



The Fire This Time

THE CALLER TO THE SAN FRANCISCO PUBLIC RADIO SHOW on October 30, 2017, had just lost a house to the Tubbs Fire in Santa Rosa, California. She wanted to know about materials used in building the house.

"I'm just curious if building materials would have even made a difference," she said. "I just went back Friday and saw the remains of our house, and from what I saw, it just looked like . . . I can't imagine anything surviving that sort of fire."

Unfortunately, the scenario after this extreme wildfire event—a home completely destroyed, with nothing left to salvage—was repeated thousands of times over in Santa Rosa. But what can be observed after the fact fails to tell the story of what actually happened to destroy the structures. Without scientific context, we see the inferno that burned everything to ashes, and we conclude that nothing could have survived. Therefore, we reason, there is nothing we could have done to prevent this destruction.

The response to the caller came from radio show

guest and physical fire science researcher Jack D. Cohen. As he explained, her home likely was not exposed to a wildfire's raging flames in the crowns of distant trees, but instead to embers blowing in from up to a mile away. The embers might have ignited mulch around the structure, debris in the gutters, or material under a deck or on a porch, or were driven by the strong winds into openings in the home, such as attic vents. With thousands of homes in the area simultaneously at risk, and with residents evacuated and fire services overwhelmed, there was plenty of time for a blizzard of embers to

A firefighter battles flames in Coffey Park during the Tubbs Fire, which destroyed more than 5,000 structures in Santa Rosa, California.

'There are steps that homeowners can take to reduce the risk [of wildfire], with the most important efforts occurring on and immediately around the home.'

—FIREWISE USA

ignite homes, and for the homes to burn completely over a matter of hours. Homes in some neighborhoods, such as Coffey Park, appeared to be close enough together so that once one home ignited, the radiant heat, flames, and embers its burning produced then ignited the adjacent home—which then ignited the next home, and so on. The wildfire passed by, but an urban conflagration was well under way to produce the burned-out conditions. Understanding the science of not only wildfire behavior but also how structures ignite is critical so we begin to think and act differently when it comes to wildfire preparedness. It is possible to design with fire in mind, and to prevent a wildfire disaster—even if the wildfire itself may be inevitable.

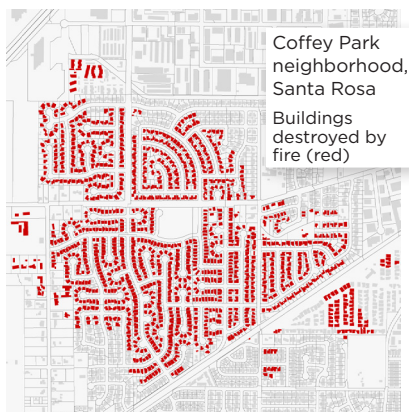
In fire-prone and fire-dependent ecosystems—which exist in many places throughout North America—wildfire will occur. Instead of waiting until it's on our doorsteps and assuming it is a problem for first responders and emergency managers to deal with, communities stand a much better chance of survival and resilience if they are planned, designed, constructed, and maintained to resist ignition from wildfire's embers and flames.

In other words: We may not be able to prevent the wildfire, but we can prevent wildfire disasters and the loss of life and property.

Planning with fire in mind

One challenge for creating ignition-resistant communities is that conditions that lead to wildfire disasters can change over time and very small distances. Solutions need to be science based, but also site-specific.

Knowing how diverse the socioeconomic, physical, and political environments are throughout the country, the National Fire Protection Association's *Community Wildfire Safety Through Regulation: A Best Practices Guide for Planners and Regulators* (see Resource Finder on page 37) recommends two simple—and effective—techniques for minimizing ignition risks: nonflammable roof coverings



In dense subdivisions, embers and radiant heat from one home often ignite others.

SOURCE: THE NEW YORK TIMES

and assemblies for new construction or roof replacements, and modification of the structure ignition zone (often referred to as “creating defensible space”) within 100 feet of the structure to reduce the ignition potential of ornamental landscaping and other features that could then ignite the main structure. The guide expands on the basic recommendations with many more applicable tools for planning, including zoning overlays, setback requirements, and restrictions of sensitive or hazardous uses in areas of high fire potential.

Increased safety and security can be planned. Given that the fire service may respond to threats by conducting a community assessment, planning and development officials can offer thoughtful design guidelines for fire-protection infrastructure, water supplies for firefighting, access and egress, and more. NFPA's consensus standards include well-researched guidelines for such development, and can be referenced or adopted by local jurisdictions.

Overcoming regulation resistance

In addition to developing wildfire safety standards that can be locally adopted and enforced, NFPA also administers a voluntary program now known as Firewise USA (firewise.org/usa). This program helps neighborhoods take steps

that reduce their wildfire risk—and it succeeds by acknowledging those taking action.

Starting with a handful of communities in 2002, Firewise USA today includes nearly 1,500 participating sites in 42 states. To maintain national recognition status, neighborhoods must continue to take safety steps each year. This program directly addresses the wildfire risk legacy of communities that have been built and designed before many of today's standard approaches and without the understanding of the location's wildfire risk and history. It helps people learn how to reduce the ignition risks that have built up over time, both from lack of care and maintenance and from flammable vegetation and other conditions.

Firewise USA has also educated residents and helped them ask the hard questions about what happens in the future. Home owners associations have changed their covenants and restrictions to address wildfire risks. Citizens groups have pushed for stricter controls on new construction, realizing it will add to wildfire's fuel load or crowd exit routes when an evacuation is ordered. The design of the Firewise USA program is to help property owners do what only they can—make changes to their homes and landscapes on private lands well ahead of a wildfire. Once residents engage in the process, they realize that other issues—like adequate water supplies for firefighting, safe egress routes, and fuel treatment on public lands—may be well within their interest to advocate and promote. Using Firewise, planners and planning commissions may find support for the policies and rules they need to apply to ensure a safer future. ■

—Michele Steinberg

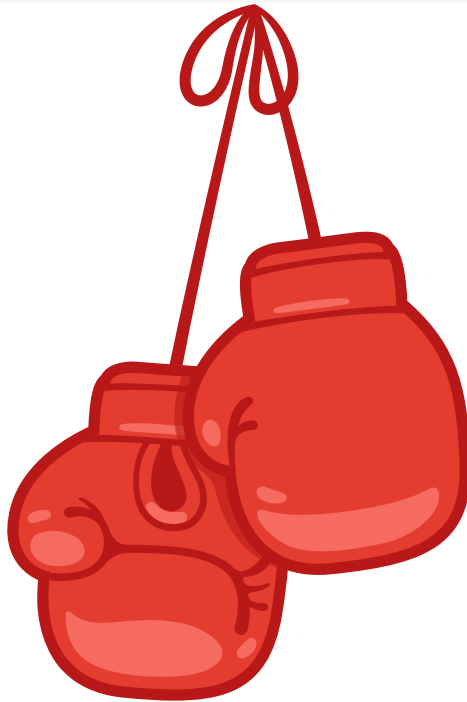
Steinberg is the wildfire division manager at the National Fire Protection Association, leading a team dedicated to wildfire safety outreach. She has worked for NFPA since 2002 and has nearly 30 years of professional experience in natural hazard mitigation, land-use planning, and disaster safety outreach. She serves on the board of the International Association of Wildland Fire and on the executive advisory committee of the APA Hazard Mitigation and Disaster Recovery Planning Division. She holds a Master of Urban Affairs degree from Boston University.

SCENARIO

A group home opponent throws a pair of boxing gloves on the floor, saying 'We're taking the gloves off!'

GET IT ON RECORD RIGHT

'Mr. Jones yanked off a pair of regulation boxing gloves, threw them violently to the floor, and exclaimed to the commission in a loud, threatening voice that he was taking the gloves off.'



For the Record

IMAGINE you are a trial court judge hearing a subdivision appeal. It has been almost two years since the hearing and the vote to deny the application. The planning board or commission rejected the testimony of the developer's engineer and chose instead to accept that of the neighborhood opponents. In the board's view, the testimony was decisive.

Here is what the judge reads from the transcript of the engineer's testimony:

"Yes, ma'am, I sure will answer your question about the stormwater flows. Take a look at this sheet from the plan set. The flow goes from here, over to here, and then is redirected and goes through this structure—really important in its design and location—and on over to that part of the property. The volumes and velocity are as indicated on this line and this line. It's obvious from what you see here, see where I'm pointing, that there is no chance whatsoever that the neighbors' property would ever be affected."

This evidence turned out to be useless for the judge. More importantly for the board, and the board's lawyer, who was not at the hearing, it makes it difficult to defend the decision based on the evidence. How can you prove that the decision of the board was not "arbitrary, capricious, and an abuse of its discretion"?

If you are from a state where judicial review of land-use decisions is not "on the record" but "de novo"—that is, heard anew in court—the record of local proceedings can still be determinative in all manner of litigation. For example, conduct and statements at the local level could form the basis for a claim under the Fair Housing Amendments Act dealing with discrimination in housing. Likewise, religious institutions may bring an action under the Religious Land Use and Institutionalized Persons Act if they believe they have been treated unfairly. Damages and attorney fees can run into the millions of dollars. Courts have the power to reverse local decisions. Having a proper record is essential in defending your decisions.

Luckily, creating an effective and illuminating record is not difficult.

Reviewable materials

First, make sure all application materials are in a form that can be easily reviewed later. The same goes for everything coming into the record at the hearing. I had a hard-learned lesson as a young lawyer when I put a tray of photographic slides into the record, and the commission sent the tray off to the court, but the judge did not have a projector and was never able to view them. Those slides should have been reproduced as paper copies (or, today, as PDF images).

Models and other large objects can be photographed. A star witness in a wetlands battle presented the hearing officer a large chunk of muddy, oozing wetland plant "for the record." A photograph of the mess sufficed.

Capturing nonverbal communication

Second, transcripts of hearings are "flat." They are utterly devoid of any emphasis

in volume or inflection and do not convey important body language and expressions. There is some dispute in the literature as to how much of communication is non-verbal, but one of the often-cited studies by Albert Mehrabian in 1970 suggests that 55 percent of communication is body language, 23 percent is voice tone and inflection, and only seven percent is the actual spoken word. More recent, and perhaps more defensible, estimates suggest that nonverbal communication is 65 to 70 percent. Even at that, roughly two-thirds of the communication is lost with the transcript.

So what can you do? On some occasions, it is useful to make a video recording of the proceeding and include that as part of the record if you think demeanor evidence may be useful. But don't bet on the judge spending hours watching a zoning hearing.

A somewhat more certain approach is to paint "word pictures" for the transcript. With our engineer, for example, it would be easy to coach her along with something like, "Ms. Jones, just so I'm clear as to your testimony, I see you are pointing to sheet four of seven of the plan set, and you're now pointing to that portion of the plan around catch basin 14, right?"

One thing that you practically never have to say is, "for the record." Some people hear that as aggressive and litigious. Everything that is said and put into the record is for the record; you can more gently ensure that word pictures are there by simply describing it in your own words. It does help if you coach your witnesses to be clear for the record, but they usually forget.

Once, an opponent of a group home for recovering alcoholics and substance abusers marched up to the front of the room wearing a pair of red regulation boxing gloves, and during his loud and aggressive remarks he pulled them off and threw them violently to the floor, exclaiming, "We're taking the gloves off!"

To get the word picture into the record, when it was my turn to speak, I said, "I don't think I've ever seen anything quite like this. Did you see it? Mr. Jones took his

SCENARIO

A member of the public makes a discriminatory remark.

GET IT ON RECORD RIGHT

'I respect your right to free speech, although I personally do not agree with any of your comments, and more importantly, I want to make sure that you know, and everyone else here knows, that we pride ourselves on being an open and inclusive community and that we look at each and every application objectively, carefully considering the needs of those who live here now and those who would like to live here.'

position at the lectern wearing a pair red leather, regulation of boxing gloves, out here in front of the commission, some 40 residents of group homes who are here, and 50 or so members of the general public, and he yanked off those gloves and threw them violently to the floor and exclaimed in a loud and threatening voice that he was taking the gloves off."

This transcript ultimately made its way to the federal magistrate judge, who ruled in favor of the group home operator. Without that word picture, the magistrate judge would not have known that the speaker was wearing those boxing gloves or understood his demeanor.

Complete, clear, and accurate

Third, it is critical that the record be complete and accurate. Make sure all your regulations and reports are in. Documentary evidence such as photographs, maps, and plans to support the decision are essential in helping others understand the facts and commission's reasoning.

When someone makes a mistake in the record, it should be corrected as soon as possible, even though it may cause some embarrassment. If you as a board member offer your calculation that the proposed density is 4.2 dwelling units per acre, and then 15 minutes later, as you look back over your calculations, realize the density is actually 3.6 dwelling units per acre, it must be fixed. Yes, it is embarrassing to admit you made a mistake, but it is much better to correct it immediately.

Even more difficult is when a member of the public makes an outrageous and inflammatory remark on the record, such as a negative comment about affordable housing. That speaker has a First Amendment right to free expression and you certainly respect that, but you also know that it is completely outside the culture of your community. It is not only useful and appropriate, but often essential, for a public official to say in response to such a speaker, "I respect your right to free speech, although I personally do not agree with any of your comments, and more importantly, I want to make sure that you know, and everyone else here knows, that we pride ourselves on being an open and inclusive community and that we look at each and every application objectively, carefully considering the needs of those who live here now and those who would like to live here."

It is not difficult to create winning records. It only requires that everyone down the line be able to understand everything that happened at the local level, that adequate word pictures be painted to pick up on the nonverbal communication, and that the record be complete and accurately reflects the views of all the stakeholders. ■

—Dwight Merriam, FAICP

Merriam is a frequent contributor to *The Commissioner*. He is the founder of Robinson & Cole's Land Use Group and teaches at the University of Connecticut School of Law.

Connecting to Regional Planning

ACCORDING TO THE *GROWING SMART LEGISLATIVE GUIDEBOOK* (planning.org/growing-smart), a regional planning agency “transcends the boundaries of individual governmental units but shares common social, economic, political, cultural, and natural resources characteristics. A regional planning agency prepares plans that serve as a framework for planning by local government and special districts.” In APA’s PAS report *Emerging Trends in Regional Planning* (planning.org/publications/report/9118764), Rocky Piro, FAICP; Robert Leiter, FAICP; and Sharon Rooney, AICP, explain, “Regional entities were typically established to coordinate planning across jurisdictions in order to ensure the efficient use of public funds, manage infrastructure and other types of systems or network planning, and give local governments a stronger political voice in their dealings with state or federal governments.”

This article looks at the purpose of regional planning, along with how various organizations function and intersect with the local planning commission.

What is regional planning?

Regional planning organizations can take various forms. They can be voluntary, independent nonprofits like the Metropolitan Planning Council in Chicago. “These civic collaborations may work with and sometimes include governmental partners, or they may work outside of government and serve as a voice to influence public policies and investments,” write Piro et al. Other organizations are authorized or mandated by state legislatures, like the Tahoe Regional Planning Agency (California and Nevada) and the Delaware Valley Regional Planning Commission (Pennsylvania and New Jersey).

“One of the more common regional governance structures is the special-purpose authority focused on a specific geographic area or issue, such as regional airport, water, or transit authorities,” they write. “Federal law established metropolitan planning organizations (MPOs) in the 1960s . . . to coordinate long-range transportation planning as a condition of receiving federal funding. Councils of government are another common regional governance model . . .”

As described in *Growing Smart*, these organizations or agencies undertake plans; provide information, technical assistance, and training; coordinate efforts among units of government; and can serve as a forum for discussion of sensitive issues.

Regional planning was integral to the American planning movement from the beginning. In 1902, the Boston Metropolitan Improvement Commission became the first such entity. But, unlike in some other countries, there are no formally designated planning regions in the U.S. If we were to map those regional organizations today, we would see overlap and gaps, as various programs (including federal) and locally developed regional organizations defined their own areas of concern.

Over the years, regional planning changed. “In the earlier decades of the 20th century, regional planning approaches typically focused on single topical areas. In many cases, the early regional plans only addressed transportation,” the report says.

The 1960s was a significant decade for regional planning. In 1965, four federal acts provided legal direction and funding for regional planning. Regional agencies called councils of government, made up of representatives of local government and with their own dedicated staff, expanded as the federal emphasis on housing, economic development, transportation, and water came to the fore. Although not all regional planning organizations cover all these issues, those that receive federal funding do continue to focus on them.

Regional planning has also interested planners and policy makers at a more

prescriptive level. Citizens, planning commissioners, planners, and elected officials have been called upon to consider the larger geographical impact of local actions, and are encouraged to consider coordinated regional approaches to shared problems. Peter Calthorpe and William Fulton wrote about regional planning as a solution to undesirable sprawl in their 2001 book, *The Regional City: Planning for the End of Sprawl*. More recently in 2011, the Lincoln Institute of Land Policy proposed new ways of considering regions and enacting planning in *Regional Planning in America: Practice and Prospect*. Editors Ethan Selzer and Armando Carbonell, FAICP, describe their intent: “Regional planning is concerned less with the exercise of jurisdiction and more with the search for new forms of habitation based on a clear commitment to advancing sustainability.”

While some regional planning agencies produce plans, such as a regional transportation plan, that coordinate financial investment in transportation infrastructure, other regional organizations provoke new ideas for tackling regional issues through studies, proposed plans, and public forums.

The relationship between regional and local planning

Emerging Trends in Regional Planning describes the context for this relationship: “Working at the regional level requires coordination among local, state, and federal governments. This can happen through formal processes, such as enabling legislation or official memorandums of understanding between local governments, or it can occur more informally through self-designated regional agencies or collaborations.”

The local planning commission should be aware of which regional organizations are in their area. The National Association of Regional Councils states that there are more than 400 metropolitan planning organizations in the U.S. that develop regional transportation plans and oversee the spending of federal and state dollars.

Learning about these plans and how they affect and intersect with local transportation plans is an important place to start.

In the case of mandated organizations with functional planning responsibility, the local planning commission can expect its planning staff to coordinate with regional planning for housing, water, parks, and economic development. These plans are vital, and commissioners should be knowledgeable about them. While commissioners can expect their staff to shoulder the responsibility for coordination, there might be occasions in which a commissioner is asked to serve on a board or committee of the regional organization

to further coordination. Often an elected official will represent the community.

An important service that these agencies or organizations play is to provide background information and context for decisions that come before the planning commission. This service can include education programs for officials and the public. For example, the Atlanta Regional Commission conducts planning commission training and offers programs for officials and the public on current issues affecting the community. ARC also provides technical assistance to communities.

Some regional organizations provide funding for local projects, like the Chi-

cago Metropolitan Agency for Planning. Once again, planning staff and commissioners should be aware of these opportunities.

Regional planning agencies carry out important planning for communities. Other regional entities help shape the discussion around common problems and the need for new policies. They provide a significant added dimension to the work of the local planning agency and planning commission. ■

—Carolyn Torma

Torma is a former director of education for APA.



London in 1910 was the setting for the Town Planning Conference, considered the first international meeting of urban planners.

HISTORY PLANNING ABROAD

AMERICA'S PLANNING MOVEMENT took shape in 1909, with the first national conference in Washington, D.C. But that wasn't the only planning gathering taking place; an international movement was developing.

The first Town Planning Conference was held in London in 1910. The Royal Institute of British Architects brought together four streams of urban design: Städtebau in Germany, British town planning, the American City Beautiful Movement, and French urbanisme. Attended by architects, landscape architects, and engineers, the conference also included a public side, with exhibits of 1,000 plans and models.

Five major sessions took place. Four examined cities of the past, present, future, and development and extension, while the fifth looked at architectural considerations in town planning. Four years later, the Royal Town Planning Institute was created to develop and sustain professional planners.

—Carolyn Torma

RESOURCE FINDER

As we emerge from one of the most destructive fire seasons in recent memory, it's time for communities to assess their risks and plan for fire hazard prevention.

APA RESOURCES

Planning for Wildfires, James Schwab, FAICP, and Stuart Meck, FAICP, PAS report 529/530: planning.org/publications/report/9026859.

Safer Communities Through Better Wildlife Planning, On-Demand Education: planning.org/events/course/9103881.

PAS reports are free to all APA members.

OTHER RESOURCES

City Visions: Rebuilding the North Bay—a more fire-resilient future, KALW Public Radio, October 30, 2017.

Community Wildfire Safety Through Regulation: A Best Practices Guide for Planners and Regulators, National Fire Protection Association, 2013: tinyurl.com/yc8qnxzg.

National Fire Protection Association, Firewise USA: tinyurl.com/yd4k6yrw.

NFPA Firewise USA: Wildfire Preparedness: firewise.org/wild-fire-preparedness.aspx.