

WILDFIRE PROFESSIONALS

January 3, 2022

Board of Forestry and Fire Protection
Attn: Board Members
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Re: Wildfire Professionals Oppose December 2021 State Minimum Fire Safe Regulations Because They Compromise Public and Firefighter Safety

Dear Members of the Board and Staff:

The recent December 2021 draft regulations substantially further reduce fire safe regulations from the April 23, 2021 draft, which the undersigned opposed in April. **These regulations fail to provide adequate standards or State oversight and enforcement to ensure the safety of firefighters and civilians for firefighting and evacuation.**

New building construction in fire prone areas of the state often relies upon existing road infrastructure for evacuation and fire fighting. If this infrastructure is substandard, it prohibits safe concurrent fire apparatus access and civilian evacuation as stated in the current 2020 state fire safe regulations. SB901, which required the LRA VHFHSZ be included in these new regulations, called for expanding wildfire safety, not the relaxation of standards existing since 1991. We ask that you not adopt the proposed regulations without significant modifications that meet the original intent of the legislation to provide for wildfire safety recognizing today's changing fire threat environment.

We respectfully request that this matter be put on hold until the Governor appoints a new permanent Director for Cal Fire. The new Director would need time to digest these proposed regulations. Cal Fire professionals spoke at the December BOF public hearings asking for an opportunity to provide input. The chaos in rapid, immediate, evacuation situations is something one can't imagine or plan. Experienced fire fighters and first responders understand that if these proposed regulations are enacted, it would be potentially catastrophic in injury to the public and firefighters.

The undersigned wildfire professionals strongly oppose the proposed December 2, 2021 Minimum Fire-Safe Regulations based on both our practical application of fire codes and ordinances and our past career experiences with evacuations, fighting wildfires and wildfire prevention planning. Specific comments on the December 2021 draft follow:

- The legislation that enacted these regulations in 1991 pursuant to PRC 4290, and the Attorney General's office have confirmed the Intent of the regulations is to provide for safe concurrent fire apparatus ingress and civilian evacuation for new development on both existing as well as newly-constructed roads. The December 2021 draft removes the word

“safe”, and further removes the actual road prescriptions required to meet safe concurrent ingress and evacuation.

- The proposed minimum road widths (14 ft. with no shoulder requirement vs. previously 20 ft.) for new building construction requiring any access on existing roads, and grade requirements (25% vs. previously 16%) unequivocally can not provide for concurrent ingress and evacuation. Moreover, the 14 ft. width can be further reduced by exceptions. If the July 2020 regulations were preserved, new building construction would actually improve infrastructure safety; instead, the BOF is promoting added residential, commercial and industrial development in unsafe areas of the entire state, which could likely lead to more community burnover catastrophes. In order for the 14 ft. minimum road width to even possibly work would require shoulder requirements that would support fire apparatus with no exceptions. We encourage the BOF to retain the existing 2020 standards until a robust analysis is conducted.

Of note, the **National Fire Protection Association (NFPA)** develops standards for the wildland urban interface areas. Fire Access Roads requirements come from **Chapter 18 of NFPA 1, Fire Code. Access Road Specifications:** *“Access roads need to allow adequate access to the building and room to setup and perform manual suppression operations. Fire department access roads require 20 ft. (6.1 m) of unobstructed width, 13.5 ft. (4.1 m) of unobstructed vertical clearance and an appropriate radius for turns in the roads and dead ends for the vehicles apparatus to turn around. The minimum 20 ft. (6.1 m) width allows for two-way vehicular traffic and for one fire apparatus vehicle to pass while another is working at a fire hydrant or conducting aerial operations while the 13.5 ft. (4.1 m) vertical clearance ensures that fire apparatus can safely pass under power lines, bridges, and other obstructions. Bridges need to be designed to be able to support a load sufficient enough to carry a fully loaded fire apparatus and the vehicle load limits need to be provided at both entrances to the bridge.”*

While Herb Spitzer, Retired County of Los Angeles Fire Department served on the **NFPA's Forest and Rural Technical Committee** many years ago, the committee discussed at length the roadway width issue and the discussion always came back to firefighter safety. When most city fire engines are over 9 feet in width, how do fire engines pass one another or large vehicles such as RV's and large horse trailers often used for the evacuation of horses and livestock when the road is less than 20-feet wide? Anything less than 20 feet in width for a fire access road does not make sense.

Additionally, **International Fire Code** requirements regarding fire access road specifications: 503.2.1 Dimensions states: *“Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6 and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).”*

Furthermore, the **County of San Diego Fire Code** set minimum requirements for dead end road lengths, which were based on revised State Codes following reviews of the 2003 Cedar Fire and other horrific fires that destroyed numerous lives and millions in property losses.

The existing Standard for Dead-end Roads is Sec. 503.2.5.1 *“Dead-end roads. The maximum length of a dead-end road, including all dead-end roads accessed from that dead-end road, shall not exceed the following cumulative lengths, regardless of the number of parcels served: TABLE 503.2.5.1 DEAD-END ROADS - MAXIMUM LENGTH (Title 14 SRA 1273.09 Ref.)*

Zoning for Parcel(s) Served by Dead-End Road	Cumulative Length of Dead-End Road(s) (Feet)
<i>Less than 1 acre</i>	<i>800</i>
<i>1 acre to 4.99 acres</i>	<i>1,320</i>
<i>5 acres to 19.99 acres</i>	<i>2,640</i>
<i>20 acres or larger</i>	<i>5,280</i>

All lengths shall be measured from the edge of the roadway surface at the intersection where the road begins to the end of the road surface at its farthest point. Where a dead-end road crosses areas of differing zoned parcel sizes, requiring different length limits, the shortest allowable length shall apply. Where parcels are zoned 5 acres or larger, turnarounds shall be provided at a maximum of 1,320-foot intervals. Each dead-end road shall have a turnaround approved by the fire code official and constructed at its terminus. A Turnaround shall be provided to all building sites on driveways over 150 feet in length and shall be within fifty (50) feet of the building.”

The San Diego County standard for road widths is 24 feet, not 20 feet; the proposed regulations are weakening the current code. Again, anything less than 20 feet in width for a fire access road does not make sense, and could place lives in danger.

- Bridge weight requirements (GVWR) were removed on existing substandard road infrastructure, which will create bottlenecks and put firefighters and civilians lives at risk. Firefighters conducting evacuations during a conflagration may not be able to access large new developments enabled by this proposal or strategically access structures and wildlands to fight fires.
- Significant changes were made to § 1273 Article 2 that put lives and property at risk. § 1273.00(b) defines three thresholds, any of which would trigger a set of requirements for Existing Roads for new building construction. The April draft required a slightly higher set of standards when exceeding the thresholds (similar to the standards for New Roads except for elimination of dead-end road and One-way Road length requirements). The December 2021 draft has severely limited the road standards for Existing Roads to apply only in high and very high fire hazard severity zones, despite the fact that wildfires do not discriminate among the zones, and many moderate and low fire hazard severity zones have burned fully in recent California fires. The December draft further removed most of these prior standards for development over the thresholds on Existing Roads, including removing the requirement for two 10 ft. traffic lanes, grade requirements under 25%, bridge requirements, driveway width requirements and dead-end and one-way road length limitations. Thus, a new high density residential and high use-intensive commercial development could be built on a 14 ft. wide mountain road with no shoulders and steep drop-offs on a 12-mile dead-end road in a high fire zone, with grades up to 24.9% for unlimited distances - A near perfect design for future tragedies. This clearly opposes the stated Purpose (§ 1270.02(d), pg. 11-15) to “reduce the risk of Wildfires which among other things protect the health, safety and welfare of residents, and protects natural resources and the environment.”

- Standards for Building Construction on Existing Roads over the thresholds in § 1273.00(b) were significantly reduced by inserting the word “new” in multiple places in Article 2; hence standards no longer apply to existing substandard roads, despite the fact that new building construction often relies on these unsafe roads for evacuation and fire fighting. The addition of “new” in most sections of Article 2 eliminates many critical regulations for most new building construction, including large commercial and residential developments. The Fire Chief’s working group advising the BOF stated that it was very important for safety that dead-end roads to be limited to ½ mile long. Yet this draft allows dead-end roads on existing roads, where most new development occurs, to be of unlimited length in high and very high fire severity zones.
- The definition of Residential Unit (§ 1270.01hh, pg. 7) allows a single driveway to access four bunkhouses housing multiple bunks; thus, this could be a hundred or more persons. This needs to be modified such that a Residential Unit does not house more than [6] persons unless they are in one family. Furthermore, there are no width requirements for new development on Existing Driveways. Therefore, a 6 - 8 ft. wide driveway could now be the only access to four new structures housing hundreds of persons.
- § 1276.02 Ridgelines in the April draft specified that “*New Buildings on Undeveloped Ridgelines identified as strategically important are prohibited*”. In the December draft that has been changed to only prohibit: “*Residential Units, on Undeveloped Ridgelines identified as strategically important are prohibited*”. “*New Residential Units are prohibited within or at the top of the drainage or other topographic features common to Ridgelines that act as chimneys to funnel convection heat from Wildfires.*” In BOF public meetings, discussions acknowledged that the intention was not to limit utility infrastructure (such as communication and utility towers, water towers, or barns) on Ridgelines; however, this December draft should absolutely account for and prohibit commercial and industrial building construction on Ridgelines to comply with the intent of SB 901.

The existing rules and regulations (2020) provide reasonable protection and could use some strengthening (e.g., shorter dead-end road limits); however, the proposed changes frankly put lives at risk. Compared to the current 2020 regulations dating clear back to 1991, the proposed regulations are significantly weaker for new building construction relying on substandard existing road infrastructure. These proposed safety standards are regressive, especially when there is overwhelming evidence that development in California’s wildfire-prone areas increases wildfire risk and hazard. **The lack of adequate ingress and egress for residents and first responders significantly contributed to the recent losses of lives and properties in California’s wildfires.**

As wildfire professionals, we rely on the State Fire Protection Codes, regulations and common sense to make fact-based judgments and guide our fire safe planning recommendations. The proposed regulations will serve to undermine our professional work to protect public safety and property. Most counties do not have requirements for an analysis and assessment of wildfire safety risks and appropriate mitigation to ensure safe development, including scenarios where roads must be upgraded or development should not occur. **The State has mandated since 1991 that the BOF set minimum fire safe regulations. By reducing these regulations to effectively unenforceable guidelines, the BOF may be abrogating**

the legislative mandate of SB 901 and the original legislation in PRC 4290 enacting the fire safe regulations.

Local jurisdictions will be provided with loopholes to approve more development and not meet State minimum fire safe standards, which in fact puts more people in harm's way. When preparing a wildfire plan, we often ask ourselves: What if our families were in the proposed development during a worst-case catastrophic wildfire, and were forced to evacuate on inadequate unsafe roads? **In effect, the BOF, which is obligated to provide adequate public safety regulations, is abdicating its important oversight role with this weakened 2021 proposal. We are then compelled to ask: Who will be held liable for the increased hazards, risks and loss of lives and property?**

The Director of Cal Fire will likely oppose this undermining of PRC 4290 and also proposing to the Board of Forestry and Fire Protection to require the State (Cal Trans) and county agencies responsible for highways and roadways to clear the vegetation back to the easement line, providing a safer ingress and egress for citizens and first responders. In addition, the roadways may make possible holding lines for fire operations. We should be advancing public safety, not undercutting it.

We ask for a continued focus on public safety, as was the original intent of the legislation that enacted these fire safe regulations in 1991. The proposal weakens total fire safe standards so severely that the effects must be evaluated. It is concerning that the BOF did not conduct a data-supported analysis of existing road and infrastructure capacity to assess potential impacts to wildfire emergency response and evacuation plans, as well as the increase in ignition sources that will occur by providing both exemptions and exceptions to thousands of parcels. An analysis should include quantifying the potential increase in population and intensity of use in the SRA and VHFHSZ LRA as a result of the reduced regulations and liberal exception process that will now free up parcels to new building construction, including commercial. All new development should require an expert's review to determine how fire risks are mitigated, including safe evacuation on existing roads, as is now in practice in several counties.

The bottom line is that many of the State Fire Protection Codes that were put into place following lessons learned from on the ground reviews of catastrophic losses of life and property in the 1970's and going forward are presently under consideration for being weakened and watered down by the California Board of Forestry. These codes have stood the test of time and are a few of the reasons we have fewer lives and homes lost to wildfire, particularly in southern California, as well as in newer communities built since the 2003 Fire Year throughout the State. On the heels of the disastrous 2020 and 2021 Fire Years, we cannot afford to go backwards. As professionals, we have always supported the BOF and appreciated your leadership in improving fire standards. For the first time ever however, we cannot support your proposal knowing that it reduces safety standards on existing roads and will likely result in the death of firefighters and civilians. We request that the BOF retain the existing 2020 standards until a robust analysis is conducted, and include a requirement for fire safe analysis for all new building construction.

Sincerely,

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cc.
California State Firefighters Association: <https://www.csfa.net/>
California Fire Safe Council: <https://cafiresafecouncil.org/about-us/about/>
Senator Dodd