

# **The 2003 Southern California Wildfires: Constructing Their Cause(s)**

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## **The Event**

Fire season in Southern California is late summer through fall, when strong winds (the famous Santa Anas) out of the eastern deserts sweep across a desiccated and fuel-rich terrain of light forest and brush known as “chaparral.” It doesn’t take much—a careless hiker, camper, or motorist, an accident, a lightning strike, an amateur arsonist—to ignite a fire. In fact, firefighters contain and extinguish hundreds of fires every year in California, many of which have the potential to become full-blown wildfires.

The last week of October 2003 saw all the components for classic Southern California wildfires, and outbreaks occurred in the eastern portions of San Diego, San Bernardino, Riverside, and Los Angeles Counties. Several developed quickly into wildfires—and then firestorms. In the end, more than 13,000 firefighters were on the lines across the four counties. Nearly seven weeks later, when all the fires were officially extinguished, more than 750,000 acres had burned, 3,600 dwellings were destroyed, and 22 people had been killed. The Federal Emergency Management Agency and the insurance industry put the dollar losses at over \$2.5 billion.

In truth, it could have been much, much worse: the Cedar and Paradise fires in San Diego County, two of the main fires, came perilously close to uniting at times over a two day period in late October. If they had united, they would have created a conflagration that would have sustained for at least another week, perhaps reaching into truly urban areas of the city of San Diego and threatening many more structures and lives. In fact, the physics of such a potential megafire, with tornado-force fire whirls and winds, touch upon the sublime. The updraft created by such a large conflagration draws in more oxygen than normal, creating even hotter flames that “prepare” unburned brush up-path of the fire. Cinders then shoot out, extending the fire’s reach even further. If all this had occurred, it might have been one of the ten worst catastrophes in U.S. history. As it was, the 2003 Southern California wildfires became the worst fire disaster in the state’s history and even surpassed losses incurred from the 1991 firestorm in the Oakland-Berkeley hills.

## **Disasters as Constructed Events**

Natural events are not necessarily disasters. Hazards, such as earthquakes, tsunamis, volcanic eruptions, hurricanes, flooding, or for present purposes, wildfires, must interact with social systems and human vulnerability to become “disasters” (see Blaikie, Cannon, Davis, and Wisner 2003, and Oliver-Smith and Hoffmann 1999, among many others). While controversy continues over definitions and the parameters of the concept of “disaster” (Quarantelli 1998; Perry and Quarantelli 2004), the hazard-vulnerability interaction is well enough accepted to serve as a basis for most research. Also, very well accepted and beyond debate is the crucial role of the media in establishing, for the public at least, a natural event as a disaster. A more sensitive issue is establishing the cause or causes of a disaster, for it is on that basis that blame is conventionally assigned, which all too often turns into scapegoating.

More important for analytic purposes, however, the causal construction of a disaster frames the solutions proffered to avoid its recurrence, which then affects the composition and priorities of items on policy agendas: systemic or public, institutional, governmental, and decision. That is, causal constructions of disasters or other extreme events are important components in answering Kingdon’s (1995: 1) classic question “What makes people in and

around government attend, at any given time, to some subjects and not others?” Versions of this question still drive an entire body of research, including on policy learning (Sabatier and Jenkins-Smith 1999) and punctuated equilibrium (True, Jones, and Baumgartner 1999).

The media plays an important and controversial role in disasters (Singer, Endreny, and Glassman 1991; Gaddy and Tanjong 1986; Adams 1986), and is crucial for agenda setting, although disagreement exists on precisely how. The classic argument (McCombs and Shaw 1972) is that while the relationship is clearly reciprocal, the media sets the systemic/public agenda more than vice versa. Manheim’s model (1986) is more advanced, arguing that public, media, and policy agendas are interrelated and influence one another. All of the various literatures, however, recognize the role of catalyzing, shock, or focusing events (Birkland 1997) in capturing media attention and altering policy agendas.

With this in mind, we revisited the 2003 Southern California wildfire disaster to pose one particular question: how did the local media construct its cause or causes? That is, were the fires predominantly constructed as failures of hazard reduction, mitigation, preparedness, and/or response, or was the disaster attributed to more fundamental land use decisions, such as allowing housing and other development to push into inherently fire-vulnerable areas of Southern California? In other words, was this disaster constructed as resulting more from a relatively technical/organizational set of deficiencies or as a deeper wisdom failure?

This question derives from the fact that, as many ecologists will affirm, the semidesert chaparral and light forest in the interior portions of Southern California counties have evolved to burn periodically, clearing old growth and allowing new growth (Radtke 2004). In that sense, the 2003 Southern California wildfires were an inevitable recurrence of a natural historical pattern. However, the human and property losses that made it a disaster were not inevitable, because while the fire hazard is permanent in Southern California, the societal vulnerability part of the equation is not.

A second reason for revisiting the 2003 wildfires is methodological. While much has been written about the nature and importance of “causal stories” in politics and public policy analysis, methods for coding such stories and then tracking their impacts through various political agendas to eventual outputs and outcomes are much weaker. However, As Van Belle (2000) and others studying the news media have noted, disasters or other uncommon events offer unusually clear opportunities to track issues because they minimize influences of confounding variables so often found in more typical times. Disasters offer significant opportunities for testing models of causal story construction and agenda setting and control.

## **The Hypothesis**

Based on the extensive literature on nondecision making, issue avoidance, and elite agenda control (see Olson 2000 for one disaster-related treatment), our working hypothesis was that the 2003 Southern California wildfires would be overwhelmingly defined as a technical/organizational problem and not the result of flawed basic strategies in rural, suburban, and exurban California land use. This hypothesis derives from the overwhelming growth bias in California and in Southern California particularly, where developers, policymakers, and homeowners would be hard pressed to admit wisdom failures and where a media attentive to these biases would devote relatively little time and attention to causal stories exploring these problems. We also believed that preparedness and response causal constructions would receive

more media treatment because they can be technically or organizationally corrected relatively easily, unlike more complex and politically problematic wisdom failures, particularly land use.

Following former Speaker of the House of Representatives Tip O’Neil’s famous “All politics is local” statement, we limited our analysis to the San Diego area and its most widely-read newspaper, the *San Diego Union-Tribune*.<sup>1</sup> To test our hypothesis we gathered postevent treatments of the disaster from the newspaper, which we chose for two specific reasons: San Diego County was clearly the most affected in Southern California and, reflecting that fact, the *San Diego Union-Tribune* covered the fires and their aftermath most extensively. For research reconnaissance purposes we limited data collection to 30 days after first coverage of the event (the online service of the paper, *SignOnSanDiego.com*, however, maintains an “After the Fires” special section where articles continue to be posted more than a year later).

We collected 244 fire-related stories from *SignOnSanDiego.com*, most of which were human interest/hero-tragedy stories and therefore fell out of the scope of this analysis. A review of the relevant articles for “causal attributions” yielded 88. We coded an attribution as “1” if it focused on unwise land use policies that had rendered an area or a development vulnerable to wildfires, “2” if it framed the disaster as resulting from relatively technical mitigation failures (e.g., inappropriate building materials, lack of fuel removal, inadequate firebreaks), “3” if it primarily focused on organizational preparedness and response problems (e.g., inadequate equipment, poor training, communication and/or coordination gaps, jurisdictional problems), or “4” if it focused on the trigger or catalyst (e.g., a camper, a hunter, an arsonist, a lightning strike).

If an article addressed more than one causal problem, we registered entries in all of the appropriate categories. That is, some articles received multiple entries (1, 2, and 3, a method used in Van Belle 1999). We also decided to keep any such stories in a special file for follow-up with the reporter and editor.

From a methods viewpoint, we should highlight that causal attributions were not simply identified when a newspaper article said something akin to “X was the cause of the wildfires” or “X accelerated the spread.” We also coded a statement as a causal attribution when it focused on a wildfire-related problem (e.g., lack of aircraft, restrictive flight rules, fuel in the public lands, or jurisdictional barriers to coordination) but did not explicitly use the term “cause.” For the local public, after all, when a story spent almost its entire column space on restrictive flight rules that halted air support in the early stages of the fires, it comes across as a de facto causal story.

For our working hypothesis we expected a media bias for technical/organizational (a combination of our code 2 and code 3 causal attributions) as opposed to wisdom failures (code 1), so we set a relatively high bar for its corroboration: a 5 to 1 ratio. That is, any causal construction ratio of less than 5:1 technical/organizational failure to wisdom failure would find for the null hypothesis, indicating at least a somewhat broader or balanced causal treatment of the disaster. We included code 4 (trigger) attributions merely for the sake of completeness.

## Findings

Of the 88 causal attributions made between October 28 and November 28, fully 60 (68 percent) emphasized code 3 preparedness and response problems that allowed the fire to get out of control and spread so quickly (see Table 1). Another 18 attributions (20 percent) were code 2,

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<sup>1</sup> We intend to greatly expand our analysis of media treatments of causal stories for a peer-reviewed journal article submission at a later date.

pointing toward inadequate forest thinning, too few controlled burns, lax fuel reduction, and other technical mitigation problems (including failure to prohibit wood shake roofs) as causing such a rapid and deadly expansion of the fires.

In contrast, only six attributions (7 percent) emphasized code 1 city and county land use policies that allowed vulnerable residential and other growth in what the locals call San Diego's backcountry. Therefore, our hypothesis corroboration requirement of a 5:1 ratio in technical/organizational (combining codes 2 and 3) to wisdom failures (code 1) was not just met, it was massively exceeded at 13:1. In fact, even if we remove code 2 entries from the mix, the ratio of code 3 shortcomings (preparedness and response problems) to code 1 (questionable land use decisions) is 10:1.

More qualitatively, apart from often heart-wrenching first-person or human interest stories, one particularly thoughtful article always seems to stand out when reviewing media coverage of a disaster. In the case of the 2003 firestorms and the *San Diego Union-Tribune*, it was the paper's principal editorial on October 28, when the Cedar and Paradise fires were still raging and threatening to unite. The title was "California Calamity: In Disaster's Wake Tough Questions Arise," and the editors noted that while California was an inherently risky place, fundamental questions should still be asked "because they can lead to the kind of public debate that's necessary following a disaster." With a remarkable match to our coding categories, the editors posed the following questions:

- Can we be better prepared? Do we need to spend more on equipment and firefighters in this state and region? Or is this firestorm an extremely devastating event for which there is no prevention? [A code 3 issue in our coding system]
- If we should be better prepared, how will we pay for that preparation? Air tankers, helicopters, and more firefighters are expensive, and California doesn't have the available cash to expend on them. [code 3]
- Are we building too much in fire-prone areas? Many Californians seek rural lifestyles, but is it wise for land use planners in counties and cities to accommodate them? [code 1]
- Should people who decide to live in fire-prone areas pay more for firefighting and fire prevention? [code 3]
- Do we need stricter regulations and enforcement for brush-clearing around homes and planting vegetation that's fire resistant? Are we adequately enforcing the regulations we already have? [code 2]
- Should we require all homeowners to get rid of shake shingle roofs? [code 2]
- Should we undertake more controlled burns and other fuel reduction in the vast public lands? [code 2]

As we have seen, however, the first two of the above questions, which are classically preparedness/response issues, utterly dominated the subsequent causal constructions of the disaster by the *San Diego Union-Tribune*. The other five more politically problematic questions received scant subsequent attention. Indeed, one particular story line, the lack of a firefighting helicopter for San Diego, saw multiple repetitions. This purely code 3 issue is an immediate, visible, but truly minor issue in the large array of problems that contributed to the worst wildfires in California history.

## Conclusion

If we take the hazard-vulnerability interaction at full value (as we should), all disasters result from *where* we build, *what* we build, *how* we build, and *which measures* (mitigation and preparedness) we institute to protect what we build; these are all very rational considerations. In the case of San Diego's backcountry, for example, a major land use vulnerability difference exists between allowing major suburban, second home, and other residential development on one hand versus ranches, riding stables, parklands, or golf courses on the other. As the vernacular has it, "this isn't rocket science," which makes the causal constructions of the 2003 wildfires in the *San Diego Union-Tribune* so interesting.

To reprise our findings, of the 88 causal attributions over the 30-day period, only six were about land use decisions. Four were unimportant trigger causes (e.g., a lost hunter trying to signal his distress, which he accomplished) and 18 were about organizational/technical aspects of mitigation. A full 60 attributions were about preparedness and response problems. For the general public at least in the first 30 days after the start of the event, the underlying "first cause" (*where* we build) of the 2003 Southern California wildfires was given short shrift. Again, at least for the general public, the disaster was constructed as primarily the result of preparedness and response problems. Thus, despite the wildfires opening a possible window for public debate on backcountry land use in San Diego County, and despite its own October 28 editorial, the question "Are we building too much in fire-prone areas?" shortly disappeared off the radar screen of the *San Diego Union-Tribune*.

It should not come as much of a surprise, however, that wisdom failures are not popular discussion topics. No one, particularly a politician, relishes the idea of raising fundamental questions about where and what kinds of growth should be allowed, especially if that individual believes that the reception will range from cool to hostile, which even during the 2003 wildfires was highly likely in development-driven Southern California. The problem is, of course, when *could* such a wisdom debate be opened if not during a disaster event that revealed deep vulnerabilities? The answer probably is, "not ever," and leads to a follow-up hypothesis to this reconnaissance report: the postfire solutions publicly proffered in San Diego jurisdictions (especially the county) to prevent or at least mitigate the recurrence of wildfires similar to the 2003 event will focus overwhelmingly, if not exclusively, on improving preparedness and response. More specifically, while a broad range of solutions may reach the institutional and governmental agendas via government reviews, consultant studies, fact-finding commission reports, and expert testimonies, only code 3 (preparedness and response) and a few code 2 (organizational/technical mitigation) items will reach the decision agendas of those jurisdictions. More pointedly, we hypothesize that code 1 (land use) items will be screened out early in the process, probably reaching only the institutional or "study" agenda.

## Further Research

With coding schemes modified for other types of disaster events (e.g., earthquakes, hurricanes, floods, explosions), the hypotheses developed for this reconnaissance report can be extended to other events, both past and future. The coding in particular will allow the tracking of causal stories and associated solutions from media coverage of an event through the multiple agenda public policy process to implementation or nonimplementation and even to final outcomes. Such research will not only reveal the nature and strengths of bias associated with

each agenda for different types of disasters, but also highlight the conditions under which fundamental wisdom issues may be raised, by whom, and with what effect.

More specifically, for further research on the 2003 Southern California wildfires, our plan is the following:

- Extend the tracking temporally from the current one month to at least one year postevent.
- Code for headlines and first, second, third, etc. causal mentions. This will help determine the causal weight given to each of our codes.
- Expand analysis to the state capital and national level newspapers (*Sacramento Bee* and the *Washington Post* and the *New York Times* respectively) to see if the disaster is causally constructed differently at other nonlocal levels.
- Code and track solutions as they appear in after-action reports, expert reviews, and special commission studies (i.e., on the institutional and governmental agendas).
- Code and track proposed solutions, for example in new or amended city/county ordinances (i.e., on the decision agenda).
- Code and track adopted solutions embodied in new ordinances, regulations, and/or interagency or interjurisdictional agreements (i.e., on the implementation agenda).

As we have hopefully demonstrated, a reconnaissance report is intended to not only answer several preplanned research questions about a disaster but also to stimulate and even frame further research. The case of the 2003 Southern California wildfires shows promise on both fronts.

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Table 1: Causes of the 2003 Wildfires. Source: *San Diego Union-Tribune*.

Date	Code 1 Land Use	Code 2 Technical Mitigation	Code 3 Prep/Response	Code 4 Trigger	Total Attributions
Oct. 28	1	1	3		5
Oct. 29			1	1	2
Oct. 30			3		3
Oct. 31		1	2		3
Nov. 1			3		3
Nov. 2		2	5	1	8
Nov. 3	2	1	2	1	6
Nov. 4	1	1	2		4
Nov. 5			6		6
Nov. 6			3		3
Nov. 7		3	3		6
Nov. 8		1	2		3
Nov. 9	1	2	3	1	7
Nov. 10			2		2
Nov. 11			1		1
Nov. 12			1		1
Nov. 13			2		2
Nov. 14			2		2
Nov. 15			3		3
Nov. 16	1		1		2
Nov. 17					
Nov. 18		1	1		2
Nov. 19			3		3
Nov. 20			1		1
Nov. 21		3	4		7
Nov. 22					
Nov. 23		1			1
Nov. 24					
Nov. 25					
Nov. 26		1			1
Nov. 27					
Nov. 28			1		1
Totals	6	18	60	4	88