have prevented? How do you measure forest health? How do you do that in terms that can be understood and accepted by the people we work for? That's a huge problem here in the United States.

One little fact, in 1997, the city of Chicago had more fire death and more structural fire losses than the entire country of Japan. Think about where we are putting our efforts for fire suppression and public safety. That's a cultural and psychological shift. It's not an economic or political shift. That to me is a huge issue facing us over the next two decades. I'm not sure how to make that transition, but I think it's absolutely critical that we do so. We have to do that.

Do we have a dentist in the audience? How about anybody in the audience who has been to a dentist? I venture to say that if we want to look at a model for changing the perception of wildland fire, we already have a great model. Just ask any dentist who is 60 or 65 what has happened to that profession, which has moved from reaction and filling cavities to prevention, and it has prospered. So there are things out there that we need not reinvent. We have a model.

The other thing is scale. We have to look at economies of scale. The partnership has to be from the top to the bottom and the bottom to the top.

FREEMUTH: I must admit I began this panel with a hidden agenda, simply to trick Caswell if I could. I guess it worked pretty well. Walt, I guess the way to summarize your talk is to say it was John Denver's fault all along.

Now you get your question, Jim. One of the things I hear a lot is that the beginning model assumed we could manage forests in a certain way and they would always stay that way. I am hearing from the panelists that we may be talking more about managing change

and working with the public to understand that this old model—that forests should and always will look a certain way—is simply impossible. If we are in a long drought, for example, and atmospheric change, things will change, and we can't put them back the way they were. But we can certainly manage change. Does that prompt anyone's thoughts or reaction? Is that what we are going to be about?

MORGAN: I think you're right, John. I think forest management is really about change management. We're waiting for the other shoe to fall. I think it's great that we've made a lot of progress on treatment, Jerry, but we also need to be thinking that a lot of those areas are going to need re-treatment. Fuels grow back.

WILLIAMS: I was impressed with our friends from California. Two examples really stood out in my mind. One was the Lake Arrowhead situation, conifer-fuel type. People saw trouble coming for many months and many years by virtue of all the dead trees they were seeing. The forest supervisor, working with the local Congressional delegation, were talking people into the fact that something is going to happen here. People got ready for it. They understood, at that point, that the forest was dynamic. Up to that point, they didn't see it coming.

Contrast that with San Diego County. They were surprised even though they lived smack-dab in the middle of one of the most short interval fire-adapted systems we have anywhere in the country. They were surprised. Again, one of the things we struggle with is the perception that if there is going to be a fire problem, we'll bring in the Fire Department.

It's interesting to note that California has the largest fire department in the United States, arguably the largest in the world. I'm talking \$3 billion per year among the Forest Service, CDF, Orange County, Ventura County, Los Angeles County, San Diego. These folks are loaded for bear. Every ten years, they get their socks blown off. You can go clear back to 1961, the Bel Air fire, the Laguna fire, and on and on and on. The lesson is that if we're not managing the land, you can't build a fire department big enough.

I'm impressed with the comments from our social science folks because California may be a place where we have the most transient population anywhere in the country. As short as the fire interval is, no one is there to figure out the lessons after they have had to take the test.

HECOX: I guess I want to chime in, too. The natural systems are changing, and in fact, that rate may increase. I'm concerned, and since I'm on a panel where things may get worse, it's beyond the capacity of the Forest Service to deal with, and that is the public's perception of science. I've written down here that we trusted scientists to know something. Then we moved to "sound science." Sound science sounds pretty fishy to half the population and pretty good to the other half.

Now we've evolved into political science, which has nothing to do with natural science. It's how you want to use scientific facts to achieve an objective. That erodes trust. That makes people very suspicious. We're in an environment where people are even beginning to talk about the issue of evolution as the exclusive thing to teach in our schools versus creationism.

I'm not sure we're headed to an ever bigger and better direction in terms of the public's willingness to be rational, to embrace very complex issues. There is a very small limit to people's capacity to struggle with conflicting and complex issues. They want it to be black or white. They want it to be sound or unsound. If somebody tells you, this is sound science, that sounds really neat.

FREEMUTH: Sound science is usually the science that supports my values. The rest of it is bad science.

BROWN: I just have one thought about change. Even if we are in a long-term drought period, there will be years that will be wet. It will not be dry year after year after year so that the landscape withers in the dust. We need to be careful though that in the shortsightedness that we see all the time in the drought situation, we do not assume, when a big rain comes through, that the drought must be over. We definitely can't do that when we are talking about the kind of scale that we are here. Cautionary note.

BLACKWELL: In terms of change, one of the other things that is a huge issue is how to more effectively and with zero tolerance not only encourage but demand responsibility from the individual. That's another part of our problem. Looking at that, making each homeowner part of the problem and part of the solution. How do you encourage and demand responsibility? How do you then, once you have

someone at least engage in that thought process, offer them choices so that they know this is their choice. This should logically move them to what the consequences are.

We've talked about flood programs; we've talked about hurricanes. I spent 20 years with the Los Alamos Fire Department and was unsuccessful in my efforts to get that community to wake up. The next time I was back in Los Alamos, it was to fight fire. I could put a name to about two-thirds of the homes there, so I was a little more zealous than I was before. Looking at that, the thing that irks me is responsibility. Most of the people in that community—because that was a prescription burn—had assumed no responsibility for that fire. That's the tragedy in the Cerro Grande fire.

It's something of a sacred cow that most people don't want to speak of because it's changing that definition of what's supposed to happen with fire agencies in terms of wildland fire. The issue is those people became victims so they wouldn't have to take responsibility for their losses. Within thirty to forty-five days, some of those people were actually building homes back in that same environment, homes that were not fire-resistant.

People have to have consequences. We shouldn't reward a community for burning itself down. Maybe we're not supposed to speak of that, but if we don't deal with those issues at a local level, how do we expect the U.S. Forest to get even half a hand around this issue? I feel very strongly about that.

Someone has said that the only person who likes change is a baby. That's a shift. We better start looking at everyone at the local level as a bunch of wet babies and figure out how to deal with that.

CASWELL: When we were working with the cost panel, we went back and tried to pull together all the data and background information on this issue of costs and whether they were really out of whack, given the circumstances. One of the things I stumbled across as a result of the Bel Air fire was that in 1962, the California Association of Counties had a huge conference in L.A. That was the very theme: the changing dynamics of the ecosystem, the development of the populations, the interface issue, climate change and what all of that would mean in how counties were going to deal with those problems. There is a whole set of recommendations about how to do that, dating from 1962, none of which has ever been implemented. I know that after 2003, there was a huge rush to pass a bunch of ordinances in California,

but two years later, they are already retreating. Some of that stuff has been changed already because voters have said, no, we're not going to do those things.

It's a huge problem of remembering, even from this morning from this afternoon.

FREEMUTH: Let's take this issue of why things don't happen or why we don't remember, "Bob," from the morning to the afternoon or what the public knows or will accept from scientists. Let me preface this with a story about the Brits, who were surveyed on whether they thought they had a higher probability of being hit by lightning or abducted by aliens. Aliens came in higher on the opinion poll. Those of you who are not laughing have perhaps been abducted by aliens.

When Europeans had their western migration, there was a doctrine that rain follows the plow. Indeed, rainfall went up during that period. People like John Wesley Powell cautioned that might not have been what was going on. My question comes back to what should we do when we do get a year or two of rain and people go off half-cocked, saying, "What drought?" or "What global warming?" I'm not talking about the experts educating the poor boob public, but nonetheless, a lot of knowledge is suspect these days for a bunch of reasons. How do we get past this?

WILLIAMS: I think we're too small. Our intelligence services were faulted for a lack of imagination and a lack of breadth in how they perceived their world. In a way, I think we are, too. We are wrapping ourselves around the axle on too much small stuff: the cost of prescribed burning; whether we like or don't like thinning.

The larger public lands policy issue for at least 40 million acres in the west is how are we going to manage and sustain resilient, fire-adaptive ecosystems? Until we address that larger public lands policy issue, I think we're going to continue to find ourselves at stalemate over science.

By the way, I think some of the worst science is good science misapplied. A good example for us is taking fire and fire effects out of context. A short interval fire regime like Ponderosa pine is going to be different than the long-interval lodgepole system.

By the way, is Senator Craig's staffer in here? Good staff work. To have a U.S. Senator be able to make those distinctions when a lot of our own people aren't able to make those distinctions is important.

HECOX: The single change agent for the urban/forest interface that I would love to see us use is homeowner's insurance. Either get it or don't, but in order to get it, you have to clear. We could then pick up some examples from flood insurance, which is re-insurance really. It takes the burden off insurance companies and moves it to a larger pool. We could have forest insurance. If you live in a zone affected by fire more than urban areas in the city, you may have to have some coverage. Even flood insurance has limits of \$250,000, so some people are unable to recover everything. It tends to make us think as individuals: This is our property that is at risk.

When you move over to the public lands, people think that they own it—and they do—but they also think someone should be managing it the way they believe it should be managed. We're not having a very productive discourse now about those public lands, and I'm not sure how we get back to a more productive but a much more complex discussion. It certainly is going to be some kind of collaboration. Collaboration is difficult when you have constituents who have quite different ideas from those who live next to the forest. We haven't gotten over that either. People who live next to the forest think that it's their monopoly and that they should be the ones to decide. As a result, we've ended up in a stalemate where nothing is decided.

WILLIAMS: Let me jump back on this business of the need to have a larger public policy/lands debate on fire-adaptive ecosystems and explain that a step further. I'll pick on the insurance industry. This was a big deal in Southern California where 3600 homes were lost. The insurance industry, though, is a very competitive industry, and they figure, "If I don't sell a policy, someone else will sell it to you, and I'll be out of business." The issue came up down there where homeowners found, much to their surprise, that they no longer had home replacement policies. They were given policies valued at much less. That's the way the insurance industry hedged their risk.

The problem again is the absence of a public lands policy that, by law and policy and practice, would determine building codes and brush clearance standards and would determine trade-offs and value analysis between needs for clean air and endangered species and watersheds. In the absence of that, we will forever be arguing about trade-offs. The irony in Southern California, despite the loss of 3600 homes and 24 people, is that we lost the very things we were

managing for in the bargain. We lost endangered species habitat. We lost watershed and the visual quality of that place.

I'm also especially interested in this notion of a larger public lands policy debate as it pertains to all agencies, not just the insurance agency. Some of you may be surprised to find out that for several years, FEMA has dropped flood costs. If it doesn't cost you anything to field a fire response because you're not penalized if you don't have a fire department or brush clearance standards or safe building codes in your community, what incentive is there for you to do it if Uncle steps in and picks up the consequences?

MORGAN: Jerry, I think that may go further in your wish to answer how we manage for resilience in systems that once burned frequently and are burning again if you connect it to the resilience of the human communities, too. We need to push for restoration of resilience, not only in the forest and watersheds but also in the human communities. We need to restore the connection of people to their surrounding environment. That leads us to looking at collaborative programs at the community level. When you put the decisions in the hands of local communities, we see again and again people really grappling effectively with complex issues because they feel that they start to have a voice in what goes on around them. There are a lot of really great examples of that, Hank, in New Mexico with the Collaborative Forest Restoration Program, and certainly there are other examples around the country.

CASWELL: This is a small thing and maybe it's happening other places, but there is no federal land management presence in those interface areas, none that are active with the community, the county commissioners, and supervisors when they are engaged in decisions about the next subdivision. It's going to be placed right here on the border of the national forest. There is no one—the forest supervisor, the ranger, whoever—saying, "Do you know what you're about to do? Do you understand the potential consequences of this action?" That dialogue is non-existent. In fact, we're not even notified that it's about to occur next to a national forest as I would be if I were a private landowner and you were about to build next to my property.

WILLIAMS: You would be if you had public land policies that required it.

CASWELL: The Forest Service or the BLM could do it right now. All they would have to do is start doing it. They could at least engage in the conversation, which might lead to the bigger debate.

FREEMUTH: Is it a shibboleth to worry about more local control? How are local governments and local planning agencies working with the regional and national folks? Where is it working well? What's the solution? Is there one? Hank, what were you going to say?

BLACKWELL: The operative term in your question was control. Where is that control? Is it local, state, or federal? I would say it shouldn't be an issue of control. It should be an issue of collaboration. That's again, one of the mantras we're not singing.

Jim, I agree with what you said. In our area, we actually do partner. Our state Forest Service as well as the U.S. Forest Service actually helped us craft our urban/wildland code. Even now, in terms of our areas, they're involved in a lot of our issues. However, the agencies need to work together, first, to appreciate that their constituents are just as smart as they are and, second, to try to enable them—through the fact that they are responsible—to be a party to the bigger scheme. In doing that, it helps to educate the constituent to put pressure to bear on their public officials.

When you were speaking, Jim, one of the things that came to mind is that we're partnering with our subdivisions and our wildland code. We're using a lot of our folks in the Santa Fe National Forest and are partnering very well with them. The weakest link in the partnership is between my department and elected officials. It doesn't matter what kind of information I give them, if they have a 200-lot subdivision and they're thinking of assessed value, even if we say this is completely in violation of all our codes, chances are nine out of ten that there will be a variance to that because of limited resources. That's the weak link. If we can't link with the people we work for, they can't knowledgeably put pressure on local officials as to why we need to partner.

HECOX: I want to come back to healthy forests. In the work we did, looking at the Rockies, community after community wants to be a healthy community, and I'd love to see the two come together. By "healthy community," what they really mean is that they are vibrant, that they have a balance of jobs, that

their children could pursue some of the same outdoor jobs that they did, perhaps in different mixes.

My favorite example is Moab, Utah. In the fifties, the boom in uranium dried up. You could have bought the whole place for a thousand dollars. Now it's the biking capitol of the world. But what would \$4 gasoline do to that? It would be devastating. They are a monospecies economy, which is very unhealthy. I'd like to be able to run the clock back twelve months and say, "If we had used that \$3 billion to help local communities interface with their local forests to start clearing, to do trail work, do guiding work, we would have those outdoor jobs that we dream about as the heart of the American experience in the west."

We ought to be able to put our minds to work to start to interface the healthy communities, doing jobs in the forests that also heal the forests. The kicker is that we don't have a lot of commercial need for a lot of those kinds of timber. So we are caught in this conundrum where we can't make it pay for itself often. If we do, it's using a type of logging that the public thinks is outrageous. If we can't get on with the business of having forest products help heal the forests, perhaps we could take some of the money we might have used to throw at catastrophic fires to heal them.

It's a little like the Social Security issue going on now. How do you buy out the next generation so they have their 4% private contribution? Well, you have to double-pay. I'm afraid we have the same problem with our forest. We have to double pay to deal with the catastrophic fires, but I hope we begin a process of healing the forests in ways that the communities embrace and that makes the communities healthy as well.

BLACKWELL: I might add in terms of the issue of products, we're beginning to do that. But at least at the local level, we should be charged with trying to be a heck of a lot more creative than we are in terms of looking at what comes out of the forest. We're quick to define that it's either timber or biomass. It's all biomass. If we don't start looking at biomass as a product, we're caught in the same conundrum again, so I think that's critical in terms of trying to use the private sector and use local government and individuals to help us think out of that envelope again to figure out what that biomass can do to help the community, outside of just timber products.

That, to me, is another slight departure from where we have been. You have to engage the community to

do that. It's the same thing with insurance. Even if we do engage and educate the insurance agencies so they are a little bit more knowledgeable about what they're going to offer and how they are going to apply a model for determining risk in a wildland area, we also then still have to take a step further with the individuals who are getting that insurance. I would venture to say most everybody in this room has heard people say, "I really don't care whether there is a fire. I have insurance." We're doing a poor job of educating those people in terms of the emotional loss they will suffer, one that insurance never pays for.

That's another example of what we have to do as a group to go that one step beyond even that issue of insurance.

MORGAN: Hank, I'm glad to hear you talk about biomass. That's really why we live in a fire environment. A lot of our forest and rangelands are either too dry for biomass accumulation to keep up with decomposition or they are too cold at the high elevation. Again biomass production doesn't keep up with decomposition. Extra biomass fuels fire when you get hot, dry, windy conditions.

I want to switch gears a little bit. One of the issues I feel that we haven't really addressed is about wildland fire use in the back country. Right now, fire suppression is the most common management decision we're making in wilderness areas. The back country might be places where we can reach a zone of agreement about fire. I think it's probably ecologically appropriate in many cases, but I think the argument is probably cost and firefighter safety that will lead to broader use of fire in the back country.

Yet the fire managers I ask tell me that the incentives for using wildland fire have really declined and that there are strong disincentives.

WILLIAMS: Being the Director of Fire, I had better jump in. A couple of comments. I think there is broad acknowledgment within the fire community today that the large fire fight in this country is going to be won or lost on the fuels front. I believe that, and I think a lot of our professionals believe that. Even a few years ago, following the South Canyon fire where several fire fighters lost their lives, a survey was done among all our fire line firefighters, and the question that was posed was, "Of all the things that could be done to improve your safety, what one thing would be most important?"

Frankly, A lot of folks were expecting "better radios" or "better fire shelters," or "better protective gear." 78% of the respondents came back with the one thing we can do to make our environment safer: do something about the fuels.

In many parts of the country, we're enjoying some real success with wildland fire use. Year before last in the Bob Marshall Wilderness where Joel Holtrop used to be the supervisor up there on the Flathead, we're at a point now where, just in the past 15 years, there has been enough fire that we can let almost any fire burn at will, no matter how high the fire danger indices are. There are enough black spots that fires will run into another black spot. Same down on the Gila.

When you look at those, though, again it goes back to that larger public lands policy debate. Contrast that with Orville Daniels' stories to me when I was a pup working for him, about forming the Rattlesnake Wilderness Area. The boundaries cut mid-slope; it was a small unit, very near a populated area. Some of our worst wildland fire use experiences have been in very small wilderness area, many with private inholdings where they are upwind of the prevailing winds in a very volatile fire environment. How smart is that?

We're not going to fix the fire problem in this country until we better understand the dynamics of fire and the place of fire in the context of these fire regimes.

CASWELL: This doesn't take away from the need to look at this on a larger scale, but when you come back down to a smaller scale, fire use is predicated on two internal issues: culture is one, and the social and political environment that's happening at the moment is the other. I'll give you a couple of examples.

When I left the Clearwater, we had about three quarters of a million acres that were up and available for fire use—totally legal under the processes of the day. But because of the differences in the dynamics of the system, when the Clearwater was available and ready to start on that three-quarters of a million acres, if you had an active fire year, everybody else was in chaos. So Jerry, sitting in Missoula, said, "Snuff the next one. We can't have another fire on the landscape. We're out of resources. We can't let this go on."

So the decision space that was totally appropriate within the environment of those acres was taken away because of the larger picture. So you almost had to pray for a period of time when everyone was so

engaged around you and resources were so consumed in other places, you were at the bottom of the pile. You made an attempt, you failed, it got away. Then you could manage it. Not as fire use because that is a technical term, but you could manage it and herd it around a little bit and let it do its thing. That was the best time to gain acres, which is really kind of a sad state of affairs.

The other thing I would say on the culture side, internal to the agency, we looked at fire plans. I won't even mention land management plans. We looked at fire plans on the cost panel. Time and time again, even in what are touted as the best of the best in terms of state of the art with today's thinking, allocations and decisions are based on: "We have to put these out." There are always a thousand reasons why that particular prescription in that particular area on that particular forest can't happen, and we need to go after suppression as opposed to wildland fire use.

WILLIAMS: I think the best wildland fire use programs are run by people that make it happen, whether I'm thinking about Orville Daniels or Joel Holtrop. It was line officers who intervened and said, "We're taking the risk. We're going to do it." And the fire community will fall in behind when they do that.

BROWN: Since we're talking about fire and fuels at the moment, I'd like to make some direct linkages here with climate. When we talk about the history of Forest Service research and science, it's always been a triangle that talked about weather. Only very recently has climate been a buzz word. I'm glad to see it there, and a lot of that has to do with El Nino. If you want to blame the whole fire problem on El Nino, that's OK. You can do that, I guess. El Nino gets blamed for a lot of things.

But there are some direct links to this. For example, we heard some interest in doing some more prescribed burning. Well, that's fine, but under a warming scenario, one of the things that will likely come with that will be an increased number of inversions. So here we are trying to increase our treatment objectives, but now we're not going to be able to do it because of state or federal environmental standards.

One of the reasons for the warming, of course, is increased carbon dioxide. Plants like that stuff, that carbon dioxide. So we're actually seeing an increase in biomass as a function of climate change.

You hear people say that we've had a hundred years of fire suppression, but we've had some wet periods in there, which have helped increase the biomass. If we have these wet periods in among these dry periods, it will increase the biomass.

Something that is very interesting is that one of the things that is known about climate change is that there is a tendency to get an increased number of extreme climatic events, precipitation events that are larger than we've seen before, or we get more consecutive days of warm temperatures. Alaska was a pretty good example last summer. Over the last few years, I've heard more and more stories and comments such as, "I've never seen fire behave like this before." "I've never seen the fuels this dry before."

We have two physical systems coming together here, filled with extremes. I hope that one of the positive outcomes of this is related to fire fighter safety: awareness that we are getting into this extreme environment. So I hope the I.C.'s and the people out doing their jobs keep in their minds that they may be dealing with an extreme event right from the start.

FREEMUTH: Thanks, Tim. The Andrus Center was about to introduce you to one of the Boise inversions this morning.

I think it's time to segue into some questions from the audience. Put your hand up, and Marc or Andy will get to you.

AUDIENCE: The message I get from the panel is that certainly the biggest problem is the urban/wildland interface, at least presently. I don't know whether it's occurred to any of you, but in Australia, they do much of their fire work with volunteers. In Victoria alone, there are about 300,000 volunteers. I came back from Australia in 1985 after five weeks with the fire service and suggested that we look into some volunteers for just fire suppression. It occurs to me that would carry over to a lot of other things. In the wildland/urban interface, they are certainly going to take care of their own property with fuels mitigation. Once they are turned on to that, they would probably be good volunteers to go out and do some thinning and pruning in other areas because our trail system is now run with volunteers. We don't have enough money to do the work ourselves.

What about doing something with volunteers? Not just in wildlands but also in municipal areas?

BLACKWELL: First of all, at the local level, we're doing that. Firewise Communities is just one example of a successful tool. At the community level and the local level, we are having to rely on that resource. In terms of fire fighting, it's interesting to know that 85% of our fire fighters in the United States are volunteers. That's both wildland and structural.

The issue then becomes how best to use that resource. Because this is a dynamic problem and a dangerous problem, part of the issue becomes the cost and time required to make sure these people are well equipped, well prepared, and well trained to perform. Not only in firefighting, but we really have to train our communities. We found when we embarked on some of these community programs in the Santa Fe area five or six years ago, we made the assumption that once those folks said, yes, we'll treat our landscape, they knew what to do. We found out, much to our surprise, that we had some really angry neighbors looking at parking lots and also diseased trees. They either cut or pruned at the wrong time. A lot has to do with education and preparedness. We have to make sure we use the volunteers properly and adequately.

WILLIAMS: I had the privilege of being over in Australia a few weeks ago, and they offer some fascinating models. That was my second trip over there. Western Australia spends twice on fuels management what it does on suppression, but it's the only Australian state where that occurs.

In the Canberra disaster you may have all heard about a year or so ago, a problem emerged for the government of Australia in that relying on volunteers, they don't centralize very well. When you have to centralize, you have to go outside and get additional help. We've seen that in our own Forest Service many years ago when there was a real reluctance to go outside for help, whether for fire fighting or fire use.

One of the models I thought was fascinating in Australia was this whole business of personal responsibility. People are instructed to stay with their home and protect their home, not flee. When you look at the disasters in this country, whether it was the tunnel fire outside of Oakland or even in last year's fires in Southern California, most fatalities occur when people are trying to get out of there. Those are models worth looking at.

AUDIENCE: A number of folks on the panel talked about the need for personal responsibility. One size does not fit all. We need to work in zones of agreement where people can agree on what needs to be done. Collaboration, owning the problem, and owning the solution are the goals. What are the incentives we need to create and the disincentives we need to remove to reinforce those goals? Do you think there is a significant change that needs to be made in public land decision-making that would help achieve that?

WILLIAMS: First let me correct a statement. The first questioner said that the panel agreed that the biggest problem was the wildland/urban interface. I don't believe that. I think the biggest problem is the condition of the forest.

Now to your question. It gets back to something that was said a few minutes ago. We have forest plans, resource plans, county plans. As far as I know, we do a poor job in arraying and displaying the risks that come with an option or an alternative that we have adopted. I think, as a good first step, displaying wildfire risks in different planning scenarios in fire-adaptive ecosystems would be a first good step.

Regarding the insurance industry, costs must be commensurate with risks. We also have to look at what disincentives are out there. I mentioned this FEMA policy a little bit ago. We can't have fire fighters being asked to be heroes because we won't manage the land or fix FEMA or because we won't better array risk.

CASWELL: Let me add something to that from the planning perspective. This was another thing we found time and again on the cost panel in looking at plans. I'll give you some numbers here. One forest could prove it had a million acres that was in condition Class 3. The recommendation was to treat over a ten-year period conventionally. You would think they would be trying to treat 100,000 acres over a ten-year period. Ten thousand acres was the recommendation, and the reason, they said, was that we know we won't get funded to do that. So we're only going to plan for 10,000 acres. That seems a little short-sighted. Even if you never get funded for the 100,000 annually, it seems that you ought to try to do it that way.

Second, what they are really saying is, "We'll leave that other 900,000 acres to the cost of suppression

because we anticipate that probably over the next decade, 900,000 acres are likely to burn. There is a high probability. That's OK. We'll pay for it as suppression because that is a blank check."

AUDIENCE: My name is Stan Brings, and I administer the Wildland Fire Management Program here at Boise State University. I'm looking at the title of this discussion, and because I deal with foresters and firefighters in an educational setting, a lot of questions that come to me have to do with the GS 401 series and growing those people who are going to be the managers and leaders in the future.

This morning, Steve Pyne was talking about preparing according to the legacy of biological sciences. As you know, OPM right now is focusing on biological sciences for the 401 series. Hank, you talked about the need for technology in business as a frame of reference. Penny mentioned that fire is a social and a people issue. Walt indicated that it is as much a social science as a fire science, that there is need for economics and political science and the need for change managers. My question for the panel is: What advice would you offer the OPM with regard to the fields of study that would qualify for 401 for our future leaders in wildland fire management?

WILLIAMS: I'd suggest astrology.

On our first trip to Australia, a bunch of us were sitting in the back of the bus, and we were commiserating about the problems we were seeing and the ones we dealt with at home. We came to a startling conclusion that shouldn't be a surprise to most people. We figured that although there is much to be learned in the physical sciences about fire, we have to get serious about the social sciences of fire. Beyond that, we have to start taking some major steps in better integrating the fire problem we're seeing with the public lands policy issues that could better govern the laws and regs and practices that would help us do a better job there.

HECOX: I guess it shows I'm not a federal employee. I didn't understand half of what you said. But I do understand enough to know that the social sciences have a broad perspective on a much larger region than you may be dealing with in just your forest. I come back to the National Park Service versus the Forest Service. The Park Service has had the ability to keep people out. It's not an open access

resource in the way the forests are. Therefore they are able to charge. Therefore the Fee Demo program has been more successful, less resented.

The Forest Service has a problem. We all own it, and we all think we can freely roam, so why in the hell should we pay for it? We have to find another source of revenue. In doing that, we may close the circle and empower people to think about that forest as both something they pay for and care for. As long as it's free, we abuse it. Larry Summers, President of Harvard, said, "Whoever washed a rental car before returning it?" The forests are the same way. We need to provide some ownership. We need to get people involved.

There has been lots of discussion about community involvement, about the social sciences, and about the vagaries of individual incentives as well as America's wonderful tradition of volunteerism. We are organizers and volunteers to a degree that no other society has seen. We have to capture that.

JOHNSON: As the moderator who did an entirely different kind of panel than you've done, may I ask just a show-of-hands question: It's hard to think about the next hundred years of the Forest Service. Let's think about the next ten years. I'm wondering if any of your panelists really believe that there is a chance to make improvements on these issues in the next ten years. A show of hands.

[NOTE: All panelists raised their hands except Dr. Brown.]

BROWN: I'm president of the Pessimists' Society.

FREEMUTH: Please thank our panel.

* * *

FIRE AND FOREST HEALTH

The Forest Service's Continuing Management Challenges in the New Century

THURSDAY, NOVEMBER 18, 2004
JORDAN BALLROOM, STUDENT UNION
BOISE STATE UNIVERSITY

3:00 PM

Discussion: **Things Could Get Better: *Imagining the National Forests in the New Century***

JOHN C. FREEMUTH: The topic of our last panel of today is Things Could Get Better. I was fortunate to be invited to speak last January when all the supervisors got together in Nebraska City. When Dave Tenny talked earlier today, he talked about the pledge signed by all the supervisors. The Chief didn't know that was coming, but what Dave didn't tell you is that when it was presented to him, he was pretty well overcome with emotion. My point is that we can certainly talk about government policy and making an agency better, but it's pretty rare when you see such esprit de corps in an agency and that degree of love and respect for a chief. It looked to me as though the agency was fired up and had turned a corner. I thought that would be a good way to introduce our theme. Things could get better, imagining our forests in their second century.

We have a great panel to help us do that. Jon Oppenheimer works for the ICL. He is their fire policy leader, and he does other public lands issues. Before that, Jon was the Forest Service's budget analyst for Taxpayers for Common Sense, so he brings a long background of studying Forest Service questions.

Next to him is Louise Milkman, who is the Director of Federal Programs for the Nature Conservancy in Arlington, Virginia. Before that, she was an environmental attorney in the Environment and Natural Resources Division of the Department of Justice. She brings both a legal and a policy perspective on questions of forest management and other environmental issues.

Next to Louise is Chad Oliver, whom many of you know because he had a long career at the University of Washington before moving over to Yale. Now he is the Director of the Yale Global Institute for Sustainable Forestry and has done some groundbreaking work on relating silviculture more clearly and closely to ecological systems in our forests.

Next to Chad is Marc Brinkmeyer, who is the owner and president of Riley Creek Lumber, past

chairman of the Western Wood Products Association, and president of the Intermountain Forest Association, also one of the sponsors of our conference today.

Finally, next to Marc is Wally Covington, and many of you know his work. Some of you may remember when Secretary Babbitt came to this room and gave a fairly major speech on fire and forest policy. He was the Secretary of Interior, but the person whose work he most relied on as to why we needed to do things differently was Wally Covington. Many of you are aware of Wally's work.

To begin, each of you give us three or four minutes of what you think needs to be done to make things better for the Forest Service in this next century. Jon?

JON OPPENHEIMER: Just to start off, John referred to ICL. For those of you who are not from Idaho and might not be familiar with that acronym, it stands for the Idaho Conservation League. We're the largest statewide conservation group in Idaho.

A hundred years is a long time to look ahead, and I feel pretty confident that things are going to change quite a bit over the next 100 years. When I was thinking about the question of whether things are going to get better over the next century, I didn't limit myself to fire and forest health. In these opening remarks, I will refer to some other things.

The question of "better." Obviously, that means different things to different people. For the purpose of this panel, I thought I would focus on the mission of the Forest Service: caring for the land and serving people. We have to work with increasingly scarce commodities, especially with regard to forests and public lands, and there are growing populations that want access to these commodities and resources—not necessarily commodities in terms of timber and board feet, but recreation, clean air, clean water, and other things. The issues are going increasingly to be the commodities coming off our public lands.

In addition to that, we will see increased competition for appropriated funds. Looking at the budget, there will be a serious crunch coming up in the next few years, even within the next decade. Are there going to be funds to deal with these kinds of things? I think that's a big issue that we are going to need to deal with.

In order for the Forest Service and public land agencies to be as effective as possible, they need to be as pro-active as possible. Looking back at the history of the Forest Service and just over the last 20 or 30 years since I've been alive, they have been primarily crisis-driven. The 1988 fires, the 2000 fires, the dramatic rise in ATVs and motorized recreation, concerns, such as old growth, clean water, endangered species issues. These are things we ought to be able to see coming 20 years out, but unfortunately that's not the way that Congress is set up or the American people are set up to deal with these things.

If the Forest Service had come out in 1970 and said, "OK, we're going to put strict regulations on ATVs, it would have struck people as odd because there wasn't a crisis out there. But I think this is the way we need to start thinking.

There are three points I want to drive home: be pro-active, not reactive, and try to think ahead about what the issues will be. We heard some of that this morning: development in the interface, population growth, and climate change. These are some of the things we ought to be trying to tackle now, and I don't think we're giving enough emphasis to those issues.

Second, do it on the cheap because the money will not be there. We need to figure out a way to do these things without the funds that we have available to us now.

Last is to try to get out of the mold of fighting the old battles. We need to get away from thinking that "roadless" or old growth are the big issues that we need to think about and fight on right now. We need to try to get out of the mold we've been in during the last twenty years or so and start doing things a new way.

LOUISE MILKMAN: Since this is the optimistic panel, I'm going to tell a success story. First, I want to say a few words about the Nature Conservancy since some of you may wonder where we fit into this whole fire management picture. The Nature Conservancy has been in existence for about 50 years, and we do work in all 50 states, including here in Idaho, and in many places around the world.

Our mission is to protect biodiversity, and it has become clear to us that altered fire regimes are one of the top threats to biodiversity, not only in the U.S. but worldwide.

So the Conservancy has a real stake in altered fire regimes and restoring them. We've used fire on our own preserves for about 30 years, and we're working increasingly with federal land managers, including the Forest Service, on larger landscapes to reduce hazardous fuels and restore fire-adaptive ecosystems. We currently are doing a lot of prescribed burning, about 200,000 acres a year, some on our own land, some on our partners'. We have about 75 burn bosses working for the Conservancy, and we are doing quite a bit of training as well.

Our goal is to work with partners to restore fire-adaptive ecosystems in large scales. We're struggling, as an organization, with many of the same challenges with which all of you in the Forest Service are struggling.

I want to give just one example of how I think it's been working really well. This is a project that started in the field in the Bayou Ranger District in Central Arkansas. It's an area where there was a concern about restoration of oak ecosystems. Some Forest Service and Nature Conservancy ecologists got together and started studying the area and talking about desired future conditions that would incorporate both ecological and social goals.

They then did the hard work of talking to the community, bringing in as many partners as they could, educating people on the role of fire in the ecosystem, and trying to understand what the interests of individual community members were and how those could fit into the Forest Service's goals. What emerged from that was a 60,000-acre restoration project, which really has the support of pretty much the entire community. It's now in the Forest Management Plan for the Ozark National Forest, and they are treating 20,000 acres a year, mostly through prescribed burnings and thinning.

I want to highlight one important part of the program. They have a really rigorous ecological monitoring program by the Ranger District, so they are able to test their assumptions and, when their assumptions are wrong, to adjust their action. It's been cost-effective and allows the community to see what's happening.

When the public saw what was being achieved on the Bayou Ranger District, they supported it and supported expanding it to other areas on the

rest of the Ozarks and Washtaw National Forests in Arkansas. Now there is a 500,000-acre restoration project in the Forest Management Plan. It's mostly restoration that is happening through prescribed burning but also through watershed protection and invasive species control.

The reason that the community supported these projects is that they started to really see the benefits of this collaborative restoration-oriented approach. This gets to a lot of what big things need to be addressed in the future. The communities are safer in the wildland/urban interface part of that area. The forests are being restored at large scales; watersheds are being protected; and people have a much better understanding of fire. They still have a ways to go, but it's better than it was.

People are seeing a difference in their communities for game animal habitat, for wildlife habitat, and for recreation. They are starting to get funding in from the National Fire Plan, which is always a help. It's really been a success, and one thing that has made it very successful is this adaptive management program, which has been a way to build trust within the community, bringing them along at every step of the way in terms of the ecology, the on-the-ground science.

The Arkansas Project is part of a larger project called the Fire Learning Network, and I've left a little material out front on that. It's a nationwide project in a series of places around the country where communities are coming together to work on fuel reduction and restoration at very large scales.

The big things that we all need to work on—and some of these have been mentioned—are funding in the long-term, funding directed at restoration, more incentives or direction to the agencies to do adaptive management, more rewards for doing wildland fire use and prescribed burning within the culture of the agencies, and more true collaboration. That often means a lot of up-front investment but it really pays off at the other end, including a lot fewer NEPA headaches. Multi-jurisdictional planning among the federal as well as state and local agencies and private landowners—those are the big things.

CHAD OLIVER: I want to first build on a couple of things that were said earlier in the day and then get to the issue of the future. We can have quite prosperous forest areas throughout this country if we have a realistic vision. I want to first get to that question of where is our constituency? That brings me

to an interesting question and an interesting point.

My position is the Pinchot Professor at Yale, and the money that pays my salary is part of the interest on an endowment given by Gifford Pinchot's parents to Yale. In that sense, I feel a close connection with the Forest Service. Also, for years, I taught the students going through their certification program, and I've worked with them in several ways. I have a great admiration for them, and I am really glad to hear that the internal esprit de corps is becoming more positive.

I want to bring up a little bit of tough love. I'm not sure I would agree that one of your strong supporting constituencies is the local communities. We just had a meeting at Yale where we had local community leaders from California and Oregon and Washington through the lake states in the northeast and into the south. They were not very enamored with the Forest Service. They said the Forest Service people were absolutely great, but the Forest Service itself could be thought of almost like a fortress Forest Service. One hits a brick wall relative to it. The problem seemed to be that the Service felt it had to control everything.

I noticed a little bit of it here. When any problem came up, it was said that the Forest Service will have to answer it or will have to handle it. Listen to us, and we want to get your opinions on how the Forest Service should do this. I would encourage instead a different approach. Let's develop a vision, look at it, and then ask how it can best be achieved. Some part will be best achieved by the Forest Service. Some by collaboration. Some by others. I want to bring up that point. I can't say I am right on it, but it's something I wish the Forest Service would look into.

The United Nations Food and Agriculture Organization's forestry segment, which is worldwide, had this problem for a while. I met with their chief shortly after they had recognized the problem and changed it. They were starting to become a monolith, and they are much more effective and enfranchising now.

In terms of constituencies, for the Forest Service, I'm not sure the local communities are, but I'll get back to that.

The large timber industry that owns their own timber lands is not a constituent of the Forest Service. Quite frankly, there is already an awful lot—some people would say too much—wood in the world, and it's not in their best interests to have the Forest Service producing wood to compete with them.

Now the small timber industry that you could build up within the local industry is something that would be a constituent of the Forest Service. Unfortunately, one of the constituencies of the Forest Service right now is getting to be the fire/industrial complex. That's not really a good one to have as a constituent. So we need to start looking for a vision. I'd like to propose one. First of all, Steve Pyne said something very important when he said, "In India and in the southeastern United States, they don't have that big fire problem because they have a lot of rural local people being active." That may be a model to consider right there. Rural local people may be the key to a lot of this, something that Walter Hecox brought up.

What we need to look at is the vibrancy of our local rural communities. Right now, they are very much in decline. Their problem is that without the revenue from timber—and this is especially a problem around national forests not only because they don't bring timber but they don't pay their full share of land-based taxes compared to private land owners—the rural communities are hurting. They are losing their infrastructure of schools, hospitals, roads. This is occurring nationally and also internationally. It's a problem many people are looking at and asking, "How do we address this globally?"

I suggest that the Forest Service remember that its aegis is not just the national forests. It's what is the vision for all the forest lands in the United States. Let's start with that point of view.

Second, much of the United States does not have national forests within its area. Parts of the east are very largely private, and national forests are not significant. But they have the same problems with rural communities: economic decline, overcrowded forests. In those overcrowded forests are lack of habitat, problems with fires, problems with watersheds. Why don't we look at a global view and start with a vision?

It's interesting. People like to live in cities, not because the city is this very mechanistic, archaic, utilitarian phenomenon, but cities are beautiful. They are situated on a natural feature, usually a river or bay or mountain or something. They have parks, museums, and other amenities. They are vibrant. You can go to theaters. There is architecture. The more you learn about it, the more exciting it becomes. They even have it the same time they are earning money. They have factories right there. They have offices. So their actual income is associated with it. They even

change. They demolish buildings and build buildings. Before they do this, they usually have a mock-up, a long pre-planning, and a long pre-warning. The main thing is that people like to stay in cities and spend money, so you have an economic turnover.

The difference with the rural communities is that rural communities could be that vibrant. Instead of our crowded forests, we could have a diversity of old growth, savannah forests, closed forests. We could have forests where there is production going on. Forests change by the hour and by the season and by the decade. Even where we are doing forest operations, plan them, visualize what's happening, show what will happen in the future.

The one difference right now between rural and urban communities is that the rural communities give away for free a lot of the things that they provide: the environmental services, the habitat, the water quality, the fire protection, etc. This is getting to be recognized both nationally and internationally.

We need to change the issue and make the first question, "How can we return our rural communities to a vibrant condition so that they can provide all the ecological values?" You could use the Montreal process or sustainable forestry criteria, biodiversity, commodities, forest health, soil and water protection, carbon sequestration, and socio-economic viability.

The communities could provide that if we could franchise them and give them the right tools. With that as a vision, then we could ask ourselves how all of us could work together. Once we begin asking that, I think we would find a very strong role for the Forest Service on both public and private lands.

MARC BRINKMAYER: Yes, we are small compared to Boise Cascade, but our company is private. We take our business seriously. Being a part of forest products is something I thoroughly love. I'm very passionate about it. I come with my family from a long line of farmers from Iowa. We migrated from Germany, and our family farm has been in the family from the 1400's. My cousins manage it now. So we are very much aware of what it takes to take care of land.

In our company, we're about growth although our fee lands are not all that significant—we have 50,000 acres. What we care about is growth and how those lands are cared for long term. I will say from the get-go, fire is not in our life. We hear about it here today, but for us, fire is devastating, not only to the land but we lose the growth in the process.

They talk about fire salvage, but fire salvage is something that doesn't work for us. Once a log is charred, it's very difficult for us to use it. It doesn't fit in the paper process, and what we do at the end of the day is manufacture precision rectangles that everybody loves. You hear about Wal-Mart, second largest retailer is Home Depot, and Home Depot's prime product is lumber.

Sixty billion feet of lumber is used each year in the United States. Two-thirds comes from the west and the south. One-third comes from Canada. About two billion feet comes from overseas. A couple of weeks ago, I attended the European Softwood Conference, and Europe wants into our markets. We are truly global. Interestingly enough, the European Union production capacity is within two million cubic meters of the United States and Canada: 115 million cubic meters in EU; 117 million cubic meters in North America. So we have a small productive capacity although we have a great market.

With respect to our company, everybody loves lumber. Unfortunately, as much as we work against it, logging is politically incorrect. There is very little we have done to dissuade that. The Forest Service hasn't done it; we as an industry haven't done it. We work at it, but we don't do a good job. It's a problem.

In our company, our success is technology. We have a credo we call "T-cubed." Talent. We have to have absolutely the very best people. To attract them to North Idaho, we pay very good wages. Technology. We have the latest in fiber optics, computer scanners. On a 20-foot log, we have 20,000 data points that we use to manufacture rectangles. We have curve sawing. We can saw with the curvature of the log in a way that will yield a rectangle that is structurally superior. High tech: we constantly change, and our software budget every year is significant. We pay a lot of attention to it, hire the best software engineers.

65% of our cost of doing business is raw material. So when we talk about economics, we have the opportunity to bring funds to the Forest Service. At Riley Creek, where does our raw material come from? Interestingly enough, in our plans for our company, we don't rely on the Forest Service at all. All of our resource studies are done without the Forest Service. Why? We can't count on it. We have bankers and people who lend our industry money, and we can't operate, not knowing whether the raw material is going to be there.

You've heard all the reasons why today. I believe we can come together and deal with some of those

issues. When you look at the possibility of the economics that we could bring to the Forest Service, those are some of the problems that will have to be dealt with.

We are blessed in North Idaho with a large industrial land base. We are also blessed in Idaho with an Idaho Department of Lands, and it is where it is today because of the leadership of Cece Andrus several years ago. It's a robust agency; the revenue is used for schools, and the land is managed for highest and best use, which happens to be timber production. Granted, the state Department of Lands is somewhat controversial right now, but I believe that, too, will pass.

Not only do we have it in the state of Idaho, but we also have it in the state of Washington and the state of Montana. In our company, we have four mills. We manufacture structural lumber for 50,000 housing starts a year out of our headquarters in Sandpoint, Idaho. We are able to source some wood out of Canada, but we operate primarily from Colville, Washington; Kalispell, Montana; and Lewiston, Idaho.

The Canadian issue is serious to us, and it's serious in several ways. The softwood lumber dispute that you hear about has to do with economics. In our Moyie Springs mill, which is 20 miles south of the border, a truckload of logs is \$2,000. You go 20 miles north of the border, and that same wood is \$800. Canada's timber, in British Columbia especially, is for social values, and they don't have the market system that we have in the United States for valuing stumpage.

Canada has a serious issue—and I see that Stephen is looking into the fire history in Canada—with bug kill. They cannot get their arms around it. In order to stop the beetle in central B.C., it takes a solid, hard freeze for 14 to 21 days, and they haven't had it. In fact, we're seeing an increase in lumber prices right now because Canada—Ontario and up in the Muskeg area, because of the temperatures Tim talked about—they can only log when there is frost on the roads. Now the roads aren't freezing, so those mills can't log and can't operate.

So with respect to weather, it's almost the agony and the ecstasy. We're having a strong housing market, the agony being that this environmental issue we're scared of and can't get our arms around is probably ultimately what is going to bring us all together as we strive to figure out how to deal with it.

In addition to the Canadian issue, the only thing

that is keeping the Europeans out of our markets right now is the currency and the devaluation of the dollar. Those of you who have traveled in Europe know that it's huge and it's going to continue to get worse. In addition, the Europeans really don't care for the Americans right now from the experiences we had.

Lastly, we're going to be dealing with an environmental and energy issue. The price of oil was up again yesterday, and all that trickles down to our cost of doing business. In addition, it has to do with our cost of housing and shelter. That's the good news for wood because wood pricing is stable. Steel, however, has gone up significantly, and with the increase in oil prices, plastics have gone up significantly. Those of you who have built a house recently know what the petrochemicals do to the cost of housing.

Coming on the horizon will be the BTU value of our wood fiber. As we deal with the forest health, biomass is something that has an opportunity to play a significant role. Biomass is close to being economical without any type of government subsidy, much unlike wind or some of the other sources of energy.

So as we look forward, I myself am optimistic. I think we're going to struggle with some issues, especially land issues on the ground—fire as well as the harvesting issue. But I believe the outlook is good because people care about the process, the manufacturing process, and procurement. We have a superior product that we manufacture, so as I look forward to what my contribution is, I hope that when someone looks back one hundred years from now, they will conclude that we were good stewards and that we did come together to take care of this valuable resource that is good for all of us.

WALLACE COVINGTON: The first point I'd like to make is that it's important that we focus discussions on fire and forest health, which is the central goal here, in the context of comprehensive restoration of greater ecosystems health. I want to define what I mean by "greater ecosystem health." It's a fairly new term, but by "greater ecosystem," those of us in conservation ecology typically mean large landscapes of several million acres in size. The ones I've been working with are two to eight million acres. They are linked by geographic processes with similar climate, watershed structures, wide-ranging disturbance regimes, also wide-ranging wildlife, and

human habitat uses. So they are cultural landscapes as well. When we talk of greater ecosystems, we talk of humans as part of that. Like the old "Oklahoma!" musical, "we know we belong to the land." That's literally true, and we tend to lose sight of that.

So when I talk about focusing discussions of fire and forest health on comprehensive restoration, it's more than just fire regimes. It's disturbance regimes, regimes of cultural practices; it's healthy human communities as well as healthy wildland communities.

It's my view—and I know tomorrow we will have a couple of panels discussing this—and has been for some time that the number one task of the Forest Service and other federal land management agents has to become, within the next one hundred years, restoring and enhancing the economic, ecologic, and social integrity of greater ecosystems. I see this in the collaborative groups I'm working with.

Just one little story here. I'm from Northern Arizona University. It's located in Flagstaff, Arizona. We have the Greater Flagstaff Forest Partnership there, which started trying to figure out how to treat the urban/wildland interface as part of the habitat of Flagstaff. You might think that a group like that would get together and decide, first and foremost, to protect human nest sites. Those are the houses that Marc's company produces enough material for 50,000 of them. They didn't really focus on the nest sites so much as on the greater habitat.

So the first urban/wildland interface treatment that the Greater Flagstaff Partnership did was upwind of Flagstaff and up slope, the opposite of where it should be to protect Flagstaff. That's because they treasured the San Francisco peaks. Some of them referred to them as "the postcard that is the backdrop of Flagstaff." That was more important than losing a few houses.

I live southwest of Flagstaff, and I was kind of militating for some treatment southwest of my house. One of the outcomes of this was that people really do care about much more than just the immediate area around their houses. A couple of years later, we were doing this greater ecosystem assessment in the western Mongolian Plateau, about 2.2 million acres, and we were addressing the question, in collaborative process, of what are the critical landscape elements, those elements that are important to the long-term sustainability of these greater ecosystems? We looked at the Mongolian Rim, this big swath of Ponderosa pine forest through central to northern Arizona.

During the Rodeo Chidesquai Fire, about half a million acres along the Mongolian Rim, there was no reason that fire shouldn't have burned up half of Flagstaff and the communities around Flagstaff and the San Francisco peaks. The question was: What can we do today to try to ensure the sustainability for future generations of the greater ecosystem around Flagstaff?

The next thing we got into was the Community Wildfire Protection Plan, using a geographic information system. The Community Wildfire Protection Plan for the Greater Flagstaff area had a footprint of 850,000 acres. They clearly identified the community of Flagstaff as more than the nest sites. It's the whole habitat. This makes perfect sense when you look at it from a human ecology sense, much as you would from a wildlife ecology perspective.

To recap, I think it's important to remember, whenever we are looking at a problem like fire, that it's not just about fire. When we look at forest health, it's not just the health of those parts of the greater ecosystems that have trees on them and can be classified as forest. It's about comprehensive restoration of the ecological, economic, and social integrity of entire greater ecosystems. Thank you.

FREEMUTH: Some of you were working toward a different mission for the Forest Service, whether it comes as part of a larger socio-economic conversation about helping communities and not just the biological ecosystems. I heard the word "collaboration" a lot. Anybody want to elaborate on that? Can it be done without legislative action? Is the Forest Service capable of evolving internally by listening and changing? What would jump-start it?

COVINGTON: Of course, I'm a professor and teach forest ecology, ecosystem management, and a bunch of other stuff. One of the important parts of educating young foresters is to give them a good sense of the history of the profession. One thing that is obvious when you read the history is that it's always been about more than federal land. If you look at the mission of the Forest Service, part of it is the National Forest System's land, and, of course, there is state and private forestry and lots of other missions as well. But even within the National Forest System's lands, district rangers, forest supervisors, and practitioners have always been concerned about the greater ecosystem. This is not some novel idea; there has always been a recognition of the importance of healthy and

sustainable communities. So in a way, what I'm suggesting here is kind of "back to the future." I don't think it's necessary to have legislation to do that. I think it's embedded within the profession.

OLIVER: I'd like to turn the question around a little bit and say what is needed in order to get our forests viable. What you need, of course, is people knowledgeable about the ecosystems themselves. You need a lot of workers in an infrastructure of labor, mills, road-builders, fire fighters, fire managers, planners. You need a certain amount of larger infrastructure that, back in the 30's, was provided.

I grew up working for my father's company in South Carolina where the main times we saw the Forest Service was in research meetings. There, that was their mission. The SCS provided a lot of the mapping capabilities, and the state provided the seedlings. It was private ownership.

I think what we ought to do is first ask what infrastructure is needed before we start asking what should this or that organization provide. We will be much stronger by looking at it that way.

The secret is that if you look at the demographics of this country, the inland west doesn't have a strong political voice, but if you add all the rural forest communities in this country, you get a stronger voice. What you want to do is seek the commonalities first because they all have the same problems. Only then can we start answering your question.

BRINKMEYER: Just looking at from a manufacturer's point of view—and I know that when you say "manufacturing," some people start deducting IQ points—how are you going to fix the process? You have all these bright people—and we're seeing them today. This is the first time I have done one of these, Cece, but it's kind of exciting to me.

It's almost a battle, however, to be on the ground logging. When you look at the Forest Service contract to do business in the woods, it's a significant document. No one except Gray, who talked about it a little bit, has said if you don't fix the quagmire of all the litigation and how things can be stopped, how do you get any sense of satisfaction in doing your job? You put passion into these things, and I get a little passionate, but at the end of the day, I get to go home. I haven't quite done it right, and maybe I have to do it over, or I have to get up and hit it harder the next day. But no one tells me I can't do it. When do you come together?

Maybe that's the next one, Cece. Fire is one thing, but fire is a reactionary function. Something has to happen for all this stuff to come together. But where is the leadership going to come from so that litigation doesn't become a show stopper for every good idea or every element of substance that comes down the road? I believe the people's side. I think they are very very bright people, and the University of Idaho and other institutions represented here are training good professionals to take this on.

One thing we are learning in this process is that there is room for all of us at the table. There was a time the manufacturing side produced massive clearcuts because that was the economical way to do it. That, to me, single-handedly really had a negative effect on our industry. That drive from Ellensburg to Seattle, where you go through all those railroad lands that were clearcut was a terrible advertisement for what we did as professionals. Yet on some lands that we've looked at, down in the St. Maries area where the railroad clearcut in the 40's and 50's, you might say, "That wasn't so bad after all." The professionals are saying that as well, but it's certainly something you can't talk about in some social settings.

It seems to me that, unless we're going to really deal with the legal issues, set them off to the side, or give us the legislation we need to fix it, how can we ever advance any one of these models?

FREEMUTH: It's been said that we don't have a forest health problem; we have a legal health problem.

BRINKMEYER: Does that bother anybody besides me?

FREEMUTH: Louise, you've worn that hat. Do you want to comment?

MILKMAN: Wearing my former Department of Justice hat, I feel your pain.

BRINKMEYER: It's just a reality. It isn't even pain.

MILKMAN: The litigation is very frustrating for the Forest Service, for many in the community. The NEPA process is exhausting. I've been with the Nature Conservancy for a couple of years, and I've talked to a lot of people who are working at larger scales to restore fire adaptive ecosystems, people

within the Conservancy and people within the agencies. This is a process that is just beginning, so I don't want to oversell it, but what I hear over and over again is that, in these particular projects, NEPA really hasn't been much of a problem, and litigation has not been a problem at all. That is more true in the east than in the west because people are a lot more accustomed to living with fire in the east and the south.

When people get together and are actually part of deciding what the future of the ecosystem should be, when they are given a chance to really understand the science and to express their concerns, when the NEPA documents come out, they are not a surprise. Everyone knows what's in there. I'm not saying that there are not sometimes people who come in and who weren't part of that process or who feel that their needs weren't addressed and appeal or something. But in our experience, it really is a way to get at this frustrating problem of going a long way toward trying to get some work done on the ground and then being stymied or delayed.

OPPENHEIMER: Just getting back to your original question, one of the important things that the Forest Service can do that will be critical to their being able to function in the next hundred years is to draw some really hard lines that aren't going to be easy politically to draw. The Forest Service needs to say, "Here is a line we're drawing. If you put your house on the other side of it, we're not going to be there to save you from fire. On this side, we will work with the county and the state to try to protect the structures." There needs to be a clear delineation between the wildlands and the urban or developed landscape. That's one of the things we're going to be struggling with. If we don't take some hard action now, there will not be a lot of hope in the future that we're not just going to continue burning up people's homes and continue to see these issues really dominating land management policy.

FREEMUTH: Let me put you on the spot a little bit. ICL occasionally sues—there is no question about that—but ICL is also in the middle of the White Clouds and the collaborative effort on the Owyhees. So why do you sue? Is it strategic? Or do you feel as though the collaborative stuff hasn't worked? We know there are all these venues to sue, but why does it happen in a moderate organization like ICL, which is not considered to be sue-happy?

OPPENHEIMER: I hope that we're not considered sue-happy because it's a very last resort for us. The key thing—and I know this won't work with every single environmental or community group that's out there—is early collaboration and communication. There will always be people who throw grenades at the last minute, and there is probably not a lot you can do about some of those individuals or groups. But there are a whole lot of groups that are willing to collaborate, to sit down, to try to figure out where these good projects are, where we can get the best bang for our buck, and try to work with the agencies.

Obviously, that's not every group, and there will be frustrations. I don't think that there will be some fix coming out of Congress anytime soon. There will be effort, and it will be interesting to see how those proceed, but I think the bottom line is that communication and collaboration do have some potential, but it has to be honest and early. There are definitely groups, including the Idaho Conservation League, that are interested in those efforts.

BRINKMEYER: Does the ICL trust the Forest Service?

OPPENHEIMER: There are definitely trust issues. [Laughter] A lot of it comes down to personalities and, as I said, communication. There are individuals in the Forest Service with whom we have great relationships, and there are individuals in the Forest Service with whom we do not have great relationships. So the bottom line is: communicating early and often, being honest about what you are truly after, and trying to find, as Penny Morgan was saying, those areas of agreement, building trust there, and then moving on to some of the more challenging issues.

FREEMUTH: Let me change the subject just a little bit. I've looked at the registration lists, and I know there are a number of folks in here who are county commissioners, mayors of towns like Salmon. The Andrus Center, a few years ago, did a conference on the fate of rural Idaho. We had some people like Vaughn Grisham, whom some of you might remember as John Grisham's cousin, who had these wonderful strategies about how you build a community and reinvent its economy. But a disturbing thing that came up is that the rural counties that are close enough to the urban areas

to have some sort of interface are doing well. The ones further away are not, as a general rule. They are depopulating in some cases.

Is this where there is a role for the Forest Service to be creative, to help those communities? I'm not talking about re-tooling, but perhaps figuring out ways to deal with the changes and to survive? Chad, I thought you were suggesting some of that.

OLIVER: I still wish we wouldn't say first, "What is the role of the Forest Service?" I wish we would start by saying, "What do these communities need?" Then go from there to ask who is in an appropriate place to provide it.

It's a worldwide phenomenon, by the way, in developed countries. We don't have in this country now any more young people than we had 15 or 20 years ago. The population is growing because the number of old people is increasing. If you look at a population pyramid, we basically have a straight stack up to 45 years.

In about another 25 years, we will have a lot more old people, but we're going to have an interesting economic situation. There will be as many people leaving their homes as new families moving in. So we are not going to have this new housing development or new furniture buying. There will be replacement, depreciation, upkeep, etc.

So we will have an interesting time in our society. We don't have the situation like Europe's where they actually have fewer young people than they had a few years back. The question is that with less of a need to develop new infrastructure, will we have relatively stable population distributions?

Also, as the rest of the world becomes developed, then the prices of fuel and everything else will go up, and resources will be more expensive. So we will end up with people having more leisure time but also resources will be more expensive. We may even go to a 4-day work week. That's one suggestion. Then we'll be choosing places to live, and what we live in will be very important.

The interesting question will be how many of these large homes are we going to have? What rural communities will be viable at that time, and how do they become viable? It's partly to be a resource and non-resource issues.

If you have a viable community or want one and you're in a region of forest management services—everything from providing habitat, safe areas, water quality, esthetic beauty—they are all things that

make up the quality of life. Quite frankly, the whole developed world is struggling with how to provide these to rural communities. In areas where the Forest Service owns a lot of the land, it will naturally have a large presence there. In places where the Forest Service doesn't own much land, it may very well be there also if they are the best provider of some of these other services—the technology, etc. That's an open question.

Looking at one hundred years from now, we could make our rural areas as pleasant to live in as our cities. A hundred years ago, we could have said the opposite.

MILKMAN: I have a question on this issue of rural areas. We've talked some about the need for fuels to be taken off the land in the intermountain west, maybe more in the southwest. There aren't necessarily economic incentives to do so right now. That is a big piece of the problem right now. I'm wondering if Marc and others think that there does need to be a policy change to ensure that there is the kind of infrastructure around rural communities or other communities to be able to support removing huge amounts of fuels, either for energy or other uses.

BRINKMEYER: Those infrastructures are already there in north Idaho where we have the timber industry.

MILKMAN: Are they prospering? If they are not prospering, what is stopping them from moving large volumes of material?

BRINKMEYER: Again, in our working circles, we have a vibrant timber industry. In North Idaho and in western Montana, eastern Washington, we have the infrastructure in the logging and the manufacturing community. We still operate in our business where necessity is the mother of invention. As the price of power increases, biomass generation—for those of you who don't know much about co-generation, it's not as efficient as combined cycle natural gas—the BTU value of biomass will increase. Again, it would not need to be subsidized. We're not that far away from it.

But you asked me an infrastructure question. The infrastructure does exist in the west and in the south, a little less in the northeast.

OLIVER: Can I just say very quickly about the infrastructure. People are not always looking at these

environmental services being paid for on a one-for-one basis. In Europe, France apparently subsidizes a lot of its traditional agriculture because people like to drive through the countryside and, instead of seeing a Taco Bell in the middle of France, they will be able to get some French bread and French wine. I understand we're doing that in various parts of this country.

It's a matter of what things should be paid for by the public, and what things should be paid for by the private sector. In this country, we feel there are certain things that are best left in what some people call a "socialist" condition: libraries, fire departments, school, and roads. We need to decide which of these things is for the public good.

FREEMUTH: Let me open it up to questions.

AUDIENCE: I'm a county commissioner out of Lemhi County. We talked about the rural communities in pretty nebulous terms. I'd like to put it in terms of communities and human beings. As you said, the infrastructure is there. Where we are, we have a small diameter mill; we have two post and hole plants; and a house log construction outfit, two guys who have their own little private mill and can custom cut. At the moment, they are all starving for material. In fact, last year, they were all importing from Montana and Canada, trying to get material.

We are now actually harvesting some local timber for their use, and it is coming off BLM ground. There is still nothing off the Forest Service although Walt Rogers is here, and we're trying to get there.

We talked about community collaboration, and it's there. Idaho is one of the leaders, particularly among the counties. I see Peg Pilichio and Brian Shiplett here; I serve on the Fire Plan Committee for the state with them. We've made the counties the lead agency in that group. All 44 counties presently have completed their wildfire mitigation plans or are very near to it. All of them have been done collaboratively; all of them involve identifying areas of federal land where the fuel needs to be reduced.

A classic example: In Lemhi County, we identified as one of our top priorities the Gibbonsville area. You have to remember that Lemhi County is 92% federal land. Our partner to the south, Custer County, is 95%. Between those two counties, we have six million acres of federal land. There are only 12,000 people there. When we talk about trying to regulate and draw the lines in areas not against federal land, there isn't any. We're 8% private land up there.

If you're going to build, you will be against federal lands. There are none of these zones to be drawn.

Gibbonsville is a classic example. It's a strip of land about half a mile wide and four miles long. It's over-fueled horribly. The community has been evacuated twice in four years. We've had a fuel reduction plan from the Forest Service ready to go since 2002. We're now on our second set of appeals.

We talked about the money necessary for razing this. We spent 40% of our money from the Forest Service on fire suppression. Anybody have an idea on what percentage we spend on environmental regulation and litigation costs? It will rival it.

You're dead right. Somewhere along the line, this litigation process has to stop. In Idaho, we have reached the point of community involvement and community collaboration. What we do not have is community empowerment. We can reach consensus together on Gibbonsville and the areas around Salmon; we know the areas where fuels have to be reduced. Our only option is that we do it through public lands grazing, and even that is under attack today.

As far as going out, gathering the materials to reduce the fuels, and using them as a merchantable product that benefits the valley as a whole, that benefits the whole country, it can't be done. The reason is simple. There are only 12,000 of us that can get involved in these collaborations. There are a lot more people in Missoula, and every one of them is smarter than we are.

FREEMUTH: The fundamental question here is community empowerment, national lands, national interests. Is it possible to do both so that these guys get something without it turning into local/national politics? Is there a solution to this?

AUDIENCE: There was an incident in north-western Montana a couple of years ago. They agreed on a community basis to cut 1% of the timber per year, and it was objected to violently on the basis that in 100 years, it would all be gone. My question is: how do you negotiate with people who don't understand that trees grow?

OLIVER: I really wish we had someone either in policy or in the Forest Service to speak on this. Let me just tell you the type of tools that are being developed are ones where we could manage the forest through what is the equivalent of total quality improvement.

You don't hire an architect who says I will build you a \$200 million skyscraper. Trust me. We have the ability to take a forest landscape, plan the management, and show visually what we expect it to look like every five or ten years into the future.

Then you could use this as a start and say, "Here is what we expect, and you can monitor us by going out there and telling us. We want to know if we're not on the right track because then we can take steps to improve it." There are ways to get around this business of saying, "I know what I'm doing. You'll like it a hundred years from now." You could show on a landscape that by cutting 1% of it every year, the rest would have grown, and you would always be in timber. These are possible. We just need the infrastructure to make these tools robust and available.

COVINGTON: John, in response to your question, I think it is possible to hierarchically link local to state to regional to national policy. That's what the Western Governors Association was all about. That's what the collaborative approach is about in trying to solve some of these problems we're discussing today.

In doing that, it's difficult sometimes to see how to counterbalance what has been a more centralized political process so that the local collaborative process can actually have sufficient say in how that should occur. An important step occurs somewhere at the state level, maybe even sub-state or multi-state level, where general principles are articulated but then actually discussed and implemented at the local level.

One final point is something that has concerned me for quite a few years now. We need to be cautious in presuming that we know what local collaborative groups value. The presumption was that it was just houses burning up, for example. We need to be very careful that when you get a collaborative group together, they are going to conclude that the only trees that need to be removed and used are trees that are a fuels problem.

When you start looking at local communities and you're talking about reinvigorating rural economies and rural social health, many of the local collaborative groups are going to come up with a sustained wood products operation. It's not just "till we get the forests treated so they burn the way we want them to." It's going to be a bigger question than that over the next hundred years.

It's hard for us to get out of this current," Oh, my God, The forests are burning up." We need to really look at that long-term sustainability of local economies.

AUDIENCE: Is it time for another public land law review?

FREEMUTH: Are you implying that fixes all the problems?

AUDIENCE: It's a start.

OPPENHEIMER: There are certainly forces that we're going to be dealing with in these next few years that are certainly calling for that. I think we'll see where the chips fall. There are certainly areas where there is room for improvement on all sides. I also think there are some things out there that, even though they're difficult to work through, we get some products in the end.

One of the key issues that has been raised on a couple of panels is, one, to be strategic about where we are putting our efforts and, two, to find areas of agreement and to build trust.

Just going out and trying to chop down public land laws that are out there isn't really going to accomplish that and is going to lead to more controversy as they are experiencing in Golden, Colorado with people chaining their kids to the trees, which I don't think is going to be any great salvation.

We have to figure out a way to find those areas of agreement, to be strategic, and to actually work to get some accomplishments on the ground that end up building trust instead of just trying to undercut each other, depending on which way the political winds blow.

MILKMAN: One thing that we have been kicking around is whether it's time for a re-definition of multiple use. We have talked about ecological services; we've talked about restoration goals and whether the way the agencies look at multiple use should be kind of expanded or changed to take more of a science-based approach. Should they think more about social and economic sustainability and take more of a long-term view than they have in the past and consider factors that reflect the current values that we are now trying to get from the national forests and public lands.

AUDIENCE: I was wondering whether there was going to be any discussion on forest health associated with insects and disease because you see large expanses of national forests that are turning red—a good example would be the area around Elk City. Couple that with concern about anadromous fisheries, then it means... are we going to go to court now? When you look at an insect infestation that has gone on since 1989 and the trees are turning grey, then you know that fire is not far behind, and the city of Elk City is in jeopardy. Any comment?

BRINKMEYER: Cece, as you know, Dick Bennett has a mill there that will be shutting down. It's a good mill, technologically advanced, but it can't access raw material. It's right there in Elk City. But there are several stories that are the same way. It has to do with the process. To me, the most serious obstacle is the legal thing that I raised earlier.

I do believe the process is flawed. It seems to me no one wants to touch it. We want to continue to struggle with the process that is out of date with the times we're dealing with. Let the facts speak for themselves. Some people are concerned about the logging on the national forests, but 12 billion feet was the cut. Now we're down to less than 2.

I might add that it's calculated differently. In the past, it was 12 billion feet without firewood and other fiber that was removed from the forest. Now it's two billion feet with everything that is removed from the forest. I'm not saying 12 is right, but certainly two isn't right either. So it's somewhere in the middle. How soon can we get there and still avoid some of the problems we're dealing with?

The collaborative effort is very important, Jon, but it has to have some teeth in it, and it has to be at the local level. There has to be trust. Trust has to be at that level so we don't have somebody veto it that's not at the party. That happens in the appeals process. If we can get at that process, then all the rest of this has a chance of working. Otherwise, it's just conversation that will get locked up somehow. We don't make the necessary progress.

COVINGTON: With the collaborative process, if it's using the best science available and it's broadly based, there are very few groups that are going to litigate or appeal something like that.

BRINKMEYER: I consider that a pretty statement that you can blow holes in.

COVINGTON: Let me elaborate a little bit. We're fairly new at this collaborative process, but if you have a broad collaborative process looking at large areas of land, even if there are appeals and litigation, it's likely to be upheld if it's using the best science available.

We need to give this a chance to operate. I'm always a little bit concerned about taking away a right to redress some grievance against some flawed process.

BRINKMEYER: I've got to push back a little on this. You talk about a million acres, 500,000 acres, 300,000 acres in your process. To me, your process is too big. We still only harvest one tree at a time, and the issues in that area, whether it is streamside or other issues we have to deal with, are specific issues as opposed to something where we are trying to come up with one-size-fits-all for 500,000 acres. I don't see how we're smart enough to do that.

COVINGTON: That is certainly not what I'm talking about either. It's an assessment at the scale of two to eight million acres with individual projects on a scale of 10,000 acres or 4,000 acres that related to the collaborative process. I doubt that on the individual project there will be this broad-based collaborative input.

For example, with the Western Mongolian Plateau Group, you will not get all of those fifty people to come and look at each 10,000 acre unit. But many of the questions, not just about desired future conditions but about how to get to the desired future conditions, can best be articulated in large chunks of land.

People just get worn out. There is not the capacity to go to each little project.

BRINKMEYER: What was the Forest Service study a few years ago, down in Washington state where they came together. Jim, what was that? ICBEMP? [Inner Columbia Basin Environmental Management Plan] That was supposed to be the end-all evaluation of how we were going to handle the forests. And what happened there?

I don't know what happened. It didn't go anywhere in an area that was so large.

FREEMUTH: One more question.

AUDIENCE: Dr. Oliver spoke to this a little bit when he mentioned the work force. Many members of the work force I think about are not here today. They are back at the unit doing the work we've been talking about. I need to frame this question a little bit.

I've had the privilege of working for the Forest Service for 31 years, 22 of those years as a District Ranger and the last seventeen on the same unit. About 28 months ago, I had the rare privilege of welcoming a new employee to federal service, a wildlife biologist who matriculated at Purdue University. Since that time, I have also watched a professional hydrologist and an engineering technician either transfer or retire from the federal service. In six months, I will retire from the federal service. Of those four positions, only one of them will be filled, and I will let you guess which one that will be. Is this trend, as potential stakeholders in what happens to the national forest lands, disturbing to you?

OLIVER: I would say absolutely. It sure is.

COVINGTON: You look at the scale of the work that has to be done over just the next twenty years—you don't need to look at the next hundred years—and the work force capacity is alarming, not just the lack of capacity, not just within the agency but in the woods work force. We need to get pretty serious about building up the capability to do the treatments that really have to be done.

OLIVER: And the institutional memory is something that is very important that we are worried about.

FREEMUTH: I would suggest to you that some of that may be more strategic than you realize, and it's something to be very concerned about.

On behalf of the Governor and the Andrus Center, I'd like you to thank this panel for a very provocative discussion.

ANDRUS: Thank you very much, John, and I echo his remarks. I can drive through any city and tell you which grocery store is successful by looking at the parking lot and looking at the cars. This room has been full of cars all day long.

It makes me feel good that we're accomplishing something, and tomorrow is going to be an out

standing morning. We start at 8:30 AM, and be certain that you wear your little badge because Homeland Security has rented the BSU football team to check the doors. If you don't have a badge, you don't get to play on the blue turf.

It's been a long day. I appreciate the stamina that has been demonstrated here. Tomorrow will be a jim-dandy, and we'll have the Chief here to answer some of the questions. Thanks to the panel. We'll see you tomorrow morning at 8:30.

FIRE AND FOREST HEALTH:

The Forest Service's Continuing Management Challenges in the New Century

FRIDAY, NOVEMBER 19, 2004
JORDAN BALLROOM, STUDENT UNION
BOISE STATE UNIVERSITY

8:30 AM

Remarks by Jack G. Troyer,
Regional Forester, Intermountain Region, U. S. Forest Service

CECIL D. ANDRUS: Welcome again this morning to the symposium on fire and forest health. I would call your attention to the screen with the list of sponsors. Those sponsors are the people who kicked in the money to make a non-profit organization work and make it possible for us to present this meeting today. When you see anyone representing those firms, say thanks for helping us out.

Today will be a great day, and to start things off, I will introduce Jack Troyer, who is the Regional Forester for Region IV. Jack was deputy down there, and then we had the musical chairs, and Troyer was our pick of the litter to fill that spot. I called the Chief and everybody I could think of. He's done a superb job, and we're tickled to death to have him here with us. He's a thirty-year career person with the Forest Service. He has some comments to make and then he has the privilege of introducing our Chief to all of you. Jack Troyer.

JACK TROYER: Thank you, Governor Andrus. One of the many really neat comments I heard yesterday was when someone said, "You know, I've always wanted to have a little time to be around Governor Andrus. He is a cool deal." Thanks again, Governor Andrus.

I've been looking forward to having a few minutes to do some thank-you's and to say a few things about our Chief as well. I want to start by telling you a little story. You heard Dave Tenny yesterday talk about what we thought was a very significant meeting of the Forest Service that took place in Nebraska City in January. Dave talked about the pledge that was made there, but a lot of other significant things happened at that meeting.

One of those was a conversation led by Tom Thompson, whom you had a chance to get to know yesterday, about how we could use the occasion of the 100th anniversary of the Forest Service to have

not only a celebration but a conversation about the Forest Service with the American people. So the idea evolved to centennial forums, and John Freemuth was actually at the meeting on one of the panels. I was thinking about what this could be, and I happened to see John. I thought, "The best in the business—the Andrus Center. If we could do that together, we could have the best speakers from around the country. Governor Andrus and the Center do that better than anybody.

So that's how this came about. John, I'm glad you were there. I want to also mention my great admiration for Marc Johnson in terms of someone who can really moderate groups as you saw yesterday.

I want to also offer my thanks to the Idaho Statesman. Over the years, the Statesman has covered the events that have shaped the national forests, and they have done it in an in-depth, competent, professional way. They don't always say good things about us, but in our opinion, they are the height of good journalism. Their co-sponsorship of this event was very, very important to us. Carolyn, thank you very much for your role in it as well.

I would be remiss if I didn't mention that I've known Rocky Barker for years. He's an in-depth reporter, digs into things in a fair and competent way. Rocky, thank you.

This forum is one of twelve forums around the country. They are a prelude to the big National Centennial Congress, which will occur the first week in January, almost in the same place but certainly on the same days as one hundred years ago when President Roosevelt and Gifford Pinchot were there. That led to the creation of this agency, so we're here one hundred years later.

That National Congress will be a significant event as well, and it will help us document and talk about the complexity of the challenges we face and help us look toward the future. It will also put a lot

of emphasis on the fact that without the partnerships and collaborative efforts that we talked about yesterday, things just aren't going to get done.

To that end, you will notice that five of us—and I'm one of the five—are wearing these name tags to mark us. We're going to be the five delegates from this conference to the National Centennial Congress. One of our jobs is to report out what we do here, and of course, with John being part of the Andrus Center, we'll get that job done well.

I'd like to introduce the other four, so will they please stand. Feel free to go up to them and say, "When you go to that January Congress, you ought to make this point." The delegates are John Freemuth, whom you all met yesterday, John Hyatt from the Eastern Nevada Landscape Coalition, Terry Gibson from the Shoshoni-Paiute Tribe, and Scott Truman, head of the Utah Rural Development Council. That's the five of us, and the Regional Foresters from each region are automatic delegates.

One other thing I want to say is that those of us in the Forest Service have been pretty excited about a documentary on the history of this agency. It's been in the works for four years. It really is a quality production. I know I'm biased, but it is really good. All of you who care about the agency and your national forests will want to see this, so we're going to show you a four-minute trailer about the documentary. In just a few seconds, as if by magic, it will appear on the screen, so let's take a few minutes and watch this.

MOVIE DIALOG:

"We own them, so of course we're going to disagree about how they should be managed."

"For the first 100 years of the American Republic, our attitude toward the public lands was to get rid of them. General Land Offices were just giving it all away as fast as possible."

"But a nation would decide that some lands will never be given away, that they will be held in the hands of the people. It was a remarkable step for a nation to take."

"National forests exist, not for the benefit of the government, but for the benefit of the people."

"The Forest Service always promised the American people that, wisely managed, these

lands could be used for hundreds of years to come."

"The people recruited into it are immensely idealistic. They really do think that they know best. Sometimes they get into trouble in a democratic context because of that."

"The Forest Service was characterized by a palpable uniformity in gender, ethnicity, background, education, and profession."

"We didn't get a full size badge. I now have a full-size badge, so you can see how far we've come."

"It's like a thousand trains rushing over a thousand steel trestles. The agency from the beginning was obsessed with fire, but it saw it as something it would get over."

"Remember, only YOU can prevent forest fires."

"Everybody knows he's a fire-prevention' man. Smoky the Bear..."

"Smoky the Bear has a midlife crisis. He was 50 years old in a year when 34 firefighters were killed."

"The national forests could not have been sold to the American people without the guarantee of use. It wasn't timber that people fought over in the early part of the twentieth century. It was always grazing."

"Drawing lines on a map solves a lot of conflicts if you can agree on where the line is."

"The heat was on to get the cut out. Timber was king. It paid the rent. It ran the fleet. It did everything."

"Recreationists are also increasing their use of the national forests, and they are going to run smack-dab into each other."

"It's about ecosystems. Do they want them preserved and locked up and people

kept out, or do they want them managed for multiple uses?"

Our western campgrounds have been taken over by hippie types."

"People became more outspoken, wanted to get more involved, were unwilling to trust the government."

"That's when we lost the white hat and went to the dark side."

"We don't know what we mean any more by 'greatest good' in the forests."

"Finding the greatest good, of course, is a tremendous challenge because it changes over the years. Whose 'greatest good' is it now? Whose greatest good will it be later?"

"And it is that debate and dialogue that makes the national forests a very vibrant part of our national culture."

TROYER: One last thing before I introduce Dale. About yesterday, I just have to say that a lot of folks came up to me and said, "This was entertaining, useful, thoughtful." It was one of those days that really worked.

A couple of things I heard yesterday is that clearly fire and forest health is a huge issue, and everyone knows that. They know it will take a collective commitment to do something about it. It will also take a lot of money.

My favorite part of being up here is that I get to introduce Chief Bosworth. Dale is the first Chief in the history of our agency who has actually been a District Ranger, a Forest Supervisor, a Regional Forester twice, including in this region, as well as the Chief. Just in terms of the day-to-day workings of the agency, having as Chief someone who has sat in all those chairs with nearly forty years of experience, it is just a pleasure to get to brief the Chief. Instead of having to take five minutes to explain something, you know he's been there and done that.

What I really want to say is that leadership is key. You heard about what happened at Nebraska City. Every Forest Supervisor across this country, more than a hundred folks lined up behind the same priorities, the four threats that are so important to

us. Creating that internal alignment is an expression of leadership. His leadership will create as well the external alignment that will be needed as we move forward on these issues. That's skill and the mark of a great leader.

This Chief is a very unintimidating, approachable person. I don't feel intimidated very often, but the first time I was around Dale when I moved up to the regional level and watched him handle a couple of tough issues, I thought, "Oh, man. He is so good." He gives us a chance to learn from someone who is really, really good.

This is a great Chief, and if you can talk to Forest Service people in the audience, you'll see that when people feel that way about their leaders, it's the mark of an agency that is headed in the right direction.

With great pleasure, I introduce Dale Bosworth, Chief of the United States Forest Service, America's Chief Forester.

DALE BOSWORTH: Good morning everyone. It's really a pleasure to be here. I would like to have been here yesterday, and I'd like to have gotten here last evening. Travel is really interesting these days. I've heard a lot about the session yesterday, and I've heard there was lots of excitement. I've been to several of these forums around the country, and this is by far the largest crowd, not necessarily the most intelligent because some of those other ones looked pretty smart... There are more people here who know more about this subject than anyplace in the country and probably the world. This is an outstanding assemblage of top people, and I appreciate your being here.

What I want to do this morning is not to get into the specifics of fire and forest health but to make some more general comments. There will be an opportunity for questions afterwards, so if you have questions specific to fire and forest health, I'd be happy to answer those.

I'd like to set the stage by looking at the Forest Service as a whole. When I look at this agency as a whole, we are definitely more than the sum of our parts. People hear an awful lot about the National Forest System, but we are more than just the National Forest System. We have a research organization that is just tops. We have a state and private forestry organization, and we're more than that. A lot of people don't know about our international programs, but we have a great international program.

So my view of the Forest Service in all these areas has been about partnerships, about getting together

and working with our collaborators, figuring out how we can work together among all the parts of our agency and reach all of our common goals—both our goals and society's goals. That is a part of what we're here to talk about.

But we're also here to celebrate a hundred years of partnership, a hundred years of collaboration, and to prepare for the next hundred years by seeing what we can learn from the past. A lot of what we're here for is to prepare for the Centennial Congress in January.

As we look to the future, I think it's fair to ask, as many of you have, what is the Forest Service's mission? When we talk about the Forest Service's mission, you hear people say, "Caring for the land and serving people." That's a sort of abbreviation of our mission.

You also hear people say, "We just don't have a clear enough mission anymore." They say it's not defined clearly enough by Congress and that we're in deep trouble because of that.

So I want to just read the mission. It's more than just caring for the land and serving people. I want to remind everybody what it is. Our mission is "to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations."

To me, that seems clear enough, but I know that some other people would see maybe health, diversity, and productivity a little differently than I do. Different people will have different needs. Sometimes they will come into conflict. That was pointed out a hundred years ago by the first Chief, Gifford Pinchot. It is just as true today as it was a hundred years ago.

The question is: Does that ambiguity inherent in our mission doom our efforts? For 100 years, the answer has been "no." So from my perspective, why should it suddenly be "yes"? I would argue just the opposite: The ambiguity inherent in our mission has really given us the flexibility we need to adjust to changes. Unless we can adjust to changing times and changing situations, we can't sustain the changing landscapes in our care, and we can't meet the changing needs of our people. Our history bears that out, and that's what I'd like to talk about a little bit.

I'll focus mostly on the National Forest System although I think it applies also to our state and private forestry and research programs. How have the challenges we face as land managers changed over time, and how have we risen to meet those challenges? After looking at parts of our past, I'd like to take a few minutes and look forward to challenges I believe we

all face in the future.

When I say "parts of our past," I say that because I'm a forester, not a historian. Historians have their own ideas about eras and the things we have gone through, and I'm sure their ideas are more complete and accurate than mine, but I don't really think that matters. Our story will come out pretty much the same in the end. If there are some historians here, I hope they will bear with me as I go through this.

A century ago, as you all know, our nation faced a crisis caused by unrestrained exploitation of our natural resources. Bison, elk, and other wildlife species were going extinct. Others were in serious decline. We were seeing some disastrous fires, and they were followed by disastrous floods. There were also widespread fears of a timber famine. People believed there wouldn't be enough wood for the next generations to be able to build their homes. So conservation came out of that crisis because people wanted to stop the waste. They wanted to conserve timber for future generations. They wanted to conserve water. They wanted to stop the floods. They wanted to stop the disastrous fires. They wanted to save America's wildlife from extinction.

So in response, a Division of Forestry grew up in the U. S. Department of Agriculture. Later, that became the Bureau of Forestry, and then the Forest Service. Under Gifford Pinchot, the division worked with private landowners to improve forestry techniques on hundreds of thousands of acres. Pinchot also promoted systematic studies of commercial forest trees. State and private forestry as well as research were well underway even before the Forest Service started managing the Forest Reserves.

Pinchot spelled out the purpose of the Forest Reserves in his first use book. "Forest Reserves," he wrote, "are for the purpose of preserving a perpetual supply of timber for home industries, preventing the destruction of the forest cover, which regulates the flow of streams, protecting local residents from unfair competition in the use of forest and range."

The mission of protecting timber supplies and watersheds comes from the Organic Act of 1897 as most of you know. "Protecting local residents from unfair competition" was Pinchot's interpretation of our mission. That implies a social responsibility.

The first use book explicitly promoted several uses: timber, water, range, minerals, game, and even recreation. We went in and put those uses, for the first time, under pretty careful management. For example, overgrazing had been a huge problem.

We got that under control. We also protected the game and started to get the fires under control. It was a period that most people refer to as a period of custodial management.

Then we had the Great Depression, and we were faced with a whole new set of values and challenges. Now people wanted more from their government than they had ever asked before. The social needs that Pinchot had anticipated for our agency now became a broad public expectation. Because he had already planted the seed, our agency was able to respond very quickly.

Our state and private forestry research branches helped plant shelter belts in states from North Dakota to Texas. The idea was to help prevent future Dust Bowls. Much of the work was done by the Civilian Conservation Corps. Every national forest had at least one CCC camp, and we gave jobs to thousands of unemployed American in those camps. The CCCs helped us control fires; they built a lot of our infrastructures—roads, trails, campgrounds, ranger stations. It was a period of new social responsibility for the Forest Service.

When World War II began, that ended the CCC. But our social responsibility continued, particularly through the war effort, and we strongly supported the war effort. A lot of our employees enlisted, and we ramped up timber supplies that were needed by the troops.

After World War II, we entered a new period. Our troops came home, and the demand for housing soared. The war effort had depleted state and private timber stocks, and the national forests were needed to fill the gap. For the 1960's through the 1980's, every Administration, with strong Congressional support, called for more timber from our national forests. In those 30 years, we went from producing very little timber to producing 20-25% of the nation's saw timber needs. We helped millions of Americans, during that period, to fulfill the American dream of home ownership.

I don't want to oversimplify this. The 1940's and 1950's were a difficult period of transition for the Forest Service. Some of the folks that had grown up in the old custodial model of the Forest Service found it very hard to adjust to a new timber model. Some people actively opposed it.

Timber production wasn't all we did in the post-war period. We established a system of multi-functional research centers, supporting forest and range management needs of all types and owner-

ships. State and private forestry made huge advances in forest protection through pest control and fire control.

On the National Forest System, outdoor recreation was growing by leaps and bounds. Popular demand grew for more of a balance between timber production and other uses. It led to the Multiple Use/Sustained Yield Act of 1960. We also had the Wilderness Act of 1964. Those developments show that the public values were changing.

The first Earth Day was 1970. It sent another major signal. If there were any lingering doubts, the environmental legislation of the 1970's should have put those to rest: the National Environmental Policy Act, the Endangered Species Act, the National Forest Management Act. We learned that the public wanted to have more of a say in the management of the national forests, and they wanted us to focus more on delivering values and services like wildlife, water, wilderness, and recreation. In response, we started moving to a new ecosystem-based approach, a new ecosystem-based model of land management.

The 1990's, then, were a transitional period where we no longer focused primarily on timber production. Again, that transition was difficult for Forest Service people. Some of the folks that grew up under the old timber model weren't too thrilled. In my view, it was the right and necessary thing to do. It was necessary because both our landscapes and our social needs are constantly changing. If we don't adjust to those changes, then we can't fulfill our mission of caring for the land and serving people.

That brings me back to what we can learn from our past. No matter how you tell the story, it comes out the same in the end. It's a story of changing values, of changes on the land, and changes in the people that we serve. It's also a story of how we responded to those changes, how we protected the land and delivered the goods, the services, and the values that people want.

Today, I think we're in a new period. We're in a period of ecological restoration and outdoor recreation. Maybe more than ever before, we focus on delivering the values and services like clean air, clean water, scenic beauty, habitat for wildlife, and opportunities for people to enjoy the outdoors. These are the main things people want today from their public lands. We know that from our surveys, from talking to our partners, and from talking to people in our communities.

We are also still delivering opportunities to harvest timber, to graze livestock, and to extract minerals. With goods like those come important values like jobs and community stability. We know that Americans want those values, too. To deliver all these goods and services and values, we have to manage the land for long-term ecosystem health while meaningfully engaging the public in our decision-making.

We truly believe that what we leave on the land is far, far more important than what we take away. The period we're in today will end sometime as well, just like every period ended before. I don't know what the future is going to bring, but I believe a few strategic concerns will drive future change, at least for the next decade or so and maybe beyond.

These concerns don't have anything to do with timber harvest or livestock grazing or road-building. Those debates are essentially over, or they should be. I believe they become huge distractions from the main concerns we face today.

The major concerns are, in particular, the four threats that we've been talking about. In some cases, these are more of a threat to state and private lands than to national forest land. Let me just run through those. First is the natural accumulation of fuels and the resulting fires. You know the kinds of things we're seeing, the fire effects. In some cases, we're way outside the historical range of variability in terms of some of the responses.

Second is the spread of invasive species. All the species cost Americans about \$138 billion a year in rural economic damages and associated control costs. That's \$138 billion. That's a lot of money. The ecological costs are even worse. One study has found that invasives have contributed to the decline of almost half of all imperiled species.

The third threat is a loss of open space. Every day, America loses more than 4,000 acres of working farms and ranches to development. That's more than three acres a minute. The rate of conversion is getting faster all the time. We're also losing forest cover in many areas, even in parts of the east, despite the gains that we're getting as agricultural lands have reverted back to forest lands. We're losing valuable corridors that wildlife needs and rangelands that many plants and animals need to survive. We're also losing a piece of our cultural heritage as Americans as this happens.

Fourth is unmanaged outdoor recreation. In many places, recreational use is simply outstripping our management capacity and damaging resources.

I'm particularly concerned about the damage from the use of off-road vehicles. But other kinds of damage is taking place as well. People will love their forests to death if we don't do a better job of managing recreation.

These threats are not new. We have been dealing with them for some time. There are a lot of other things we do as well. But if you talk to our employees, I think you'll find, overall, that we spend a lot more time and resources on these four threats than on most other things, certainly more than we do on timber harvest or grazing or road-building issues. Sometimes, from the discussions you hear, you wouldn't believe that. I believe that, in years to come, the four threats are going to drive a lot of the changes that we see.

There are also some other concerns that I'd like to talk about. For the past two or three years now, we've been doing what we call "Chief's Reviews." These are strategic reviews of the Forest Service at the regional level, and we've found some common themes. One common theme is the sheer scale of what we face. Besides the four threats, our review teams have several concerns. First, we have a huge backlog of work to complete. We have thousands of deteriorating culverts that we have to replace. We have roads to restore. We have abandoned mines to reclaim. We have watersheds that need repair. We have vegetation to treat. We have all kinds of deferred maintenance and ecological restoration that we need to catch up on. These problems are only made worse by altered vegetation conditions, the loss of milling capacity for removing vegetation, and the public distrust of active forest management.

Second, we have over-subscribed water resources and deteriorating watersheds in many parts of the country. As our population rises, the problem is only going to get worse. As a nation, we're not thinking this problem through enough or doing enough about it.

Third is the level of ozone and other substances that threaten long-term ecosystem health. Our ability as a nation to furnish clean air, clean water, biological diversity, carbon sequestration, and other environmental services from forested landscapes and other natural areas is increasingly open to question.

Again, these aren't new problems, and we've been addressing them for quite some time now. But what struck our review teams was the sheer scale of what we face. When you take these concerns and combine them with the four threats, you get some idea of the scale of what we face.

The Forest Service is at a crucial moment in history. In the past century, there have only been a few similar moments when we faced challenges on a similar scale. Meeting these challenges could lay out a career's worth of work for the next generation of Forest Service employees.

Speaking of the next generation of Forest Service employees, we need to work very hard to have an organization that reflects the diversity that we have in America. The demographics of our country are changing. We need to work harder at having an organization of the next generation of Forest Service employees that reflects those changes if we're going to do our job of serving the people.

Some of these challenges might already be affecting the values that people want from public lands. Recall how the environmental legislation of the 1970's responded to changes in public values. Last December, Congress passed the first major legislation affecting national forest management in a generation. It was the Healthy Forests Restoration Act. The legislation responds to the threat from fire and fuels. Does that signal the beginning of a change in public values? Maybe it does.

Before closing, I want to emphasize that we face most of these challenges on all of America's forests, including the 500 million acres that are under state and private management.

Today, we live in a global economy, and market dynamics are challenging some of the long-term assumptions about delivering goods and services from the forests of the United States, whether they are private, state, or federal. A good example is a study that was conducted by Temple Inland Forest Products Corporation of Texas. They looked at cost plus transportation, and they found some things I thought were pretty amazing. They found that it is more expensive to bring logs to Baltimore, Maryland from Atlanta, Georgia than it is from Canada, Europe, or even South America. Unless something changes to make American timber producers more competitive, foreign imports are only going to grow.

This has a couple of serious implications, in my view. First, if we buy cheaper logs from overseas, are we supporting unsustainable logging practices in other countries? For example, are we contributing to illegal logging or to deforestation?

Second, and equally important, if forest landowners here at home are undercut by foreign competition, are they then forced to sell their lands to developers? When we import these cheap logs, are

we contributing to the loss of forest cover, not only overseas through deforestation but also here at home through land conversion to urban uses?

Today, the challenges we face are often on a global scale. This is a part of the sheer scale that we face today. I don't think we're going to be able to meet these challenges unless we understand the global connections and address those through international partnerships.

So that brings me back to our mission and our purpose. Our story is the story of change. Our mission focus has changed accordingly over the years. 100 years ago, we focused mainly on timber, water, and general forest protection. Seventy years ago, we incorporated more social responsibility into our mission through the CCC. Forty years ago, we focused heavily on timber. We also sought to balance that use with other uses, particularly recreation, range, watersheds, wildlife, and fish. Today, we focus on sustaining the health, diversity, and productivity of forest and grasslands to meet the needs of present and future generations.

Given the scale of what we face, our main focus has to be on ecological restoration and outdoor recreation. In a general sense, our mission has always been caring for the land and serving people, but what that specifically means has changed over time. Our history makes that clear.

Something else has changed, too. That's the way we deliver what people want. A hundred years ago, Gifford Pinchot recognized the need for working and partnering with local communities if we were going to be successful. He planted the seeds of partnership in our first use book by directing our employees to work closely with local communities and to promote conservation. Ever since then, we've always been committed to fulfilling our mission through partnerships. Today, though, the scale of what we face leaves us no other choice. We have to work together.

The way we work with people has changed over time. In particular, we've learned the need for more up-front public dialogue, public involvement, and collaboration in our decision-making. Today, I believe we need a community-based, collaborative approach, and sometimes people refer to that as community-based forestry. It involves getting everyone that is interested to state their ideas up front, then to talk through those differences, and come to some agreement on shared values. It's easy to say that, but that can be really, really difficult to pull off. Sometimes people believe that they're not given

enough of a say in the decisions, and sometimes they see things in terms of good and evil. In a lot of places, we have a long way to go before we can get the full, up-front collaboration that we really need. We have to do better.

We've come a long way together over the last hundred years. Values have changed, and so have the challenges we face. In the period that we're in now where our focus is on ecological restoration and outdoor recreation, the pure scale of what we face is overwhelming. The only way that we can rise to the challenge is through community-based forestry, by working up front in collaborative partnerships at home and abroad for long-term ecosystem health. For that, we're going to need help from our partners. Community-based forestry is relatively new for us, and we're still working it out.

I also believe that these Centennial Forums and the upcoming Centennial Congress are suitable forums for this issue. The Congress won't be about the issues we deal with on a daily basis, such as what should we do about roadless areas or whether the planning rule for national forests should be a certain way. These are indeed critical issues, but they don't rise to the level that we envision for this Congress. We expect the Congress to take the long view and the broad view across decades and across centuries.

The question of collaboration takes the long view. It transcends the specific challenges we face. It rises to the strategic level that we envision for these events, so I urge you to carefully consider it. With your help, we can improve the way that we work together to meet the challenges of the future and to prepare ourselves for the changes to come.

Thank you very much.

ANDRUS: First of all, Chief, I want to thank you very much for a very thoughtful message. We have to recognize that there are more stakeholders than there used to be.

We have one of your employees, Andry Brunelle, here with a mike. Dr. Freemuth is over there with another mike. Let me repeat what I said yesterday. No speeches. Ask your question. If you start a speech, you'll deal with me.

AUDIENCE: We heard yesterday a district ranger say that his staff is being reduced. Staff in his district is not being replaced. They either move out or retire. What can you do to make sure we sustain

a sufficient body of Forest Service employees in the field to address all these problems?

BOSWORTH: As everyone knows, we're going through some interesting times in terms of budgets across the country. There is a lot of competition for the dollar these days with the economy and the war on terrorism, which has made it more difficult to maintain the budget levels that we believe are important. Having said that, I truly believe that dollars will go to where people like what we're doing. With an approach like community-based forestry or collaboration where we have a common vision, where we work together, and where there is a lot of support for it, I believe the money will come and that we'll have what we need to do the job out there.

When I was talking about partnerships, the scale of what we face is too much anyway for a federal budget. We have to find ways of partnering with NGOs, with communities, with volunteers and with other organizations that have similar kinds of needs. We can leverage dollars that way and get more done.

Then if we continue to work internally on some of our internal processes, both our NEPA process and consulting under ESA, we can get more of the dollars we do have to the ground. We're going through a very controversial time in our organization by looking at business process re-engineering. That potentially has an effect on a lot of people. It's very difficult for us to do that, but it's something we need to do. I believe we can save \$100 million when we complete the changes we need to make. If we save \$100 million a year, that should be \$100 million that could go out to add people to that ranger district so that they can get the job done.

There is not a single solution. There is a whole bunch of different things that we have to work on together in order to get the level of funding and the capacity to get the job done.

AUDIENCE: Dale, as you know, I'm with the timber industry, and I'm here to help you. [Laughter] You made some of the best remarks I've ever heard from someone in the Forest Service, especially your understanding about the global nature of the forest products market and those international markets and how they play. Yesterday, Marc Brinkmeyer of Riley Creek talked about the independents in the west and how they are the ones that really depend today on Forest Service timber output for the mills.

Marc mentioned yesterday that about two-thirds of your costs is in raw material supply, both in logging and instumpage rates. He explained that today, we're competing against Canadians who are about 35% of our market, and he explained how those boards come into our markets. A lot of their stumpage is as low as fifty cents a thousand. As a landowner trying to protect the value of your stumpage, how do you view the Forest Service's role in protecting your values against this flood of cheap foreign stumpage? Do you see a role? Is there something you can do to help resolve this Canadian lumber issue?

BOSWORTH: Next question.

[Laughter] That is a hard one because I'm not sure what we in the Forest Service can do to change that. It's critical for us to have an infrastructure that can utilize material off the national forests. We have a role in terms of producing timber, but I believe that our bigger role is ecological restoration. In order to be able to get the work done with the dollars we have, we're going to have to find ways of utilizing some of that material. So the global aspects of this are puzzling. If you lose that infrastructure, then we're going to lose one of the tools for doing the work that needs to be done in some kind of cost-effective way. So I'm troubled by that, and I don't honestly have a good answer that would specifically make a difference.

I do believe that if we in the Forest Service can get as efficient as we can be and if we can be consistent in what we tell people, if we let people know that these are the kinds of projects that we have, if we work together, if the industry knows with some level of certainty that certain things are going to happen, and if we actually develop a track record of doing what we say we're going to do, then I think that helps the industry in terms of making the decisions industry people need to make about how to make investments.

Beyond that, in terms of dealing specifically with foreign imports, most of that will be up to other folks. If you have solutions that the Forest Service could undertake, I'd be interested in those.

AUDIENCE: I was excited to hear your comments about ecological restoration. Yesterday, we heard people repeatedly talk about the difficulties of applying active management to ecological restoration in the forests. We also heard repeatedly about the high costs of doing it that way. We even heard the example of the Clearwater, where, practically speaking, they

would just throw up their hands and say, "We'll just let Nature do it"—even though that wasn't written in the plan. There was even a Congressional Budget Office estimate a couple of years ago, claiming that it was just not economically practical to use these active management methods to restore the forest.

So I wonder, given the contentiousness over the roadless areas, if there isn't an opportunity there to remove some of the contentiousness by focusing the active management portion of the Forest Service plans in a much more restricted way.

BOSWORTH: Let me just ask you before you sit down, when you say "focus in a much more restricted way," are you talking specifically about near communities and wildland/urban interface and community watersheds? Is that what you're thinking about?

AUDIENCE: Exactly. That's what I'm thinking about.

BOSWORTH: My belief is that the highest priority right now around the county needs to be in places where people and communities and homes are going to be affected. That means not just around a house, but I'm talking about whole communities. That's why we're encouraging communities to come up with Fire Protection Plans and Fuels Treatment Plans. Then we can work together with the communities. When we get that kind of collaboration, and the communities, the agencies, and the landowners have come to some agreement, those should be the highest-priority areas for our work.

There are also places that we need to do work that may be away from communities but are important for other ecosystem purposes. A couple of years ago, we had some fires around the Giant Sequoia groves. With a little bit different conditions, we'd have lost a couple of groves of huge trees. That's pretty important. We don't want to lose Giant Sequoias just because we're afraid to do some thinning underneath and get fire back into those ecosystems. Those aren't in the wildland/urban interface, but most Americans would say that if we can come to an agreement on how we ought to treat them, those would be a very high priority. We don't want to lose those.

There are areas where we have threatened or endangered species, and certain kinds of treatment around those areas might be useful. They should also be up there somewhere on that priority list.

Last year, in terms of our fuels treatment, about 60 or 65% of the work we did was in the wildland/urban interface, and it's been consistently at that level for the last two or three years. I expect that to continue. So I do agree that there are definitely some places we ought to prioritize, and there are other places that, at some point, we might get to, but they are not as high a priority as the ones we're working on now.

AUDIENCE: Chief, we've talked of fire use and wildland fire suppression, and there is so much money in fire suppression that you wonder if it's almost a detriment to getting the culture changed to a little more fire use. Even sometimes when a manager takes the risk, and the fire, over time, gets out, it's almost a career-ending event. Yet, for fire suppression, certificates of merit are given out. What management emphasis or support is there towards helping this cultural change internally as well as outside for encouraging more fire use?

BOSWORTH: The real answer to the question is what kind of positive incentives can we put in place for forest managers to move toward fire use. Part of the way we do that is through how we fund it. Some changes were made not too long ago in our overall policies. How we pay for it has become more of an incentive to do more fire use.

If you look at the last three or four years, the numbers are increasing. A couple of years ago, when we had one of our really bad fire seasons, I was pretty amazed at the number of fire-use fires we had around the country because there was a time when, if we had a big fire season, we shut everything down in terms of fire use, in terms of allowing fires to burn. Because we were concerned about our resources being stretched too far. We ended up with several hundred thousand acres of fire-use fires. So I think we're making progress.

The key, though, is to have good fire plans in place and then to follow those fire plans. A lot of times we get criticized when we suppress a fire in an area where we have it under a fire plan, but generally when that happens, it was not within prescription. Our fire managers and line officers will always be supported, in my view, when they have good plans, implement those plans, and don't violate them. They will make some mistakes, and we don't want to shoot anybody for making a mistake with the right intentions as long

as they're following their plans and staying within it. In fact, we are rewarding people who are getting work done that way.

AUDIENCE: Dale, you and many others have talked about collaboration and trust, and I agree with you that it's very important to move forward with those things. My environmental group has tried to work with the agency, but it's hard to move forward when we continue to fight the same old battles.

This week we had another of what I think is a pointless exercise in roadless area comments. I wonder how we get beyond these same old battles where a guy like Bill Mulligan and I can agree on more things than we argue about, but we're still in these political battles. I don't see you or your agency having a great desire to develop and log roadless areas, but we're still at it. My question to you is: Why couldn't you turn the Administration back from this political battle? How do you suggest that we as a community, represented in this room and elsewhere, get beyond these political battles?

BOSWORTH: I don't have a big disagreement with most of what you're saying. Some of these political battles or these big issues affecting national forest management drive us apart from the things that are really important. We're going to probably always have certain kinds of political issues to deal with.

My belief in terms of any major decisions, whether it's roadless or any other decision, is that you need to have a broad base of public support for those decisions. That base of support also needs to include local people.

Especially after having been in this job and having the opportunity to see forests around the country and to do some international travel, I've become a stronger believer that if you want to have sustainable decisions, you have to have the people who live around the forest believe in those decisions or at least to have a good group of those people believe in the decisions. Ultimately, the people that live in and around the forest will be the ones to protect it.

If you look at something like the roadless issue, it seems to me that the real challenge there is to make sure that we can move forward with a decision, have local support for that decision, and have broad support from the country in general. Then, of course, we have to go through all the court cases in many of those situations.

In terms of roadless, I believe that most of the roadless areas that are out there are going to remain roadless. There is no reason for us to build roads into those places. I believe that to my core, and I think that's how we need to look at it and to move forward with it. But we need to have a system that's reasonable and that local people are going to support.

ANDRUS: Remember what the Chief said earlier about partners instead of adversaries. Last question. We should have stopped before...

AUDIENCE: I find I have to spend a lot more time on the national forest, now that I'm retired, than I did when I was working. I want to come back to one of your threats, invasive species. We had this discussion and battle through ICBEMP. My anecdotal observation as I beat around on the forest, is that everything else pales by comparison to what I'm seeing happen as a result of invasive species. Yet it seems almost impossible to raise that to a social level. I'm not recommending a commercial with a desperate housewife in a towel...

ANDRUS: And your question is...?

AUDIENCE: We heard yesterday that this shouldn't all rest on the Forest Service. I'm asking what thoughts you have on how we can put this threat—that in some cases is overtaking some of the other things we tend to battle about—into a more social context and get it the attention it needs so the agency can deal with it more effectively.

BOSWORTH: That's a tough one because that's what we're trying to do right now. That's why the four threats. That's why I go to every editorial board that I can get to and ask them to write about it. I've done interviews, and we're going wherever we can to try to raise people's awareness. Think about the roaring fire you see on the 6:00 news. People really get into that. But when you show them a weed growing, it just

doesn't have the same impact. It's hard to get people to really understand what's happening.

Some of the results I get from our efforts are a lot of editorials, entire editorial pages of newspapers now that talk about invasives. For the first time, I went to a hearing last spring, and one of the senators brought in a leafy spurge and asked me if I knew what it was. I said, "Yes, it's a leafy spurge, has about 20-foot roots." He said, "OK, you know what it is." The point is that members of Congress are starting to talk about it. I've seen briefing papers now that are going from the Secretary of Agriculture to the White House, talking about invasives. Symposiums have been held around the country, talking about invasives.

So I think everyone is getting more of an awareness, but we also have to have solutions. We can run around with our hair on fire about this, but if we don't have some solutions for people, they will think it's overwhelming and that there's nothing we can do. So we put together a strategy for the agency, working with other organizations. People like the ones in this room can be the Pied Piper for some of these problems.

One last comment I want to make. I know there are a lot of Forest Service people in the room, and there are a lot of Forest Service retirees here. I just want to say, "Thank you," to the Forest Service people and retirees who are here because I can't think of an organization in the world with people better than you folks. I can't think of any organization I'd rather be associated with than you folks. The public gets their money's worth day after day, even if they don't know it. They get it day after day from the hard work you do, so thank you for that!

ANDRUS: Thank you very much, Chief. As I said, the people are here because they care, and, you're right, the people in this room can resolve some of these problems if they will use the word "partner" instead of "adversary" as you pointed out.

We're going to take a little break now. I want you back in here in no more than ten minutes.

* * *

FIRE AND FOREST HEALTH:

The Forest Service's Continuing Management Challenges in the New Century

FRIDAY, NOVEMBER 19, 2004
JORDAN BALLROOM, STUDENT UNION
BOISE STATE UNIVERSITY

Mission Impossible? A Debate About the Future Priorities in the Forest Service.

Resolved: that the Forest Service should make forest health its top priority.

Moderated by Marc C. Johnson

CECIL ANDRUS: Ladies and gentlemen, let me reintroduce to you Marc Johnson, President of the Andrus Center for Public Policy, who will head up this next panel. His job is, like mine, pro bono. I give you Marc Johnson.

MARC JOHNSON: Thank you, Governor. Good morning everyone. Chief, it's great to have you here with us today. I am mindful of the fact that Jack Troyer said in his comments earlier that he heard from a number of you that yesterday's panels were entertaining, thoughtful, and useful. I'm challenging this panel to strive for at least two out of three.

During the sessions yesterday, you did hear various calls in various ways for re-inventing the mission of the U. S. Forest Service. Steve Pyne, for example, suggested a re-chartering of the Forest Service in a biological framework. Others suggested that it was past time for the Forest Service to put its fire legacy behind it. Understanding Chief Bosworth's argument this morning that ambiguity in a mission can be a good thing, we're going to try to join this discussion a bit more precisely around the question of forest health.

As the Service is both glancing in the rear view mirror at its long history and taking another glance down the road to where it might be going in the future, we want to engage with this panel directly a question about a mission or priority for the agency. A panel of real shrinking violets has been assembled here this morning to debate this question: Resolved: That the Forest Service should make forest health its top priority.

The two teams are ready to mix it up on that subject, and let me introduce the debaters. First, for the affirmative position, the team captain, so to speak, is Neil Sampson, President of Sampson Group

Incorporated and Vision Forestry LLC. Neil also served as the Executive Vice President of American Forests from 1984 to 1995. He is a University of Idaho graduate and a recognized national expert on forest resource policy.

Also for the affirmative team, it's the quiet and understated former Chief of the Forest Service, Jack Ward Thomas. Former Chief Thomas is now Boone & Crockett Professor of Conservation at the University of Montana in Missoula. His 30-year Forest Service career was marked by many, many accomplishments, including very distinguished work as a research scientist for the Forest Service.

Finally, on the affirmative side of the panel is Tom Bonnicksen, Professor Emeritus from the Department of Forestry at Texas A & M University. Dr. Bonnicksen's distinguished career has focused on the history and restoration of North America's native forests. He was recently named Citizen Conservationist of the Year by the California Forest Association.

For the negative, their leader, of all things, is a politician, a retired one, which makes him a statesman. Butte, Montana's gift to the rest of the world, nine-term Congressman Pat Williams is now Senior Fellow at the O'Connor Center for the Rocky Mountain West at the University of Montana. Pat was elected to more consecutive terms than any other Montanan in the state's history, which disproves the old adage that you can fool...I'm not going to go there. During his very distinguished career, Pat was a Deputy Whip in the House and served on the Agriculture and Interior Committees.

Also on the Williams team is Chris Wood, Vice President for Conservation Programs for Trout Unlimited. Prior to assuming that position, Chris served as senior policy and communications advisor

to the Chief of the Forest Service. He began his career in Idaho as a seasonal employee with the Forest Service.

Last but certainly not least, on the negative team, Randal O'Toole, economist and director of the Thoreau Institute in Oregon. Randy O'Toole has written and spoken widely on natural resource management and environmental policy and has authored a book with the catchy title of Reforming the Forest Service.

A brief word on the format we will try to follow for at least part of this debate. I'm going to ask Mr. Sampson and then Congressman Williams to make an opening case statement for each point of view. Then, alternating in turn, I will ask each panelists to comment, critique, object, denounce, or otherwise engage on these subjects. There will be no necessary time limit beyond what good taste permits and what I might tolerate on your behalf.

So we will begin with Neil and then Pat and then come back to Jack, then to Chris, then to Dr. Bonnicksen, and then Randy. Then each side will have the chance to ask questions and probe the weak points of the other side's perspective. Then as time permits, I'll try to sweep up with a few pithy questions of my own, and then you'll have an opportunity to get into this as well.

The opening case for the affirmative on the question: Resolved that the Forest Service should make forest health its top priority. Please welcome Neil Sampson.

R. NEIL SAMPSON: It's an interesting experience to be brought in during the late innings of the ball game after everybody has said everything, but it's an even more interesting experience to be brought in during the late innings with two other relief pitchers and grapple for control of the mound. We'll see what we do.

You've heard a good history today and a longer one yesterday from the Chief and Steve Pyne. I'll give you a shorter history. In 1992, Congress passed a bill creating the National Commission on Wildfire Disasters. After the Secretaries of Agriculture and Interior had worked their magic, I and 24 other citizen volunteers were on that Commission, and I was unduly elected chair. At the same time, the University of Idaho, Boise Cascade, the Boise National Forest, some other folks, and the American Forestry Association, with which I was associated at

the time, had a partnership in here, looking at what was happening on the Boise.

Those things started to inter-relate. The congressman who sponsored the Wildfire Commission came to our first meeting and told us that we were to find that the Forest Service had a fire problem and that it was to build up its firefighting forces and salvage more logs. The Commission, unfortunately, decided it would do its own thing, and we decided that the Forest Service didn't have a wildfire problem. They had a land management problem, and they had to get on top of the ecosystem restoration job or there was no way you could build a big enough fire crew to get your job done. You heard a much more articulate formulation of that yesterday by Jerry Williams.

In Sun Valley in 1992, a group of scientists, several of whom are in view right now, came to the conclusion that many of these systems in the west, particularly the low elevation systems, needed to have real intervention or the wildfire type that would get them was going to change their ecological character in a significant and undesirable way. You heard Larry Craig mention that result yesterday.

The other thing we found was that the agencies really had an overwhelming task that involved double duty. They needed to get ahead of the problem with ecosystem restoration, but they had the problem blowing them out at the same time. Here on the Boise, while we were identifying ecosystem restoration strategies, a third of the Ponderosa pine type was burning up in really uncharacteristic ways.

In a medical analogy, that Forest Supervisor was caught needing to run a wellness center and an emergency room simultaneously, both of them very important. It was tough to do.

We need to start this debate by talking a little bit about forest health because yesterday what we heard was that forest health means restoring health to the greater ecosystem. We heard that articulated very nicely. For a lot of folks, that's been the definition for about ten or fifteen years as we started to work through this.

But quite frankly, it was quite painful to let other people narrow that definition down and then whop everybody over the head with it. It was painful to hear that was just an excuse for whacking trees. It was painful to see a supervisor, who was innovative and creative and who had his staff all fired up to shift the Forest Service from timber harvest to ecosystem restoration and to really focus on it, face full-page

ads, bought by the combat opposition, calling him the “butcher of the Boise.” That hurt; it hurt him; it hurt the staff; it hurt me as a friend.

So our first challenge, if we’re going to talk about forest health as a first priority, is to define it. You were doing a great job of that this morning. Yesterday, we heard the newspaper reporters say we have to do that with the public. We can trust the public with that message. But you can’t let your opposition define your terms for you. You have to define them for yourself, and I think that’s our first challenge, one of communication.

Second, what we heard yesterday is that the Forest Service is too small to do this alone. 191 million acres and a great big organization sounds wonderful, but it’s too small. When we’ve done some of the wildfire hazard and risk modeling that we’ve done in Colorado, Idaho, and elsewhere, what we never allowed was the ownership map to come on to the assessment. We just didn’t allow that. We just looked at the landscapes, saw what they needed, saw what those risks and hazards were, and saw what they needed for restoration. The ownership lines come later when people decide what their share of that process is going to be.

So obviously, Dale, you hit this beautifully. The second challenge you raised was to work with others. Then identify what the Forest Service can and should bring to that table.

Finally, you need to recognize that if you decide that forest health is your first priority, as I firmly advocate that you do, you need to help people understand the size of the problem. We’ve talked about Class 3 condition ecosystems, and people may not know what that means. It means ecosystems are currently in a condition that, when they burn, they will suffer damage in terms of species, structures, processes or something that will alter that ecosystem perhaps in a permanent way.

I’m trained as a soil scientist, not as a forester. When I look at what’s happened in some of these places, it’s the soils, folks. If the soils are damaged, something really significant has changed. Class 3 ecosystems, Forest Service, forested lands only, 50.4 million acres was the last number I saw on a table. That’s a big job. If that was your first priority, you’d be hard pressed to get to your second one.

The truth is that it’s a huge job. Is it an undoable job? No. Is it an unaffordable job? No. It’s an unaffordable job if you don’t use any material in a commercial sense, if you have to stack it and burn it

all. If you start doing some of the things that involved forest management and include the things that are economically and socially rational in there, it is a doable job.

That leads me to my third and final idea. I believe with all my heart that you should move this to the top priority for the agency, but to do that, you have to inculcate throughout that agency a bias toward action. You must be getting things done because we can no longer confuse process with progress. We have to get past the practice of taking three years to decide to do anything. Nature takes our options away while we’re thinking about it.

We must begin to think about that. You’ve been working hard at that, but that job is not done, and you need a lot of help. I’ve heard a lot of that this week, and I believe it with all my heart.

JOHNSON: Congressman Williams.

PAT WILLIAMS: I’ve had a chance to talk briefly with my two colleagues, and we would like to point out a couple of obvious things to you, at least one is obvious. First, as you look at this arrangement, we’re on the left. Second, in the proposition, that the Forest Service should make forest health its top priority, maybe the term “top priority” is the fulcrum of the debate.

We would also like to point out to you at the beginning that we on this side are not against forest health, nor patriotism, nor apple pie. We do have qualms over here about the Healthy Forest Initiative. We know that this is only one of a dozen Forest Service conferences being held throughout the country. This one, as the title indicates, is dedicated to the subjects of fire and forest health. The three of us want to offer the proposition that, as you all know, there are elements other than thinning and logging that must be used and accepted as a prescription to repairing and preventing fire and its results.

Chief Bosworth closed his remarks today, saying the Forest Service mission was one of ecological restoration and recreation. The three of us oppose the Healthy Forests Initiative because we oppose any law affecting the public lands that includes sweeping exemptions from regulations, public review, and your right to appeal to America’s courts.

We are particularly interested, on this side, in three things: primary changes in governance with regard to the forests; second, direct applications by the Forest Service and private landowners that

improve our fisheries dramatically; and third, we are for restoration and not just thinning and logging. We are for restoration, including road removal and repairing of culverts that have blown out. Some of us have crossed over those passes and also looked down at degradation that has involved simply lots of culverts that have blown out and dumped sediments eventually miles away into once-clear, flowing, wild trout streams.

We're for restoration in Montana and Idaho, in particular, of abandoned mine waste sites since we have more than any other two states combined in America.

Given that this is the final major event of this wonderful conference, on behalf of the whole panel, Marc, I want to thank you, John Freemuth, the University, and Cece, always Cece. I want to note that, although you call him Governor, those of us who served in Congress when he was Secretary of Interior, prefer referring to him as Mr. Secretary.

Our luncheon speaker yesterday said, without real intention, that he, the Senator, and Cecil Andrus had worked together on wilderness, but they'd just never been able to get any. That's not true with regard to Cece Andrus. Andrus oversaw the greatest single inclusion of the most wilderness ever in American history in the Alaska Lands legislation and also oversaw additional wilderness here in Idaho. For that, Mr. Secretary, a lot of us will be forever grateful. Thank you so much for this conference.

ANDRUS: They've called me a lot of other things, too.

WILLIAMS: My respect for you made me leave those things out.

JOHNSON: Chief Thomas.

JACK WARD THOMAS: First off, I want to recommend to Dale Bosworth that he take up teaching after his tenure his Chief. You can pontificate about everything and be responsible for nothing at all.

You have to remember that a debater does the best he can to persuade the audience to the correctness of the position assigned. So, therefore, I submit that the Forest Service should indeed make forest health its top priority. Now forest health means almost nothing without definition, so I would define it as it is defined in the Healthy Forests Restoration Act: to make forests resistant to stand-replacement fire.

Now the Forest Service's ability to do active management has been somewhat reduced due to its inability to initiate planned activities in a timely and efficient manner due to a variety of factors: lack of acceptance, legal challenges, inability to simultaneously satisfy overlapping and contradictory laws, existence of a conflict industry, lack of consensus, a constantly-shifting playing field resulting from continuing streams of disconnected court decisions, and increased politicization of natural resource management.

Therefore, this increased emphasis on forest health is a clear mandate from the political system, the first since the overwhelming mandate of the salvage rider in 1994. Clearly, this focus on forest health is a real opportunity for the Forest Service relative to active management.

Why is that? Congress gave marching orders, overwhelmingly so. Current president strongly agrees. Congress has agreed, at least in principle, to provide some righteous bucks to carry out the assignment. The environmental community has ducked. The Forest Service finally has an absolutely clear direction. Specifically, the assignment is motherhood and apple pie. How can anyone object to that, particularly in the urban/forest interface?

The focus is on extension of current fire-fighting orders: protection of life and property first. The result, we would hope, is that those who built homes in the interface will be safer, will feel safer. Local fire departments will be even further buttressed by federal funds. Efforts on national forests and adjacent private lands to reduce fire danger will be supported by federal dollars. The influx of federal dollars will provide jobs in carrying out the necessary management and replace some of the jobs lost in the diminution of the timber programs.

If such activities do make homes safer, it will pave the way for more homes to be built in the interface. Those homes, in turn, will require and feel entitled to protection from wildfire. The new homes will add to the necessity to maintain the newly-created forest structure over time. That will require continued funding, and that funding will be required to increase. If the created conditions are not maintained, they will, in time, make the circumstances worse than already exist. So more homes in the interface will produce a growing constituency for such programs. Questions can be expected to arise, relative to obligations to maintain these conditions and meet

these responsibilities. Once done, the maintenance of the desired condition will result in an entitlement.

Such activities at relatively low elevations can be expected to change ecological conditions with predictable and some unpredictable consequences. Among the predictable, such thinning will allow more light and moisture to the forest floor. This will result, in many cases, in enhanced production of ground-level vegetation, which indeed can be a fire hazard in its own right. In many cases, this will attract seasonally and year-round wild ungulates. They will, in turn, have significant impact in and around houses. It will be followed by predators: bears, cougars, and wolves. They will respond to the food source. Therefore, there will be an attendant wildlife management problem, which will require attention and additional financial support.

Such thinned areas adjacent to homes, roads, and livestock will be seed bed for exotic weed invasion, which will require, again, added management attention. Herbicides are likely not acceptable, so we will use mechanical control, which is labor-intensive and costly. Controlled burns will be risky and will perhaps produce some smoke, which may be a problem.

Large land-holding companies will see a dramatic increase in the value of their lands adjacent to the national forests for the purposes of subdivisions. Land values in the interface coincident with development should enhance revenues to counties. Private entities and local governments will prove to be formidable allies in continued increases in these programs.

So, to sum up. Therefore the focus on forest health is a clear mandate from the political system, the first since the overwhelming mandate of the salvage rider.

Now, this influx of dollars will provide jobs in carrying out necessary management activities, and therefore, I think it is a program that is bound to grow. It's a clear mandate and a new mission for the Forest Service as it enters the 21st Century. Therefore, being in favor of the Forest Service and increased programs, I am in full support.

JOHNSON: Chris Wood?

CHRIS WOOD: I enjoyed being here. Thank you.

JOHNSON: It was just the luck of the draw, Chris.

WOOD: I'm still not sure which side Jack is on.

THOMAS: Somebody said to me that when you debate, you have to do your best. I told them I set out to convince myself of my position. They said, "How do you do that?" I said, "You just have to have adequate ego."

WOOD: It's good that you mentioned that, Jack, because it wasn't until I was on the plane coming out here that I thought, "How am I going to argue against forest health being the overriding objective of the Forest Service?" Can we submit Dale's comments this morning for our side of the ledger? We could have done away with the debate. The Chief already made our argument for us.

Our larger perspective, from this side, is that this is more a question of values than it is anything else. Let me give a brief example of what I mean by values. I want to talk about values in the context of one of my favorite issues, the roadless issue.

Yesterday, someone told a very sweet story about being with his dad, fishing on a river in Idaho. He just remembered chasing cows. As an angler, I hate cows in streams. There is nothing sweet about them. But it doesn't diminish the value of my friend's experience or make my set of values right. I just have a different experience relative to cows in streams.

On a more substantive level, I think the roadless issue is a good way to look at this. View the roadless issue from a forest health prism, and it's pretty straightforward. You have too many missed fire return intervals, too many small trees, and too many bugs. The condition class of the forests in Idaho—be they roadless or wilderness or general forest—are typically equally out of whack. You don't see condition classes that are much healthier in roadless areas than in some of these other portions of the landscape.

So the answer would appear to be, if you listen to all the forest health experts, to do large scale treatments, landscape-scale treatments involving fire, thinning, and a whole bunch of other vegetative management methods. This to me is the distinct similarity between the forest health guys and lawyers. Sometimes when the only tool you have is a hammer, everything begins to look like a nail. That's of concern to those of us who look at roadless areas through a values prism.

What I want to do is cite a few statistics about the value of Idaho's roadless areas from a report that is actually available on line {Can I stump for my

organization here?) *www.tu.org* It's called "Where the Wild Lands Are." It's a series of roadless reports that we're doing that describe the hunting, fishing, and wildlife values of the roadless areas.

These places are all out of whack. From a vegetative and management perspective, these landscapes are in big trouble. They are unhealthy. In Idaho, 68% of remaining bull trout habitat is found in roadless areas. 74% of the chinook habitat and 74% of the steelhead habitat are found in roadless areas. 50% of the west slope cutthroat habitat, the strongholds anyway, is found in roadless areas. From a game perspective, 88% of the land in units that yield more than 90% of branch bulls is in roadless areas.

I only raise this, not to pick at the sore that Jon mentioned earlier, but because they speak to the values context in which I think forests ought to be managed. Multiple use, as much as it is criticized and ridiculed, is probably the bureaucratic equivalent of democracy in action. As Winston Churchill said, "It's the worst form of government except for all the others."

JOHNSON: Professor Bonnicksen.

THOMAS BONNICKSEN: Thank you. I would argue that the preserve-and-protect clause in the Organic Act of 1897 made forest health the overriding principle of management and that we don't need further legislation to do so. We already have it, but not as an end in itself but as a means to provide the country with the many values forests produce.

Unfortunately, we have failed. We know that 132 million acres on the national forests present a serious fire risk, Class 2 and 3. We know that fires have doubled since 1980. I have spent the last year and a half working on the San Bernardino National Forest, and I can tell you that insects are a bit of a problem as well.

Up until now, there has been no social agreement on what to do on our national forests since the 1960's. The unnatural and destructive fires of 2000, 2002, and 2003—and I was on those fires in 2003—and the mass of unnatural insect infestations has changed everything.

Today, there is widespread social agreement that we must protect each other and our property and the forests we all cherish. Any of those who do not agree are being marginalized. Their arguments are becoming less believable, and their lack of empathy for people, more obvious. They have been reduced to

throwing stones in the form of lawsuits because they can no longer convince a skeptical public.

Still, we do not have a mandate. The vision of 1905 fit the needs of mostly rural people. Today, 76% of our population, according to the current census, is urban. In California, where I spend a lot of my time, 93% are urban. Obviously, these people are detached from the land. Those people who are moving closer and closer to the forest are really just displaced urbanites. They are not becoming ranchers and farmers just because they are moving into the country.

So in order to appeal to this constituency, which in my view is an urban constituency, we have to have a new vision. We have to be as charismatic and persuasive as Pinchot and Roosevelt. The 21st Century demands it, and, in my view, it can only come from the Forest Service itself.

Many of you already know what I advocate. It's no secret. I've been doing it for thirty-five years. That is restoration, which is a vision for the future rooted in my deep respect for the past. I'm not talking about restoration everywhere. Certainly there are places where it would be inappropriate. But around those communities especially that are composed of displaced urbanites, it is what they will expect, accept, and embrace. I have talked to many, many people and groups in those communities, and they all agree. They like it.

I will define restoration forestry as I'm putting it in a book I was just contracted to finish next year. Restoration forestry is defined as "restoring ecologically and economically sustainable native forests that are representative of historic landscapes, significant in America's history and culture, also serving society's contemporary need for wood products and other forest services."

That means three things are essential to accomplish it. First is history. We have to actually understand the specific forest and the specific location well enough to say, "This is what developed over the last several thousand years." It is, of course, inherently sustainable and healthy.

Second is management. We have to have management. It is impossible to do it without management. I know prescribed burning is a tool that we all value and use. I studied under Harry Biswell, "Harry the Torch," at Berkeley. I know a little bit about prescribed fire, but history tells us something about why we can't use it as the primary tool. I wrote

the book, *America's Ancient Forests*, and I had to read all the hundreds of first-person accounts by all the explorers. If there is one theme about prescribed burning that would be relevant today, it is how many observations were made by those explorers about not being able to see the mountains because of the smoke, about how miserable it was to be enshrouded in smoke. Only once in a while was the sky clear all summer long.

We can't live like that in the 21st Century, and we won't. Smoke, in and of itself, will be the biggest single constraint, but we still have to use it. It is a valuable tool, and it will be more valuable after we thin our forests.

I know we also want to talk about little trees as our problem. In the Sierra Nevadas, for example, 67% of the trees in the Sierra National Forest are pole-size. It's not just little trees. Boutique forestry, which means using little trees for little things in little markets, will not solve our problems either. We have a serious problem that will require serious forestry to solve.

Third, there is the question of cost. I testified in Congress a couple of years ago, and I was asked to figure out the cost side of it. At the time, the area in danger was 73 million acres. I went through all the literature I could find, got all the prices and the costs of manipulating forests by various means, and concluded it would cost \$60 billion in taxpayer money for the next 15 years to restore that 73 million acres. It would cost another \$31 billion every fifteen years thereafter in constant dollars forever to maintain it.

I don't think we're going to do that. I really don't, and I don't think you do either. That means we have to find value on the land that will leverage the tax dollars, or we will never restore our forests, make them healthy, and solve the wildfire crisis.

So in my view, restoration forestry—which is a combination of history, management, and partnerships—will ultimately do what I think we all want to do: bring back the legacy we have lost and that I enjoyed learning so much about by reading the accounts of the explorers, forests that represent a heritage as significant as any building or artifact in our history as a nation and, at the same time, provide all those values that we cherish and want from our forests.

So that's my position: restoration forestry.

JOHNSON: You've heard the case for the affirmative. After Mr. O'Toole's comments, I would ask your team, Neil Sampson, to be ready to pose a couple of pithy questions to the other side. We will then give them an opportunity to question you.

RANDAL O'TOOLE: When Pat said that we're on the left side, I wanted to move away because between 1980 and 1990, I shifted my views from being an environmentalist, which was traditionally viewed as a leftist, to a free-market environmentalist. Some people think a free-market environmentalist is a contradiction in terms. How can you be a leftist and free-marketeer? In any case, I don't like to be associated with these leftists.

Even before that, Marc talked about how we're the negatives. It's hard to be saddled with the label "negatives." You're the negatives. Ironically, that's probably most appropriate for me because I'm so negative. I not only don't think forest health should be the primary goal of the Forest Service, I don't even think that's the primary question we should be asking today.

Probably Jack Thomas presented the case I wanted to make and made it probably better than I can. The case I want to make is that institutions matter. How you design your institution is far more important than what mission you give it.

Now I'm going into my prepared spontaneous remarks, so you'll notice a change in tone in my voice. We've been debating the mission of the Forest Service for years, for decades. Fifteen years ago, I was at a conference where environmentalists and industry were debating the mission of the Forest Service, and finally Chief Dale Robertson got up and said, "We can talk a lot of philosophy about how the national forests ought to be managed, but let me tell you, it is the budget that energizes the Forest Service."

What he was saying was that mission is really determined by incentives. Budget is one incentive. There are other incentives, but the budget happens to be the one that is most easily measured and most easily controlled. But I doubt that you can think of any government agency more than ten years old that hasn't experienced what we call "mission creep." Why does mission creep exist? Because we create these agencies out of some sense of idealism, we give them a mission, and then we give them a budgetary process. But the incentives created by the budget don't align with the mission. Pretty soon, the agency

gets rewarded for doing one thing different from what the mission is, and it refines its mission to what it is getting rewarded for.

It might give lip service to the original mission, but what it is really doing on the ground is what it is rewarded for, not what its mission is. The best and most obvious example is how the blank check has dramatically influenced Forest Service fire policy. We all say we want to have more natural fires. We want to have more prescribed burning, but the blank check controls what we do with fire suppression. We put so much money into that we don't have enough money left for other forest management.

The real question we should be asking is not what should be the first priority of the Forest Service. We should be asking what kind of institutional design will best allow the Forest Service to achieve its priorities and its mission, including forest health.

I want to suggest that there are many things we need to consider when you develop institutional designs. Three of the most important for the Forest Service are (1) it needs to be de-centralized. Mark Rey gave me once a 1952 copy of Newsweek magazine that featured the Forest Service. It had Smoky the Bear on the cover, and the Forest Service was such a popular agency that members of Congress would rather abuse their own mothers than say anything bad about the Forest Service. Can you imagine that?

Why is this true? The number one reason it gave was that it was completely de-centralized, was working with local people, and was collaborative and responsive. The Forest Service lost its way when people like me, environmentalists, started attacking it. It responded by centralizing. We need to get back to the decentralized days.

Second, of course you need to have incentives that align with the goal. That was my whole point in describing the problem of mission creep. Incentives need to be aligned with the goals of the Forest Service.

Third, we need to have a public involvement process, a mechanism that encourages cooperation and collaboration, rather than a mechanism that encourages polarization. Some of you last night complimented the Forest Service for having an outstanding public involvement process. What I didn't mention was that the public involvement process was developed with good intentions but had the unintended consequence of leading to more polarization.

The forest planning process that the Forest Service tried in the 1980's and continues to try today gives people incentives to polarize. Despite all you hear about collaborative groups—the Boulder-White Clouds collaboration, Quincy, and Applegate—anyone who has been involved in these groups knows that there are strong pressures on all parties—the environmentalists, the extractive industries, the Forest Service itself—to dissent from that collaboration. If one group dissents, it all falls apart. So it's very very difficult under the current system to have those kinds of collaborations.

So how do we change? What kind of institutions do we create that can meet those objectives? A lot of ideas have been tossed around, but I want to give you three ideas. Sally Fairfax of the University of California and I have developed these three ideas in quite a bit of detail. First, the Forest Service should be allowed to charge user fees on anything that it can charge for, and it should be allowed to keep a share of those fees, the same share for everything.

One of the big problems for the Forest Service between about 1950 and 1990 was that it was legally allowed to charge the fair market value for timber, and it was not legally allowed to charge fair market value for any other resource. It was legally allowed to keep an unlimited share of timber receipts, so it got huge rewards for timber. As someone said in the video this morning, "Timber paid the rent." But it was not legally allowed to keep an unlimited share of any other receipts. Most of the receipts it did collect, it wasn't allowed to keep at all. So of course the Forest Service emphasized timber because timber paid the rent. So allow the Forest Service to charge for everything and to keep the same share, whatever percentage you pick, of all receipts.

Number two: We talked a lot about trust yesterday. My response was, well, you're telling me that you screwed up for 99 years, but trust you, now you have it right. I want to talk about a different kind of trust, and that's a fiduciary trust. Sally Fairfax has written a couple of books about fiduciary trusts, and she points out that there are several legal requirements for a fiduciary trust. You can't just call something a trust, like the Social Security Trust Fund or the Highway Trust Fund or the Knudsen Vandenberg Trust Fund. That doesn't automatically make it a fiduciary trust. Once you do meet the requirements for a fiduciary trust, you place strong, strong obligations on the trust managers. The whole point

of a trust is that is assumed that the managers of the trust are going to try to do everything they can to rip off the trust.

That's just the opposite of what we assume with the Forest Service. We assume that the Forest Service is completely altruistic and wants to manage the national forests for the public benefit, for the greatest good for the greatest number for the longest time. We give it all kinds of leeway, and when it turns out that it's not true, we're shocked, shocked that they aren't completely altruistic.

Of course many people in the Forest Service are altruistic, and altruism plays an important role in the Forest Service. But as Freeman Dyson said, the British Constitution was made for gentlemen, and the American Constitution was made for crooks. He liked the American Constitution better because crooks are rather more numerous than gentlemen. Not that I am accusing anyone in the Forest Service of being a crook, but when the incentives tell you to do one thing, you're going to do that thing no matter what the actual mission is.

Number three: The third idea is that the Forest Service have boards of directors for each national forest or each region, not for the Forest Service as a whole because we want to decentralize it. At least some of the directors would be elected by a Friends of the Forest group, e.g. Friends of the Boise, Friends of the Payette Forest, Friends of the Clearwater Forest. The Friends group would be made up of anybody who wants to join, so you would get public involvement in the process that would naturally result in an appropriate mixture of national, regional, and local interests. If a forest is of particular national interest, then a lot of people from all over the nation will join that Friends group. If a forest only has local interest, then most of the members will be local people.

These three ideas—a fiduciary trust, user fees, and Friends groups—are one way of reforming the Forest Service. You might not like all those ideas. You might have your own ideas about how we could do it. We have one hundred national forests. Why don't we take this idea and your idea and other ideas and test them out on individual national forests for five years and see what the result is. If we do that, we can then figure out what really works, not just for the Forest Service but also for the Bureau of Land Management, the Park Service, the Fish and Wildlife Service, and all the other agencies that are going through the same strains that the Forest Service is going through today.

To sum up, my point is that institutions matter, especially that institutions matter more than mission. I hope we can talk a little bit about institutions today.

WILLIAMS: Marc, I don't want to inappropriately intervene because I know you have a process, but I do want to defend Randy's notation that he is not on the left. There are those of you, no doubt, in the audience who think that Randy is doing this simply to protect himself, knowing that he is here in Idaho. That's not so. Democrats swept in Montana this year, and he says the same damn thing up there.

JOHNSON: OK. It's time for some quick questions and, I hope, pithy and quick responses.

SAMPSON: As the only one up here to have spent 18 years working for boards of directors, Randy, I want to take you off to one side for a while. The amateurs used to come to Washington and tell me they knew a hell of a lot more about running an organization than I did. They then proceeded to prove it.

A couple of questions, though, that do spring to mind. Chris, you talked a lot about fisheries and roadless areas. It's hard to find people who are against maintaining fisheries and roadless areas, but we've talked a little bit about pushing all our priorities to the wildland/urban interface. You talked about all those areas back there that are equally out of ecological condition. How much do we let those areas get significantly damaged before we've really traded off the roadless values versus the fisheries or the other wildlife or the other forest values that are back there?

Dale made the case this morning that, yes, the priorities are out front there where the people are, but there are also some real priorities elsewhere. How do we balance this? It gets down to this question: If we don't use forest health as the fulcrum to win the approval to do those things, what will we use?

WOOD: It's a fair question. I'll go back to what I said earlier. You're looking at the relative unhealth of those areas from a vegetative management perspective, forest health people as well as lawyers. If all you have is a hammer, everything starts to look like a nail.

SAMPSON: The fire looks at the vegetative thing, not the fish, too. The type of fire that you

going to get in those areas is the result of vegetative conditions, so it's logical to start by looking at that, isn't it?

WOOD: It's one parameter. Another parameter is why are those places, right now, the strongholds for fish and wildlife in the state of Idaho? We talk about restoring the elk herds, some of North America's greatest elk herds, in the Clearwater. Those herds were established by a reset fire that burnt everything down to the ground. Then after a few years, we started getting a different condition, which happened to be conducive to elk. But it took that devastating, tragic fire to make that elk habitat possible.

SAMPSON: Well, it's interesting because most of that fire wasn't as ecologically far out of condition as it has been labeled. It happens that was a particular forest type that probably needed that fire. That illustrates something. I don't think we can use one forest type to illustrate the needs everywhere. Tom Bonnicksen brought that up, and I'd like to have him comment.

BONNICKSEN: Let me ask a question about that. Sure, you provide forage and browse, you get elk. But if you burn down a forest, do you get more fish?

WOOD: What we've seen on the Boise, for example, is that the effects on fish from stand-replacing fires are often less than repeated multiple entries for thinning or roading to do thinning. It just depends. Our point is that forest health is one parameter in a suite of values and factors that should be considered in managing a forest. That used to be called multiple use.

JOHNSON: Jack, do you have a question for the misguided panel on this side of the room?

THOMAS: Assuming the potential of a fire somewhat approaching the level of the 1910 burn, which is indeed possible in much of the west, what do you think public response to your position would be at that point, your position that we should leave them alone, they'll burn, and it will be all right? We won't mess with them. They're out of sync, but we don't want active management there, so we will stand by and wait. There is a distinct probability that we

would have not only isolated stand-replacement fire but massive stand replacement fire.

Outside of the ecological consequences, what do you think the public's response to such a fire would be? Would it be somewhat similar to the response in 1910?

WILLIAMS: When Bill Clinton was president, the response in the last couple of years in his Administration was that he set the fires? Remember? I had created some amounts of wilderness in Montana, and I used to get letters from outraged constituents who tragically lived near these fires in the Bitterroots, enormous fires, saying to me, "This is your and Bill Clinton's fault."

So I guess the response would be, "It's George Bush's fault."

O'TOOLE: Jack, one of the disturbing things that your presentation pointed out, more than anything else, was that if you make fire and forest health the chief priorities, then the Forest Service, in order to continue to get funding for that from Congress, has to have a sustained yield of fires. It has to have a sustained yield of major stand-replacement fires, and it has to have a sustained yield of houses burning down each year. Otherwise, Congress will lose interest and will stop giving it funding. To me, that's a very disturbing thing. Why are we going to put the Forest Service in a position where it has to have a sustained yield of destructive activities to get the funding it needs?

BONNICKSEN: The premise of that is that we're going to have to do this with appropriated dollars. If you change that premise to one that says, "We're going to manage these forests with money that's derived from the forest," we don't have a problem. We don't need sustained death and destruction to continue doing the right thing, which is managing our forests responsibly as was required in the 1897 act, which has never been abrogated by any subsequent legislation.

THOMAS: To add a little humor to that, I have an uncle who was a fighter pilot, and he loved two things: flying hot fighters and chasing women. He was always ragging me about being a blood-sucking bureaucrat, and I let him have it. I said, "The taxpayers have been subsidizing you flying hot fighters

for thirty years to protect us from the Russians.” He said, “Yeah, did you ever hear the story about the guy standing on the street corner, snapping his fingers. Someone said, ‘What are you doing?’ He said, ‘I’m keeping the grizzly bears scared off this corner.’ He said, ‘You damned fool. There are no grizzly bears around here for a thousand miles.’ The guy answered, ‘Yeah. That’s what a good job I’m doing.’ He said, “The Russians have never dropped an A-bomb on you, have they?” So we’ll just use that approach.

O’TOOLE: That raises another question, however.

JOHNSON: That was a pretty smooth transition.

O’TOOLE: We all know there are a lot of different forest types out there. They are not all the same. Almost all the examples we hear about thinning and fires helping to restore the forest come from the Ponderosa pine forest type. Very few other forest types in the west are like that forest type. Lodgepole pine isn’t. Douglas fir hemlock isn’t. About the only ones are the mixed conifers in the Sierras.

So if you give the Forest Service a tool, which is to use timber harvesting, commercial timber sales to produce forest restoration, that tool won’t just be applied to the Ponderosa pine forests. It will be applied to all the forest types. If you give someone a hammer, everything is a nail.

There is a prominent ecologist who sent me an e-mail. He didn’t want to be quoted, but he said that the idea that the same tools that should be applied to Ponderosa pine should also be applied to lodgepole is as dumb as stumps. That’s why I don’t favor creating that tool that would eventually be applied everywhere, even though it should only be applied in some places.

THOMAS: Do you have a degree in forestry?

O’TOOLE: A long, long time ago. Yes, I do.

THOMAS: Then you know forestry is a 400-year-old profession. You also know that it is based on natural history, the observation of forests and the development of tools and techniques that are appropriate to each species in each community. You probably also know that the Forest Service

is composed largely of foresters who would never conceive of the idea of using a single tool for every forest. I don’t know anybody in the Forest Service that would do that.

Also, your premise is wrong, too. We’re not talking about just Ponderosa pine, which, by the way, is the widespread forest in the west. We can talk about the fire regimes of all the forests of North America and tick them off. The bottom line is that those forests that were naturally resistant to fire—and I’m talking about surface fire and mixed fire forests—cover 63% of the forests of the lower 48 states where that method is appropriate—and that includes the oak/chestnut forests of the east historically.

First of all, I trust foresters, and second, we are talking about the majority of the forests in the lower 48.

O’TOOLE: But we are not talking about the majority in the west.

THOMAS: Yes, you are. You’re talking about the majority in west, and you’re talking about where the majority of the people are in the west who interact with those forests.

O’TOOLE: Less than 40% in the west are of that fire regime and type. I trust foresters. What I don’t trust are perverse incentives. If you give foresters the wrong incentives, they won’t always do the right thing. The reason why the Forest Service is in the position it is in today, the reason why it lost the popularity it had in 1952 is that the Forest Service foresters switched from selection cutting to clearcutting. I have Forest Service brochures from 1952, saying, “We’re proud that we use only selection cutting on our forests.” By 1962, a majority of foresters switched from selection cutting to clearcutting. By 1972, they almost all had switched. Clearcutting had become the dominant forest practice.

JOHNSON: I don’t want to interrupt, but I’m going to. Pat Williams is itching to ask a question.

WILLIAMS: I do want to ask a question, but first, I want to take the unusual step of maybe being helpful to the other side. This is the last time I’ll do it. I just encourage you not to equate the Forest Service with other of the world’s oldest professions.

Dale, I want to assure you there was no meaning in that. It was solid joke.

Everybody in a big institution—be it a public or private institution or a big agency—understands management creep and how difficult it is to turn that big tanker around. If management creep is real—and we all believe it is—then let me dare make a prediction about what happens 20 years out if the Forest Service follows what might be its current direction, particularly if the Healthy Forests Initiative and others to follow in the next few years take the same tack.

That prediction is that in 20 years, logging, mostly small but deep back country logging—will have expanded throughout America's internal forests. Renegade four-wheel tracks will have punched ever farther into the wild, adding in a very real way to the already 380,000 miles of Forest Service roads, enough to reach to the moon and then 200,000 miles farther out into space.

So what we have is another small salvage sale here, over there a little thinning project, and new four-wheel tracks deep within the now protected roadless base. Snowmobile sounds will be piercing our winter air increasingly. The public values, friends, have changed, have changed significantly as has the economy, particularly in these Northern Rockies.

I teach at the University of Montana, but I'm assigned to a place called the O'Connor Center for the Rocky Mountain West, a sister center to Cece's good center here. We do economic studies, and this is what popped out of our last economic study. Artists and designers, as a profession, in Montana now earn three and a half times as much salary as do miners and loggers, taken together, in Montana. Bob Dylan said it: "The times they are a-changing," and the Forest Service perhaps is not going to but it should not continue down the track it may well be on under the mandate of the Healthy Forests Initiative. If they do, twenty years from now, the forests will look far different than what the American people want.

SAMPSON: I think 20 years from now, there will be 20 years of change. I don't think there is any doubt about that, change in what people want and how places look. How are we going to match up those expectations from all those expatriot urbanites that are out there expecting the Forest Service to be frozen in time and space and look the same way forever? How are we going to deal with that if we don't do our best to manage the forests?

I'm thinking about the fact that once upon a time, my family adopted a orphaned deer. It was against the law, but we were out in the country, and we did it anyway. One of the lessons that comes out of that is that if you adopt an orphaned deer, you own the dad-gummed thing. You own it as it gets bigger, meaner, nastier, harder to get to do whatever you want it to do or not do whatever you don't want it to do. But you've taken on a responsibility, and there you are. You can't help it. The situation has changed, but you're stuck with it.

The American public has taken on a responsibility with the land. It's carried it out to the best of its ability for a hundred years. In the meantime, not just the lands have changed, and not just the people's expectations, but the way in which we express them has changed. I had personal experience in 1964 with a resource conservation and development program. It was in a bill. It was about this long. It was in a paragraph in a rural development bill. I still have a copy of Agriculture Secretary Orville Freeman's memo, implementing that bill, and his signature was on the front page. Today, our Congress, if it were to give the Forest Service any new guidance, would give it 1300 pages; it would go from there to the biggest bevy of lawyers you ever saw in your life; and the rule book would be this thick to get it done.

Here we are, talking about local empowerment, decentralization, and boards of directors. How do we get past the fact that the Forest Service didn't cause that change in the way we direct public policy? They are a small player. How do we get this done if we don't just keep our heads down and keep working at healthy sustainable forest ecosystems and hope to heck that other folks catch up with us sooner or later? How do we get there? How do you avoid doing what we've set out to do, Pat?

WOOD: I was just going to affirm for the record that I am not a forester so that no one asks me that. Pat, you go ahead.

WILLIAMS: There is no question but that there is going to be change, and many of us have very significant trust in the Forest Service, despite sometimes the political acts of the Congress, to try to do those changes in a rational way that follows the desires and expectations of the American people.

What you have laid out is responsible and reasonable, and I do think that's the way history tracks itself. My concern, quite frankly—and

this is non-partisan on my part—is that political manipulation by elected people in authority in an institution that I revere, the United States Congress, can send the Forest Service, sometimes against its own best intentions, down a path that, many years later, it wishes it hadn't.

The New York Times, not too long ago, ran a lead editorial and, for some reason, started with a quote of something I said in 2002, which was, "The only thing that burns hotter than a western forest fire is the demagoguery of western Washington politicians. When they react with a Healthy Forest Initiative, you can bet you're bottom dollar they will get it wrong."

THOMAS: Let me feed back on the question about roads. We have an inescapable condition: The Forest Service gets more recreational use than the Park Service. That's going to expand over time. We can also run a correlation co-efficient to understand that recreational use is highly related to the road system. I don't particularly like roads because I've always been wealthy enough to own horses, but Pat, no matter what happens, the population of Montana is going to triple in the next 15 or 20 years, and those people are going to be back in the woods, whether there are any roads there or not.

We already have extreme problems with off-road vehicles, whether we have road systems or not. When I was young in the Forest Service, even as a research guy, I could write somebody a ticket for doing something wrong. A standard Forest Service officer wouldn't walk up to somebody now and write them ticket because they might get beat to hell or shot. That's why we have an expanding law enforcement operation, which we didn't want in the first place but now understand that we have to have. That's going to happen whether we have healthy forests or unhealthy forests. That is a stretch of the issue and will occur with the population explosion.

By the way, I did like that thing about artists making more than foresters, and by God, I'm taking it up.

JOHNSON: I'm going to declare a draw or at least a cease-fire and offer you, the audience, the opportunity to pose a couple of questions before we wrap this up. Does someone have a question? Carolyn.

CAROLYN WASHBURN: For the affirmative panel, a lot of your premise about forest health seems

to suggest that we need to do it because if we don't, we'll have catastrophic fire, so are you really saying that the primary mission of the Forest Service is preventing catastrophic fires?

BONNICKSEN: I'll start by saying no. If you leave the forest alone, whether you have a fire or not, it changes. So in the Pacific Northwest, some of those reserves are going to convert, with no fire or other disturbance, from a douglas fir forest to western hemlock forest. Likewise, lodgepole pine will become spruce and fir. There is a replacement process that is going on in these forests as well. So restoring our forests and sustaining them is more than just fire. It's also sustaining the species composition and the integrity of the forest itself, so it's far broader than that.

SAMPSON: From my point of view, we actually started with that question turned around. The question was that you're spending a king's ransom and having a lot of black landscapes and bad results from the catastrophic fires. The question was: What do you do to get ahead of them? Do you build a bigger Fire Service or do you do something else? Our answer was you do something else. You start to try to build healthy, resilient, robust systems and let fire take a more normal place in it.

One of the misunderstandings is that if you manage forests for healthy forests, you eradicate fire. You don't eradicate fire. You change the nature of it. People are going to see fire and see fire damages. You can take the healthiest forest you want, and if you get a wind behind it, you'll get a fire out the boundary that will wipe out a house or subdivision in nothing flat. We can't reduce these things to zero.

The question was: How do you address the biggest black hole for money that this agency faces and do it in a way that you get these other values at the same time? The question was never that you had to do this for fire alone.

THOMAS: As you probably caught, I hope, some of my presentation was a little tongue-in-cheek...BUT not too much. I was pointing out a trap. We have a circumstance that is obviously not acceptable to the Congress where life and property in the interface need to be protected, and we need to address that circumstance. The point that I was hoping would emerge from that is we (I will always say "we." My shorts are green.) need to figure out

how to address an obvious political mandate from the Congress without that mandate expanding itself and encouraging more of the same problem at the same time we're trying to address the problem. I hope people picked up on that.

There is a grave danger here of trying to address that problem and then inadvertently making it easier for that problem to magnify itself. I don't think the Congress quite carefully thought their way through that nor did it recognize that there will be inherent additional problems from this approach. It's not that we should not do that, but there should be full recognition that the problem is not that simple, both in the political sense and the ecological sense.

JOHNSON: Briefs or boxers, Jack?

THOMAS: It depends on how overweight I am at the moment.

AUDIENCE: First of all, I'm very pleased that I had a career in wildland fire control and fire management. Let's go back to basics, the basic forestry principles that are one hundred years old. We spent a lot of time in college on silviculture methods and on insect and disease control. I haven't heard too much about that because during my career, we seldom did any thinning and pruning, even with KV funds. That just never fit into it. If the KV funds were there, they were so small that it didn't make a lot of difference one way or the other.

But back to the basics. Why not sell Congress and sell the people of the country four hundred years of forestry practices of thinning and pruning and maintaining a healthy forest that way, based on basic principles?

Fire was always a part of the silvicultural process. It was never ever intended to go in and underburn on healthy stands because you'd have a stand-replacing fire if you did that. So fire was always a utilization of the silvicultural process in one way or another.

BONNICKSEN: I can respond briefly by saying that what you can do when you use silvicultural techniques to cultivate, regenerate, and improve a forest depends on the value you derive from the end result vis-a-vis the costs you have to incur. Most of those kinds of silvicultural techniques are not, by and large, financially feasible on public forests. They are mainly feasible on private industrial forests

where their principal purpose is to produce wood as a product.

I think that's part of the problem. Ultimately, if we manage our forests in a more economically efficient and effective way, there will be more opportunities, as the result of revenue derived, to do a better job with those kinds of practices.

WOOD: It's probably a function of our panel and of the topic of this conference, but when you consider this question here, for most people who care about forests, what we're talking about, albeit very important, is highly abstruse and not really relevant. For most people, these are deeply social issues. We're managing values, as Dale put it.

I would propose, and maybe I'll speak for the other two environmentalists in the room, to double the cut over the next couple of years. You can even call it "forest health treatments" if you want to. I think we'd be able to do that if we were able to say and recognize that, for the meantime, the roadless issue is a red-hot issue, and we're going to leave those roadless areas off the table. Dale has done a remarkably good job of that in spite of some fairly intense political pressure over the past four years.

That's how we'll begin to move forward and build that trust that everyone talks about. We need to stop trying to beat forestry tonnage down the throats of people who are not foresters. They are not foresters. That's not what they are there for. They are there because they love the outdoors, and in the case of our constituency, they love back country hunting and fishing. It's not about stems per acre for them. It's about the resources that are in those places.

JOHNSON: One final question.

AUDIENCE: I have two deep dark fantasies with all respect to my political mentor. The first fantasy is that one day, a forest supervisor from an intermountain forest will address a group of people and say, "We made a tragic mistake of forestry in the wholesale conversion of Ponderosa pine/parkland ecosystems in the intermountain west." I've never heard a Forest Service official say that to a group of people in a room, and I think it would be a helpful message in this environment.

I recently facilitated a wildfire protection plan for 5,000 people living among 50,000 acres of formerly Ponderosa pine, not lodgepole pine, that

threatens their communities very directly. The plan could have been presented on a napkin. It would have said, Restore Ponderosa pine forests to our neighborhoods.”

Then my next fantasy is that sometime an environmental coalition will send out an organizing newsletter, saying that we are starting a national campaign to restore Ponderosa pine systems in the intermountain west. You know what? That will require a heck of a lot of active management. It will mean a lot of employment and a lot of action in the woods.

Randy was maybe going in that direction before he was cut off. Anybody?

WILLIAMS: The fellow who asked that question is David Blair. David worked in my office and did a splendid job for a good long time while I was in the Congress. David raises a point of misunderstanding, although not his misunderstanding.

There is a misunderstanding among a lot of people that conservationists and environmentalists are only here to litigate. The conservationists that I work with in Montana—and I work with a lot of them, including farmers and ranchers—are very productive. They are very goal-oriented. They don't want to stop progress. They believe that their way of doing this—and I think they're right—is to work with the Forest Service—and Dale will tell you that works for them—in a way that the Forest Service understands that the public in Montana wants to reach a new day because we are in significant transition in Montana and throughout these Northern Rockies.

Conservationists, not excluding other people, are on the side of the will of the American people and are on the side of jobs, including jobs in the woods and in the valleys for our tomorrows. They are willing to work with people. They are doing the plantation. They are willing to double the harvest.

Do you know what we've quit doing? We've quit listening to each other. That's why this conference is, at bottom, important.

THOMAS: I heard the speaker and a number of others here say that they want some statement of contrition that we screwed up. They want somebody to stand up and be sorry. It was me. I did it. I was only eight or ten years old, but I take full and total responsibility. I am indeed sorry for all of those sins, and I wish we would put that to bed. I did it, I accept

full responsibility, and I'm very sorry. Now let's get on with it.

JOHNSON: That's probably a good place to quit, but I'll give you the last word.

BONNICKSEN: I'd just like to point out that silviculture is not about removing things. It's about creating things. Restoration is about creating forests that are like they used to be. If you saw them, once they were restored, you would cherish them more than an unmanaged forest in the back country that burns unnaturally and destroys soils, wildlife, fisheries. Restoration is a creative process, not an exploitive one.

JOHNSON: Ladies and gentlemen, Jack Troyer's admonition to us was to be entertaining, thoughtful, and useful. Well, two out of three isn't too bad. Please join me in thanking this very distinguished panel.

If you'll stay in your seats, we're going to rearrange the chairs a little and have Governor Andrus, Chief Bosworth, and Steve Daley Laursen, Dean of the College of Natural Resources at the University of Idaho, provide some summing-up comments.

I also want to acknowledge Bethine Church who is with us this morning and who cares passionately about many of these issues.

FIRE AND FOREST HEALTH

The Forest Service's Continuing Management Challenges in the New Century

FRIDAY, NOVEMBER 19, 2004

JORDAN BALLROOM, STUDENT UNION

BOISE STATE UNIVERSITY

11:30 AM

Summing Up: The Next 100 Years

MARC JOHNSON: Obviously the Governor and the Chief have been well introduced. Steven Daley Laursen is the Dean of the College of Natural Resources at the University of Idaho. His expertise, as an academician, scholar, and teacher has been in applying leadership to issues involving environmental and natural resource policy. He has been here for the last day and a half, scribbling notes furiously while he sat next to me during a good part of this discussion. I think he has the outline of a new book there.

In any event, Steve I'd like to ask you to take a few moments to give us your observations on what the take-aways are from this conference, what the message ought to be to the Forest Service and the public as we think about the next 100 years.

STEVEN DALEY LAURSEN: Thank you, Marc. Good morning everyone, and before I let my opportunity slip, I want to thank the Secretary/Governor, John Freemuth, Marc Johnson, President Kustra, Yvonne Ferrell, and others behind the scenes. What a privilege it has been to be involved in this. Thank you very much.

I did take copious notes because those of you who know me know that's my style. I won't apologize for having a thousand pages. It doesn't mean I didn't get organized.

Last night, as I was looking through my notes and thinking about all of the discussions, I realized I had a choice. Do I go down the road of a strategic, decision-making model around forest fire and health? I put together a model like that, based on what I heard the last few days.

The other possibility was to go down the road of the U. S. Forest Service's role within a future vision for America's forests, broader than the Forest Service but with the Forest Service as a part and with fire and health as examples within that vision. It's obvious by

the emphasis in my voice that I chose the latter. I'd be glad to comment on the former with any of you in private conversation or even if there is time as we chat on here.

Jack Ward Thomas put his finger on me as an academic administrator and said I will pontificate without any responsibility. I do not have responsibility, but I do have a lot of experience in the things that I'm going to say, working as a facilitator at the interface between public agencies and the public and between a public university and the public. That's where I have spent my career.

My presentation is meant to be motivational, philosophical, and very optimistic. That's what I think is interesting and useful. I also want to appeal to two things within you: your sense of democracy and your sense of leadership.

Some things are out of alignment. The ride could be smoother. We could align a little better the way we work, the way we govern or use our principles of government, the way we trust each other, and the way we strategically manage our resources. We could better align all of that with where our culture currently is.

My thesis to you is that the culture has moved. We are not completely aligned with it, so we are missing opportunities to, as Jack said at the end, get going. Someone said in this presentation the last two days that the language has changed but not the culture. I would submit to you that exactly the opposite is true. Culture has changed; language is beginning to change. Your language over the last two days indicates that the language is beginning to change.

I'm going to call on three philosophers to reinforce my points. They are not Gifford, John Wesley, or Teddy. They are Alexis, York, and Lao Tsu. Like these three names, the messages are much bigger than the Forest Service. They are philosophers that

have reached beyond, but they provide some context for where the Forest Service might go and where we all might go with the Forest Service.

What I'm looking for is a vision for the people of America's forests. It is time for a new one, and I'm looking for leadership by the people for a new and compelling vision. So there is the task.

Going first to the mountains of Tibet, the Lao Tsu was about people owning direction, people taking ownership for making something happen, not someone doing it for them. It's about creativity; it's about invention; it's about construction. Those are all parts of ownership.

Then to the town halls of colonial America, a second philosopher, Alexis de Toqueville. de Toqueville found in the early days of the colonies in this country that what made it work—and, I would submit, what we have lost—is that people come together first, amongst themselves and across their differences and divisions. They create a vision out of their common view. Then they go to their political leadership, their government, and say to them and say, "We have decided that this is where we want to go." The political leadership then carries that out, and what choice do they have? There are many examples of how that system works and how we have caused it to become dysfunctional. That's what de Toqueville is all about.

The third one is the Duke of York, and he was really a horseman, who learned a lot about "the times, they are a-changing." The Duke of York was a very ethical horseman, very much into racing. He heard that his trainer was doping his horse. He went to the trainer, and, lo and behold, when he walked into the training room, the trainer was holding a sugar cube in the mouth of the horse. The horse had taken it and was swallowing it. The Duke was incensed. He, of course, challenged the trainer. The trainer pulled two more sugar cubes out of his pocket, gave one to the Duke, took one himself and swallowed it. The Duke of course followed suit. The trainer explained that it was just a sugar cube. The Duke, in total humility, apologized and went on to the race. The trainer took the horse into the track. He pulled the jockey aside and said, "Run her hard for six furlongs, then really let her rip. The only two that might give you a challenge are the Duke and myself." The moral of the story is, of course, that change is around you, take a look at it, and become part of it.

Culture and society in the United States have really evolved in two ways: the relationship between

people and the land and the relationship between people and other people about the land. I could go on with evidence, but that's not what we have time for, and I was not hired to be a speaker. I was hired to be a summarizer. So, what this change calls for us to do is consider whether our ways of working with others, the legal frameworks we have, the policy and regs we have, the way we do rules—all need to be aligned with this cultural change to our advantage and to the advantage of the resource. Would alignment to where our culture and society are and the laws, rules, roles, and support systems allow us to be more creative, more trustworthy, and to get on with our conservation goals? I believe that in the 50's through the 70's, most of our laws and policies were crafted and most of the agency roles were concretized around the need for a social correction in the relationship between people and the environment. The paradigm was definitely command and control.

Since that time, the culture and society and individuals have evolved in their relationship with the natural system that sustains us. We are more knowledgeable about ecological systems. We are more tolerant of complexity. We are more capable of, confident about, and demanding of multiple complementary outcomes like good-paying jobs, quality hunting and fishing and recreation, and environmental services. Less and less we see these as mutually exclusive goals. More and more, the people see them as complementary. We seek a synergy that comes from working these goals simultaneously.

It's time for us to move toward something that Keith Allred is rapidly amassing data on—what you might call the common interest. There is a mythology, documentable, that we are a deeply divided nation. In fact, we are not. We are a nation that has forgotten how to act in a democratic manner, to find its common vision, and ask its political system to implement that vision.

Pertinent to Dale Bosworth's conversation this morning, the Forest Service mission endures, but as Dale said, its alignment to the current cultural milieu is what you need to pay attention to.

The trust factor gets taken care of in dealing with the things de Toqueville talked about. Debate and disagreement, as we saw in the final panel, are things that can easily be positives if we return to the de Toqueville model.

So in Lao Tsu, progress comes from ownership. The reason I bring this philosopher into the discussion is that so many of you talked about community-based,

individual leadership, etc. People have demonstrated on ranches, farms, forests throughout this country in the last 30 years that they can, will, and do innovate and carry out environmentally sound and attentive agendas that achieve environmental goals as well as economic goals. We have lots of examples. That has built social capital that we should not squander.

My plea would be, in listening to you, to carry through on supporting, as an agency, individual leadership, initiative, and creativity. Those are my reflections and admonitions. I think we have a democratic system waiting to be exercised. I think we have social capital and a cultural evolution that is fuel to exercise the machine. Leadership is the key, and it's leadership by the people that can be facilitated.

ANDRUS: Just briefly, a lot of you know me or know of me. I grew up during the Depression, and one of my first jobs was a whistle punk in western Oregon on the big doug fir. It was during World War II, and most of the men had gone to war. I was too young to go to war, so I had that job as a teenager. A lot of you don't know what a whistle punk is, and I don't have time to explain it. It's an old steam donkey with a double drum, and it's a high lead operation. The Forest Service foresters might know what I'm talking about.

Until I was 30 years of age, other than my time in the military, I worked as a lumberjack. People look at me in a suit and tie for the last 40 years, and they say, "You're a lawyer aren't you?" I say, "God, no! I'm a lumberjack and a political accident." That's true, but we don't have time for that.

Let me just say that I have been there, and I have done my share of consumption of wood fibers to make a living. I've also been known as an environmentalist. I call myself now a "common sense conservationist" because everybody has a different idea of how it stands. We came together yesterday and today, discussing one of the major elements of America, the land resource base that we own and that we must take care of. We have given this man the job of stewardship over a great deal of it. The BLM should be represented here, too, because they are a major component of it.

The thing that came out yesterday throughout all of our conversations, more than anything else, was the fact that we have not been communicating with one another. I like Dale's use of the word "partner" this morning instead of the adversarial activities that we have had. There must be collaboration. Otherwise,

we'll go on as we have been, and the resource will deteriorate. You can't let that happen.

One of my pet peeves is the term "multiple use." Sounds good, almost like motherhood. Everyone can use that for everything. I've not seen very many families have a family picnic in an open pit mine. I have killed my share of deer and elk; I've never killed one in a fresh clearcut, the point being that the property is out there, but you can't all use it at the same time. If you're going to use this one for an extractive purpose, then you have to have a protection over there.

I see Jim Caswell. He used to be supervisor of the Clearwater. He knows the Weitas area. We were talking about elk habitat, and yes, that was an elk laboratory years ago, but, if you remember, Jim, just on the southwest side of it was a heavily forested area that had not burned and that was thermal cover. So the two of them worked together. We, the public, have to recognize that it takes all of these things to make it work.

What I would say to the Chief, who has given of his time to be with us here today, is: You have in this room enough people from all sides of the question, educated in their beliefs, to resolve this if they will sit down together. Our job is to get them together. The media that were on the panel yesterday have a responsibility to tell our story. Elizabeth Arnold said very clearly that it was part of her job.

If I may, before I turn it over to you, Chief, touch upon one thing that came to mind when Chris Wood said, "Get the cows out of the creek." It doesn't have anything to do with fire or forest health, but it's a pet peeve of mine. I've got you captive, and I'm going to take advantage of it. If you were an old cow, it was warm, and there was green grass down in the creek, where would you be? You'd be in the creek. You can't blame the cow. You have to blame us. You can fence the riparian areas very easily. Take the AUM money, and use it for fencing. Create employment for some of those people in the rural areas who can build fence a whole lot cheaper than your people can. I saw some figures on what it costs you to build fence, and I'm not hiring you! But you could do that.

If you say that's a loss of revenue, I can tell you from my experience, if you want more revenue, audit any three oil platforms in the Gulf of Mexico and increase the oil royalty off of that. You'll collect a whole lot more money than you'll ever get from AUMs. So if you want money, go get it from the oil platforms because they're cheating right now. Feel free

to quote me. Not all of them, but a lot of them. I've been there.

So fence those areas. Sure, they need water every half mile or whatever the topography requires. An old cow will walk a long ways for a drink. You put an alleyway, and then the lessee removes that alley when he moves the cows, and things go on.

For the people here who are responsible for that type of activity, think about that. Let them have the AUM money for wire and posts, and hire those farm kids to build the fence.

With that, I'm going to turn to the Chief. We will have a white paper, which will be posted on our web site, and we'll keep in touch. Your people have been very supportive of this gathering. Jack Troyer has given excellent support. We would hope that you are able to pick up on some of the things that these people have put together.

DALE BOSWORTH: Jack Troyer, get on that fencing right away, would you? So that's taken care of.

Unfortunately, I did miss the program yesterday, so to try to recap is a little bit difficult. During the last panel, I had some fairly brilliant thoughts in my mind, and then Jack Thomas started talking about his underwear, and I lost it all. Unfortunately, all I have now is just a couple of scribbles on a sheet of paper.

There are three things that I want to mention that came up in the discussion and also in my talks with folks who were here yesterday. They have to do with common ground, with incentives, and with communication.

Starting with common ground. When you see a group like this come together, you just can't help but know that there is a whole lot more common ground out there than what we take advantage of. I believe right to my core that we can have the roadless areas roadless, and I believe that we can have healthy forests. I believe that we can have fire playing a role in the ecosystem, that we can protect people, homes, and communities, and that we can do the work that's needed in the back country to make sure that we have healthy forests. I believe that we can do that.

I believe that we can produce timber and that we can have jobs, partly as a by-product of doing that, and have healthy communities, growing communities, vital communities. Those things can all happen. Those are things that are important to everybody. But first, you have to agree to stand on some of that common ground and work from there.

So that brings me to the incentives or disincentives. Randy talked about some of the incentives that move the Forest Service one way or another, and that's true. Incentives do play a role in what moves the Forest Service one way or the other. But I would also say that incentives play a role in how the environmental community reacts. Incentives play a role in how the timber industry reacts. Incentives play a role in how all people who have an interest on the national forest react. Maybe we need to think about those incentives as well as the incentives that affect the Forest Service. Again, those incentives push us away from searching for that common ground and working toward that. I think we have some larger choices to make and larger changes to make.

The third thing I want to mention is communication. One of the things, in the early days of the Forest Service, that Gifford Pinchot was great about, was that the Forest Service was a communication machine. Starting in Washington and at the field, it was a communication machine. In fact, it led to some legislation that prohibited us from doing some of the communication because Pinchot and his folks were so good at it.

We have to be good at communication, not just the Forest Service. It's the Forest Service, the environmental community, and industry. We have to be talking some about the same things, that common ground. We have to be convincing people across the country that national forests are a place to invest in, that they are a place where, if you invest, we will be leaving a legacy for the next generations, and at the same time, we can get the things for our generation, too.

If we work on those three things, we can make a big difference. We have enough science, knowledge, and capability in this room and around the country to solve the problems out there. The least of the problems are the technical aspects of it. The greatest of the problems is getting people together, working together, and truly trying to find the common ground.

I appreciate this meeting and all the people who put it on. This is the way to try to get to where we need to go.

ANDRUS: *The Idaho Statesman* and your organization helped make it possible, and we appreciate your involvement. One more thing. Marc Brinkmeyer made a presentation yesterday that I thought was very important. In his organization, a

private lumber company, one of the largest employers in North Idaho, a man or woman working in that operation can support a family without two incomes in the house. He doesn't pay Wal-Mart wages. They sustain a city.

Then we were asked yesterday, what about these rural areas out there, Elk City? There is a forester here from the Nez Perce that made a comment yesterday about the red trees and the grey trees and what has happened. When that mill shuts down in Elk City, there goes the payroll, people move out, a grocery store closes. There's got to be a way that we get back to where we do maintain a timber harvest off those productive lands to sustain those industries. Right now, in Idaho, Boise Cascade has closed all their mills, but their trucks are still running to La Grande, hauling 40 million board feet of logs from federal land. That's a serious mistake by the state of Idaho, letting them take logs off state land, in my opinion. I would never have done it, but it wasn't my say-so on the Land Board anymore. That takes the payrolls out of those communities, and there is not enough wood fiber to go around. So you have a big problem, and we hope that the people collected here will have the grey matter to put it all together and make your job a little better.

Dale, you've been a whale of a good Chief. Thank you very much.

Ladies and gentlemen, we stand adjourned. Let me thank you very much, all the people that participated, all the people that attended.

* * * * *

SPONSORS



Jack G. Troyer,
Intermountain Regional
Forester



Cecil D. Andrus, Chairman
Marc C. Johnson, President
John C. Freemuth,
Ph.D., Senior Fellow

The Idaho Statesman
IdahoStatesman.com • Always Idaho

Leslie Hurst,
President and Publisher

American Forest and Paper Association
American Forest Resources Council
Bennett Forest Industries
Boise Cascade Corporation
Gannett Foundation
Holland & Hart LLP
Idaho Conservation League
Idaho Department of Fish and Game
Idaho Department of Lands
Idaho Department of Parks and Recreation
Intermountain Forest Association
The Nature Conservancy
Perkins Coie LLP
Potlatch Corporation
Rocky Mountain Elk Foundation
Skinner Fawcett
Stimson Lumber Company
Trout Unlimited
Wilderness Society

For further information:

THE ANDRUS CENTER FOR PUBLIC POLICY

P.O. Box 852, Boise, ID 83701
208-426-4218 Fax 208-426-4208
www.andruscenter.org
E-mail: info@andruscenter.org