



## **Towards a Cohesive Global Fire Management Strategy**

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### **A Cohesive Global Fire Management Strategy – what does that mean?**

We are in the midst of a fascinating change in our world. From the natural standpoint, stress on ecosystems is increasing. Fire, as well as invasive flora and fauna, and development, is causing significant change in ecosystems. Society is concerned about ecosystems; but at the same time, people are becoming more and more disconnected from the ecosystems, which surround them. Urbanization is a worldwide fact we are facing. The majority of people in our societies are transitioning from rural dwellers, connected to surrounding ecosystems by historical necessity, to urban citizens, connected to ecosystems only by virtue of personal interest. As ecosystems change and citizens move, fire remains a rather ubiquitous presence. Fire has not “learned its manners.” While we welcome fire at times to warm our homes and cook our food, large amounts of fire in the wildland emit smoke, reduce visibility, and when uncontrolled, can cause damage and threaten life. Most of the time, we would rather not have fire affecting our increasingly urbanized lives. However, the future is one where we will not be able to ignore fire. Our future must be more coherent in regards to the linkage of ecosystems and people. We need a strategy – a global cohesive strategy, to binds those elements sustainably together. A Cohesive Global Fire Management Strategy – what does that mean, why do we need it, and who is responsible? Cohesion – the action or fact of uniting the whole; and strategy, a plan of action or policy designed to achieve a major or overall aim. Understanding these terms, as connected and linked, is a good beginning to understanding the logic behind the need for, where the opportunities exist, and the benefits to developing a Cohesive Global Fire Management Strategy.

In the Foresight Report, Spring/Summer 2015, “A World on Fire,” the authors Robert L. Olson and David N. Bengston, discuss how the futurists panel warned that, “current wildland fire management planning fails to account for the high levels of uncertainty surround the conditions and context in which future wildfire management will need to operate.”<sup>1</sup> Olson and Bengston use the example that planners typically assume the economic system will fully recover from problems and remain dynamic, that there will be abundant energy supplies – regardless of the cost, and that the federal government will make laws and will assure the laws are carried out. The problem with this type of planning is that we assume the governments will have the resources to manage growing fire risks. Not all panelists agreed; some envisioned dramatic progress in innovative biology and techniques that could lead to new approaches to wildland fire management that is not even on the radar today. Agreed upon was that business as usual is not sustainable. Taken as a whole, in the developed world, we need a paradigm shift involving fundamental change.

### **Wildfire as a natural process influenced by citizens**

A step forward is to recognize and appreciate wildfire as a necessary natural process. Across the country and the world, we face ecological instability. Putting out every fire, every time is not the answer; but neither is abandoning efforts to influence natural processes. Whether we understand it or not, we must “live with fire.” A deeper understanding has begun for a fuller appreciation of wildfire as a natural and necessary process, but we will have a long way to go. Across the globe, most ecosystems, especially those in any area where rainfall is intermittent, have evolved in the presence of fire. They have become part of the process of fire itself; they have become what we call fire-adapted. Fire-adapted landscapes require wildfire to maintain their resiliency and health. By releasing nutrients into the soil, wildfire increases plant and animal diversity and causes a flush of new plant growth providing food and nutrients to animals. Without the presence of fire within some ecosystems, the landscapes become unhealthy and choked by underbrush and exacerbating fire when it occurs.

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<sup>1</sup> A World on Fire, by Robert L. Olson and David N. Bengston, Foresight Report, Spring/Summer 2015

If we do not recognize the need for change, our “natural” systems will remind us! Certain ecosystems will “erupt” with cataclysmic ferocity when they reach a point of unsustainable ecological instability. Those large eruptions, changes, conflagrations, in renewing ecologic stability cause an equally massive and notable reaction in our societies because we, as citizens and fire are not connected. We need to put aside a “war on fire,” mentality as our only mindset and deal with the unhealthy landscapes that have resulted from years of managing as we thought best, together, return fire to our natural landscapes, and learn to live with fire when it happens.

## **America’s National Cohesive Wildland Fire Management Strategy**

Last year, many local, state, and federal groups in the United States of America finalized the National Cohesive Wildland Fire Management Strategy (Cohesive Strategy). This Cohesive Strategy took an “all-hands, across all-lands” approach from the inception. America’s fire management experts understood one agency could not solve all the issues facing America alone. Together, however, we could certainly do more; so therefore, we joined forces and identified the common principles, common issues, and a set of goals that if accomplished would make the biggest difference for the nation.

Together with our partners, we identified three goals for the National Cohesive Wildland Fire Management Strategy – to restore our landscapes to a healthy state and maintain their fire resiliency; for communities to become fire-adaptive by preparing for and living with wildfire; and to safely and effectively respond to wildfires when they happen. This third component (response) springs from the notion that the intersection of landscapes and communities bring goals, objectives, and conditions, which need met. The way to meet those objectives is to develop an intervention methodology.

The success of the Strategy relies on more than us managing the landscapes appropriately and safely and effectively responding to wildfires when they occur, it depends on the ability of communities to prepare for and withstand the effects of fire. It depends on changing attitudes so that communities recognize and accept their role becoming fire resilient, with or without assistance – a different approach than today’s, where people expect to be protected by fire-suppression efforts with no understanding of the consequences which derive from the sole focus on fire suppression.

On-the-ground evidence after the fire has shown that the nature of the home’s surroundings determines the likelihood of a home burning in a wildfire. Frequently, after the fire, we see the sole home that remains when the homeowners did the work to prepare – cleared its perimeter 100 to 200 feet and/or used fire resistant building materials, while others who did not prepare suffered severe damage or a complete loss. Ideally, communities and local governments would pass building codes, protection zone requirements, standards for subdivision design, and land use standards to mitigate building in highly dangerous locations, such as the top of steep ridges. Until communities make themselves fire resilient, embrace fire for the natural force can be and are able to withstand a fire without the loss of life or property, the costs associated with wildland fire management, across several realms, will continue to increase.

### **Change isn’t easy; but it’s inevitable**

Although this all makes sense, although we have been talking about it for years, there are barriers at every level of a fire-resilient approach. At the national level, when fires happen in the backyards of our citizens, there is pressure to put the fire out quickly; and within the federal and state agency at home, and I am pretty sure across the globe, firefighters train to put the fire out and get rewarded for doing so. There are times and places and situations where we need the fire out as quickly as possible, but not every time, not all the time. Changing that mentality is hard, but it is inevitable that we do so.

Although land and fire managers agree, to make a difference we must make landscape-scale changes to create healthier landscapes – fire-resilient landscapes, funding levels for fuels treatment work never rise to the level where we can make a difference.

The change will happen in different ways, depending on different future conditions.

## **The Quadrennial Fire Review – A look into the future**

Recently, the United States' wildland fire and land management organizations released their third Quadrennial Fire Review (QFR). The QFR is not a policy document, but rather, a long-term, futuristic document that looks at fire management into the future 10 to 20 years out. In essence, the QFR is like a "peak behind the curtain" at what wildland fire management might look like in the year of 2023 or so.

The QFR and the Cohesive Strategy exist for different, but complementary purposes. The Cohesive Strategy took a holistic view of current wildland fire management issues and developed a strategic approach to coordinating multiple agency and homeowner efforts toward achieving a shared vision and goals for the immediate future.

The 2014 QFR reaffirms the Cohesive Strategy vision, to safely and effectively extinguish fire, when needed; use fire where allowable; manage our natural resources; and as a nation, live with wildland fire. However, the QFR takes a long-range look "over the horizon," mindful of the Cohesive Strategy's three primary goals.

The Cohesive Strategy assesses our ability to achieve a shared vision and goals within the constraints of current and projected policy and capabilities, amidst emerging trends specific to, and beyond wildland fire (for example, demographics).

The 2014 QFR provides a framework to consider how current and emerging trends may interact over 10 to 20 years and the plausible alternative futures within which fire managers may find themselves in 2034.

The 2014 report is the first to offer a set of distinct, but plausible alternative futures for wildland fire using a formalized process known as Strategic Foresight. While the other elements of the process are important, and rightfully informed the final report's conclusions and actions for consideration, the review's "futuring" components reflect its true purpose -provoking conversation, and ultimately innovation, to help wildland fire managers in the U.S. make better-informed decisions as we implement the Cohesive Strategy across a variety of potential future conditions. We intend to use the QFR's alternative futures in ongoing planning, to "keep us on our toes" and help focus our organizations' efforts in areas that present the highest potential return on investment (ROI) for the wildland fire management community at large.

This QFR poses four distinct futures. These futures range across multiple spectrum – scorched to resilient landscapes, near vs. long-term risk, significant versus insignificant federal involvement in wildland fire management, less fire to more fire, and good versus bad fire. Some of the futures, particularly those entitled "Hot, Dry, and Out Of Control" and "Suppression Centric," reflect significantly increased risk. In the former, the risk is nearer term, in the latter it is over the horizon, but likely amplified. "Hot, Dry, and Out of Control" features more fire on a landscape that is not ready for it, whereas "Resilient Landscapes" represents progress toward a situation where fire plays a more natural role. All these futures are plausible, and we acknowledge, as does the QFR, that the community may move through iterations of them over the next 10 to 20 years.

While stakeholders across the wildland fire management community in the U.S. may have differing perspectives as to whether the specific futures in the 2014 QFR represent positive outcomes, the QFR is not about setting a vision – the Cohesive Strategy did that – nor is it about predicting the future. Rather, the QFR helps ensure that we as a community can be proactive in detecting potential impediments to achieving the goals of the Cohesive Strategy, or "weak signals" of opportunity where we can focus or invest to accelerate progress. For example, what might be the impacts of legal restrictions that limit our ability to use air dropped retardant? What actions should we take if energy prices rise dramatically, bioenergy becomes a commercially viable industry, and the public subsequently expresses widespread support for commercial harvesting of forest products? Similarly important is being able to discern whether events such as the tragic Yarnell Hill Fire of 2013, where 19 wildland firefighters lost their lives, are outliers or indicators of broader change on the horizon. Advance understanding of factors such as these is critical to enabling our organizational agility and continued effectiveness.

We will explore options to continue the futuring conducted during this QFR, which may include the institutionalization of environmental scanning, alternative futures analysis, and scenario-based

planning within the federal wildland fire agencies. We will also seek opportunities to regularly update these futures and gather input about additional trends or barriers, which the QFR may have not have fully addressed.

We are making progress in America, little by little, one-step at a time. Just as the wildland fire management issues faced by land and fire management organizations across America did not belong to one organization to fix, so is true for the issues experience across the world. Certain systems, when reaching a point of ecological instability “erupt” or in our case explode in order to reset themselves. Given the linkage we have today in our very populated, very connected world, when ecosystems explode in flame, they cause political instability as well. Moreover, when that ecologically induced political instability combines with forces outside the natural resource arena, the resulting change could be dramatic. The type of political reaction would induce stability in the political system, but would be disastrous for the ecological component of our world.

### **Moving Toward a Cohesive Global Fire Management Strategy**

So, how do we move “toward a Cohesive Global Fire Management Strategy?” I would suggest the first step would be world leaders in wildland fire management need to work toward alignment, worldwide, around Cohesive Strategy type goals and behaviors. This is where we each step up and when we begin the process of moving toward a cohesive global fire management strategy.