

August 26, 2020

Reference: 2920 Expo Parkway Rezoning Application

To: **Submitted to engagemissoula.com and elected officials in 2020 concerning the above application**

EXPO PARKWAY REZONING WILDFIRE LETTER #1 – ORIGINAL SUBMISSION ON AUGUST 26, 2020

This letter is written regarding the proposed rezone of property at 2920 Expo Parkway in Grant Creek and is specific to our concerns for the safety of Grant Creek residents and emergency personnel regarding wildfire evacuations in Grant Creek's Wildland Urban Interface (WUI) north of I-90.

Our Backgrounds

John Langstaff* – Retired Captain, Missoula City Fire Department. Fire Experience from 1977-2011: Structure and wildland firefighter including Strike Team Leader, Hazmat Technician, EMT and Incident Medical Officer.

Michael Cole* – Retired District Ranger, USDA Forest Service. Fire Experience from 1971-2020: USFS wildland firefighter, EMT, Law Enforcement Officer, Agency Administrator and Northern Rockies Type 1 National Incident Management Teams. Currently serving on the Command Staff of Northern Rockies Type 1 National Incident Management Team 1.

Richard Lasko - Retired National Deputy Director, Fire & Aviation Management, USDA Forest Service. Fire Experience from 1965-2015: Orange County Fire, CAL Fire and USFS as a wildland and structure firefighter, Fire Behavior Analyst and Planning Section Chief. Served on Northern Rockies Type 1 National Incident Management Teams and National Area Command Teams.

*Member of the Wildfire Preparedness Subcommittee, Grant Creek Neighborhood Council.

We are all residents of Grant Creek and signatories to this letter. Collectively, we have approximately 130 years of experience dealing with structure and wildland fire from a spot fire to 400,000 acres in size.

In our combined careers over a span of 55 years we have personally witnessed the changes in the number, size and complexity of wildfires. Over these same years, evacuations have become a regular occurrence due to the growing number of homes and other developments in the Wildland Urban Interface (WUI). We have all been involved with major evacuations during wildfires, including coordination with municipal, county, state and federal agencies prior to and during evacuations. We have all witnessed orderly evacuations as well as fires where multiple evacuations occurred rapidly in succession due to fire spread and there was no time to effectively notify residents. These have taken place all times of the day and at night, including morning and evening rush-hour traffic.

Wildfire Related Issues Concerning the Proposed Rezone

In 2005 the Missoula County Rural Fire District and the Missoula City Fire Department identified Grant Creek as their No. 1 and No. 2 priority (respectively) in regard to “High Risk to Wildfire” areas in Missoula County. (Ironically the Lolo, Montana area, where major fires occurred in 2013 and 2017 with evacuation issues, was identified as priority No. 5 on the Missoula County Rural Fire District’s list). The **Missoula County Community Wildfire Protection Plan** (CWPP) states “The assessment process for the Missoula County Project Area (using wildfire risk and human safety factors) produced no surprises for the Missoula County Officials involved in this fire plan.” According to the document, specific risks in these areas, “... are characterized by heavy fuel loadings, increasing human development and **emergency egress/access issues**”. (bold highlights added) (2005, *Missoula County Community Wildfire Protection Plan*, page 20). http://dnrc.mt.gov/divisions/forestry/docs/fire-and-aviation/wui/missoula_cwpp.pdf

Several action items were identified in the 2018 update to the CWPP specific to the problems we have identified in Grant Creek. On page 60, Action Item No. 7 under Fire Adapted Communities states: “Update County Growth Policy land use map and local area plans as needed and appropriate, using wildfire hazard area information **to steer growth away from more hazardous areas**.” (bold highlights added). (2018, *Community Wildfire Protection Plan, Missoula County*). <https://www.missoulacounty.us/home/showdocument?id=30120>

Appendix A, Primary Plans Related to CWPP Action Table identifies the **Missoula Growth Policy 2035** as one of the plans where coordination is involved. Of particular note, page 63 under Goal 11, Reduce the safety risk and cost associated with wildland fire, flooding and other hazards, Objective 11.1 states: “**Discourage development in hazardous areas and in areas where public and emergency responder safety is compromised**”. (2018, *Community Wildfire Protection Plan, Missoula County*).

The Wildfire Ingress/Egress Problem in Grant Creek

In Grant Creek there is only one-way in and one-way out on a 2-lane narrow road without shoulders. This is known in the fire world as a “watch out” situation. There is only one (1) escape route for everyone, residents and firefighters alike, and this is of great concern to Grant Creek residents. <https://nbcmontana.com/news/local/grant-creek-residents-fear-increased-traffic-evacuation-issues-amid-proposed-rezoning>

In the event of a wildfire evacuation, Grant Creek Road is the same route that will be used by the Missoula City Police Department, Missoula County Sheriff’s Department and local, state and federal firefighting resources entering the canyon to deal with evacuations and fire suppression, potentially all at the same time.

Egress was an issue during development of the CWPP in 2005. **Critical Egress** was identified as 1 of only 5 baseline assessment criteria, and 1 of 2 criteria under the heading of “Human (Safety) Factors”. The analysis identified Grant Creek as 1 of 37 Critical Egress areas in Missoula County (2005, *Missoula County*

Community Wildfire Protection Plan, page 51.) However, as noted in the previous section of this letter, the local fire departments (rural and municipal) listed Grant Creek at the top of their priorities for wildfire risk, in part due to “emergency egress/access issues”. The document’s analysis of Critical Egress states that **“These findings are critical for planning and implementing safe and efficient emergency evacuations. Inversely, they also point to situations where citizens and/or firefighters could be trapped, which would also affect fire response and community safety.”** (bold highlights added). (2005, *Missoula County Community Wildfire Protection Plan, page 18.*)

The current zoning at 2920 Expo Parkway was already approved when the CWPP was developed in 2005. It is presumed that existing zoning within the city limits’ WUI was considered in the plan. By 2005 it was obvious that both Missoula city and county fire services already realized that egress/access to Grant Creek north of I-90 was a major problem even prior to any of the already approved development at 2920 Expo Parkway which, if implemented, would nearly double the current population.

There is No Evacuation Plan Specific to Grant Creek

Wildfire Evacuations in the WUI were identified as a common topic under Public Safety, Disaster Preparedness and Emergency Services, part of the group of “Challenges” during listening sessions for development of **City Growth Policy, 2035**. (2015. Appendix C, page 9). On page 133 of the **City Growth Policy, 2035**, the CWPP is identified as a plan that is “coordinated” with the Growth Policy. Yet there was no consideration of the critical egress issue or lack of an evacuation plan specific to Grant Creek during the review and recommendation phase of the rezone application.

The Missoula County Sheriff has jurisdiction and responsibility for evacuations in Grant Creek north of the Missoula city limits. Depending on the size, complexity and speed of a fire, there may or may not be time to notify people prior to their evacuation. In a perfect scenario, people will be notified ahead of time as a wildfire burns closer to their homes and there will be time for the 2-stage evacuation process used by Missoula County: Evacuation Warning and Evacuation Order. The website for Missoula County Office of Emergency Service has a disclaimer that, depending on the circumstances, there may not be time to issue an Evacuation Warning (<https://www.missoulacounty.us/government/public-safety/office-of-emergency-management/evacuation-information>).

In a fast-moving wildfire situation it is not uncommon for people under a lot of stress to evacuate on their own in a disorderly fashion, especially if they never receive any notification to evacuate. This situation, on a much larger scale, occurred on the Camp Fire in California in 2018, resulting in 85 civilian fatalities and numerous injuries to civilians and firefighters, even though the town of Paradise had an evacuation plan with multiple routes to exit out of the city. (2019. *“The Plan Was Out the Window” – How the Camp Fire Became California’s Deadliest Wildfire*. <https://www.abc10.com/article/news/local/abc10-originals/the-plan-was-out-the-window-how-the-camp-fire-became-californias-deadliest/103-622661243>).

When the CWPP was updated in 2018 it was meant to build upon the existing plan from 2005 but there are still few references to evacuations. **Grant Creek remains listed as 1 Of 37 Critical Egress areas** (page

70). On page 55 of the 2018 update a reference is made that Missoula County has an Evacuation Plan available at the County Sheriff's Office. Upon contacting the Sheriff's Office, we learned that there is a 2017 Evacuation Plan. However, it is not specific to Grant Creek and provides generalized information and evacuation protocols for use by the department only. It is specific to chain of command and implementation of the Evacuation Warning/Evacuation Order system. (August 2020, Personal Communication – Missoula County Sheriff's Office, Public Information Officer).

On page 61, Action Item No. 13 under Fire Adapted Communities states: "Promote having neighborhoods and **communities** develop mitigation activities and **evacuation plans** through programs such as Firewise Communities/USA and Ready, Set, Go!" (bold highlights added). (2018, *Community Wildfire Protection Plan, Missoula County*).

The mitigation part of this program was started by the Missoula County Wildfire Preparedness Coordinator in Grant Creek in 2019. Individual homeowners can choose to do work around their homes to reduce wildfire risk to their property and many have started this. The importance of this work addresses the fact that wildfires in the WUI might cause just one home to ignite, but that fire can proceed to burn down adjacent homes if the neighborhood is not prepared. (2019. *Fire scientist to homeowners: Houses don't have to burn down in wildfires.* <https://missoulacurrent.com/outdoors/2019/04/wildfire-jack-cohen/>). However, in Grant Creek this program is in its infancy with people concentrating primarily on defensible space around their homes and a few thinning projects on private and government lands, and along some roads.

Now, fifteen years after the first CWPP was written, no evacuation plan specific to the entire Grant Creek drainage north of I-90 has been developed to address critical egress issues, and this problem remains unresolved. In addition to the critical egress issue, there are no safety zones identified where people in vehicles could congregate if road access was cut off by wildfire and no reliable water sources have been identified or developed for engine re-supply in the event of a wildfire in Grant Creek. As a result, the requested rezoning of 2920 Expo Parkway and associated population and vehicle increases would only exacerbate the problem of critical egress in Grant Creek and would further compromise public and firefighter safety.

Clearly there is inconsistency between the county and city about what constitutes wildfire safety hazards associated with development in the Grant Creek WUI based on the CWPP. As noted above, city and county fire services documented critical access issues in Grant Creek as early as 2005. Rezoning of the property at 2920 Expo Parkway is not consistent with meeting the intent of the CWPP in regard to public safety.

Egress has become a common theme following investigations of wildfires involving civilian fatalities during evacuations. (2019. *Why California Wildfire Evacuations Are Becoming Deadly Traffic Jams* <https://www.sacbee.com/news/california/fires/article229547469.html>). In the case of the 2018 Camp Fire in California, even though the community of Paradise had an evacuation plan, the fire forced the closure of some of their evacuation routes. The suitability of evacuation routes was later examined for other communities in California, a state which annually sees the majority of civilian fatalities associated with wildfires. One review found that many other communities in fire-prone areas had an insufficient

number of egress routes to use in the event of an evacuation. (2019. *Deadly Traffic. How We Evaluated California's Wildfire Evacuation Routes.*

https://www.desertsun.com/story/news/environment/2019/04/25/california-wildfire-evacuation-road-capacity-traffic-analysis-methodology-camp-fire/3514552002/?_ga=2.80914967.1621943122.1598126104-1316724573.1598126104).

Every firefighter is trained to know 1) where their escape routes (plural) are located before they engage a fire; 2) when “trigger points” are reached in weather and fire activity and; 3) when they need to disengage from the fire and go to a “safety zone” or leave the area. In conjunction with the County Sheriff, trigger points on maps are also used to recommend to the Sheriff various levels of evacuation to consider when evacuations appear necessary but need to be orderly. If a wildfire is moving rapidly, even trigger point locations can be over run in a matter of minutes, forcing everyone onto whatever escape routes are still available, or shelter in place and face entrapment.

It takes time to implement a plan for evacuation, even when time is already critical. You need the emergency personnel on site before you can do it. It is especially chaotic at the start of an evacuation before enough emergency personnel arrive on scene to control traffic.

Related Issues

The term “Mega Fire” was never used prior to 1988 to describe wildfires. Now fires over 100,000 acres in size and/or that have significant effects on human populations are a regular occurrence. In the past 30 years, the length of the average fire season in North America has increased significantly and this trend is expected to continue. A global study in 2015 noted that large fire frequency and duration has increased significantly worldwide, “...with the greatest increases observed in the temperate coniferous forests of the Northern Rockies...”. (2015. *Climate-Induced Variations in Global Wildfire Danger from 1979-2013* <https://www.nature.com/articles/ncomms8537> and https://missoulian.com/news/local/study-finds-climate-change-is-increasing-length-of-wildfire-seasons-across-globe/article_f702047f-6627-5745-93ea-1ac29b095123.html

The number of wildfires that directly impact residents of large communities and their adjoining county lands has risen dramatically, including wildfires within Missoula County. Two of the most recent major wildfires in close proximity to the city of Missoula, Lolo Peak in 2017 and Lolo Creek Complex in 2013, involved one-way in, one-way out roads with major evacuations ongoing as a result of fast-moving wildfires. This evacuation traffic fed into U.S. Highways 12 and 93 at congested intersections near the town of Lolo. In one instance during a major blowup, Lolo Peak firefighters had difficulty entering the fire area because “spectators” parked along U.S. 93 had blocked ingress/egress to the only road entering and exiting that portion of the fire. For a short time, residents couldn't get out either. A similar traffic problem almost occurred in 2016 on the Grant Creek Road during a fire near the Colorado Gulch subdivision due to onlookers partially blocking the roadway due to the absence of shoulders on the road. On a side note, vehicle accidents are the number one cause of death for wildland firefighters.

We describe wildfires in terms of complexity. A major evacuation of Grant Creek would be a complex operation at the mouth of the canyon near I-90. Heavily travelled roads like Reserve Street and I-90 can quickly complicate the process. For instance, law enforcement may have to shut down one or more of the entrance/exit ramps on I-90 west-bound and east-bound on the Reserve Street exit to stop non-fire traffic from entering during a major evacuation of Grant Creek. (local example - The west-bound on-ramp of I-90 was closed in 2005 at Wye during the I-90 Complex Fire near Alberton.) Extended law enforcement presence at road blocks would drain city and county protection capabilities, along with certain involvement of city fire and EMS personnel. This is not unusual in an evacuation situation.

In addition to civilian evacuation traffic, Grant Creek Road would have engines, crew vehicles, heavy equipment transports, etc. entering from Reserve Street and I-90 traveling up the road (or down if evacuating). Some of this equipment may end up being staged at the mouth of Grant Creek if there are not clear instructions about where it needs to go before entering the canyon. Some of it may be turned around depending on fire activity. The existing amount of residential, commercial and tourist traffic that would be using Grant Creek during an evacuation due to an advancing wildfire, even with the new MDT improvements at the I-90 intersection, would most likely be inadequate to accommodate this amount of south-bound and north-bound evacuation and emergency response traffic. The existing, approved zoning would add even more vehicles. The rezone of the property at 2920 Expo Parkway would create a significantly more dangerous traffic problem at the I-90 intersection bottleneck.

If the Incident Command Post (ICP) for the wildfire was located in Grant Creek, constant fire-related traffic would be using the road for the duration of the fire and afterwards to support fire rehab. If the ICP was located outside of Grant Creek, there would still be heavy use of the road in order to support fire suppression and later rehab activities. This would be in addition to any residential traffic that would be allowed back into the area. Residents and businesses in lower Grant Creek in particular would be pressuring officials to open up these areas for their re-entry as soon as possible, even if the fire was still ongoing in Grant Creek. It is not good practice to open an area back up prematurely due to public pressure, then have to re-evacuate everyone as fire behavior changes.

A similar problem with road access exists with structural firefighting response on buildings as numerous and as large as those proposed in the rezone. Increased traffic as a result of the rezone proposal will impact quality and response time by the city fire department. An aerial rescue platform (ladder truck) needed for the four-story buildings proposed will have a longer travel time all the way from Station 3 located across town at 39th and Russell St. Thousands of cars in the proposed rezone along with vehicles in the adjoining commercial development already located across the street along Expo Parkway will complicate accessibility, especially if large diameter hose lines are involved.

Summary

This is not the only area of the country where people see increased, large scale development associated with egress in the WUI as a major safety issue. Resident populations on the same scale as the Grant Creek population as well as larger populations affected by wildfire are concerned about evacuation routes out of their WUI. One resident in California summed it up succinctly: "We are adding people,

buildings, we are not adding any more ability to get out of here.” (2019. *Tahoe Already Has An Evacuation Problem. Should New Developments Be Allowed in the Path of Danger?* https://www.rgi.com/in-depth/news/2019/04/25/tahoe-development-wildfire-risk-questioned-residents/3418124002/?_ga=2.62252079.284409988.1598190730-1938647061.1598190730).

This letter is not intended to strike fear in residents who live in Grant Creek or elsewhere in the city or county. However, the issue of critical egress is the current reality of wildfires in the WUI surrounding cities such as Missoula in the western United States. Ignoring the problem, rezoning and adding more people and vehicles to the mix will not make the problem go away. Homeowners have some options in preparing themselves and their homes in the event of a wildfire. What they cannot do is change their escape route, establish safety zones or control traffic. Egress remains a critical issue and will not be improved by tripling the population of Grant Creek as proposed in the rezone application.

A request for road improvements on the Grant Creek road was made over two decades ago **to deal with traffic congestion near the I-90 intersection at that time (circa 2000)**. This was prior to most of the existing commercial development at the mouth of the canyon on either side of the road, no development of the approved zoning at 2920 Expo Parkway and no development of new homes within existing subdivisions as well as several new subdivisions within the county along Grant Creek Road. This project has finally just started in the past week. Other recent public comments associated with the inadequacy of the road improvements to accommodate additional traffic as a result of the rezoning request is in the public record for this proposal.

Missoula has spent a great deal of time and effort planning so development takes place in an orderly, well-thought-out fashion. However, growth at the edges of the city affects not just city residents, but the county residents who use the same roads for ingress/egress. The planning process for the requested rezone at 2920 Expo Parkway is deficient because it does not recognize the critical importance of egress. The lack of an evacuation plan for the Grant Creek drainage has a major effect on public safety for residents of Grant Creek.

Our city needs future growth to be planned and responsible. As firefighters, we fail to see why safety of local residents would not be the No. 1 priority when planning for developments in the WUI.

Every wildfire we go to has the same primary objective at the top of the list: “Implement operational objectives while addressing firefighter, public and aviation safety through hazard and exposure mitigation”. Our opinion is that the rezoning request at 2920 Expo Parkway does not assure the safety and welfare of city residents, county residents, emergency responders or firefighters in Grant Creek.

Thank you for the opportunity to provide you with this information. If you have any questions, Michael Cole will be available at 406-926-2205 unless he is on an active wildfire assignment.

Sincerely,

/s/John Langstaff

/s/Michael Cole

/s/Richard Lasko