

## **“The Future of Wildland Firefighting in the United States”**

Aerial Firefighting Conference  
Anaheim, California  
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### **Opening Comments**

As I look around the room, out through the sea of faces, I recognize many of my colleagues from around the globe. We are considered experts in the field of wildland fire management—leaders, both in the air and/or on the ground. No matter what language we speak or where we live, we are faced with many of the same current and future challenges.

We reach out to one another as the fires in our respective countries rage, as I did this past fire season when the extraordinary lightning events happened across the state of California and as the State Government of Victoria has just recently done by requesting assistance from the United States. Our hearts go out to both our devastated counterparts in Australia and Chile, where the recent bushfires in Victoria have burnt approximately 400,000 hectares and have resulted in at least 200 civilian fatalities and where 13 Chilean firefighters lost their lives in a helicopter crash in the central Maule region of Chile earlier this month. This past week, we’ve arranged for the deployment firefighters and overhead personnel from the United States to support the current fire situation in Victoria, and we will keep them all in our thoughts and prayers. We are brethren, and I want to thank you all—each of you who have assisted the United States when we’ve needed your help and expertise over the past several years.

Today, I’ve been asked to gaze into the future and talk about where we go from here—take a look into my “crystal ball” and project the future of wildland firefighting in the United States. And, believe it or not, I have one—a “crystal ball” that is, and it’s called the Quadrennial Fire Review.

## **2009 Quadrennial Fire Review<sup>1</sup>**

The second Quadrennial Fire Review or QFR, as we call it, was just recently released in January 2009. It's not a policy maker and doesn't even contain recommendations. It is rather a strategic assessment process, conducted every four years to examine the future environment of wildland fire and provide "projective thinking" about potential shifts in our mission, roles, responsibilities, and agency relationships while surveying a new course direction for fire management. In terms of a strategy evaluation, the QFR's value is to reaffirm interagency fire management priorities and help shape the discussion about investment decisions for the future.

The QFR was an integrated review and a joint effort of the five federal natural resource management agencies—the Forest Service, Bureau of Land Management, U. S. Fish and Wildlife Service, Bureau of Indian Affairs, and National Park Service, along with their state, local and tribal partners that constitute the wildland fire community. We'll talk about the QFR more in depth later today during the panel discussion, but coupled with our doctrinal approach to fire management, and our newly revised guidelines to our federal fire management policy, the QFR provides us an assessment of current programs and capabilities, and looks toward conditions and risks that can affect fire and aviation management into the future, decades out, with an emphasis on the next four to five years providing us our vision into the future.

### **Challenges in the Future**

So where do I see our challenges in the future? They aren't far from where we stand today, and I'm sure they aren't far from what you, sitting here today, will face in the future across the globe. The challenges I speak of are climate change; cumulative drought; continued wildfire risk in those areas closest to our wildlands—in those areas that directly interface our populations with our public lands; escalating emergency response demands; and our fiscal stress and budget realities. These are the "driving forces" that stand to mold how we will manage wildland fires in the future.

Not just here in the United States, but around the world, the changing climate is an ever increasing factor that we must consider when we plan our strategies to manage the fires of the future. The effect of climate change will continue to result in the greater probability of longer, bigger fire seasons in more regions across the United States. Shorter, wetter winters, and warmer, drier summers, larger amounts of total fire on the landscape, and more large wildfires will persist and possibly escalate in an irregular pattern we term as “asymmetric” fire. Fire mitigation efforts must be prepared to cope with the possibility of 10 to 12 million acre fire seasons ranging over the next five years.

Cumulative drought effects will further stress fuels accumulations. It is projected that the current drought cycle may last an additional 20 to 25 years. The effects will make the fuels more flammable and drive fire behavior. Drought effects in the southeast, southwest and western United States will make these areas especially vulnerable to wildfire.

There will continue to be wildfire risks in the wildland urban interface despite greater public awareness and broader involvement of communities. Although the still-to-be assessed impacts of the global economic recession and rising energy costs may moderate the population growth into the areas closest to our public lands over the next few years, the overall regional shifts in population and the increasing development of former timberland in-holdings will drive more seasonal recreation and full-time residency in areas directly adjacent to public lands—and most vulnerable to wildfire. Community wildfire protection plans, hazardous fuels treatments, and fire education remains vital. It’s said that 80 percent of our population here in the United States lives in urban environments. How many houses can be or should be protected? Do we trade off burned or degraded wildlands for communities? Fires are a natural part of forested landscapes; but each year, the fire seasons come earlier and last longer. Fires burn hotter and bigger, which means more smoke and carbon in the atmosphere—more of the climatic change I referenced before.

Choices will be the key in a society where there is reluctance to fully utilize domestic natural resources. The desire to conserve here in the United States has

become the choice to protect. The un-informed sense of our ability to achieve ecological stasis is one of the conundrums of our time. Our children need to understand how much they depend on forests and see the connection of natural resources to their homes and communities, wherever they live. In wildland fire management, either we help establish a coherency of action at the local, state, and federal levels or the un-informed will do so for us.

In the United States, emergency response demands of our federal wildland firefighting agencies have escalated. The growing impacts of global warming and extreme climatic change continue to be felt in the likely increase in frequency and devastation of other natural disasters. Floods, storms, and other natural disasters are only one set of potentially “major events” where massive government emergency response efforts could be required. As the Federal Emergency Management Agency (FEMA) and other agencies and communities involved in emergency response have developed their capabilities in this arena, fire management must prepare and expect to be called on to play an increasing major role—a role that will not go away, so into the future, we must chart the course for meeting this challenge as well.

In the United States Forest Service, like many other federal, state, and local fire agencies, suppression expenditures have increased in recent years due to the effects of the expanding wildland urban interface, and those climatic and ecological changes I’ve talked about. As a result, protection of life, property and natural resources from fire has become more complex, demanding, and expensive. In 2008, fire consumed 43 percent of the entire United States Forest Service budget—by 2011, it is projected that fire will receive more than 50 percent of the budget. Fire agency budget resources will be strained by increased demands and rising costs during a period where government budget revenues will be very tight or falling. The current budget environment is at best uncertain and difficult. Federal suppression costs have already outstripped budgeted costs five years in a row. Many states are seeing their reserve funds overwhelmed when they have significant wildfires. Coupled with the rising pressure over this past decade to find ways to control wildfire costs, budget

stress at all levels is likely to further intensify over the next two to three years and even after the economy recovers.

### **Doctrinal Shift**

Today, we are in the midst of making and recognizing a doctrinal shift with wildland fire. The doctrinal transition from “overwhelming mass” applied to every fire to “speed, agility, and focus” will continue. Make no mistake, I am not suggesting “overwhelming mass” will cease to be an objective for some fires, but I am suggesting that a variety of wildland and prescribed fire will benefit from the application of a doctrine which considers “speed, agility and focus.”

Small groups of highly trained individuals will influence wildfire and prescribed fire. Our doctrine recognizes the influence of management actions ahead of time with specific actions during the event. We are learning how to influence to “flow” of fire and will learn how to moderate the depth and intensity of the flow and how to reduce the energy of the flow. “Speed, agility, and focus” will allow us maximum leverage in complex situations.

The public’s expectation is that we “do something,” and the cries to “do something” will be more numerous and more fervent in the future. The fact that our actions often seem to accomplish the “do something” test is critical. Our ability to be able to answer “what can we do?” is very important, not only for adults, but for the youth as well. Our ability to be able to describe what we cannot influence and what we can is an important characteristic of the future. Fire management must expand its thinking beyond continuous reinforcement of safety as a function and operational concern. Safety and risk management must be strengthened and more systematically incorporated into fire planning, developing safety metric on a level equal to post-fire resource impacts and productivity.

The challenge of greater fire, larger fire, and longer fire seasons occurring irregularly within and across regions—or asymmetric fire, will demand greater flexibility and more agile capabilities within fire management. We must move beyond appropriate management response to strategic management response to create a framework for a multi-phased approach for incident management. Elements within strategic management response will include ensuring proactive

wildland fire decisions with greater transparency and accountability, recalibrating fire planning, and establishing more robust fire outcome metrics. Strategic management response would involve realigning incident management team structures to transform ability to respond, reposition more rapidly, be more scalable to situations and also place fire management response in line with the National Response Framework. By doing so, will lead to a core strategy for rebalancing emergency response within fire management.

### **Closing Comments**

While we must continue to make our land stewardship and protection responsibilities the primary objective, a more interactive, robust approach enabling fire agencies to work more effectively with the FEMA and state and local community emergency response forces will be needed. Fire management must continue to build beyond the strong training and technical assistance roles in national incident management that are already well-established, but we must promote stronger interplay and planning for emergency response efforts for all agencies and jurisdictional forces—achieving a “total force” concept.

In summary, our actions will be driven by our thinking; our thinking will be defined by our spirit. Personally, I am looking forward to a journey marked both by our altruistic spirit and our creative, critical thinking.

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<sup>1</sup> Refer to 2009 Quadrennial Fire Review published January 2009

