

Objection to Inclusion of Turkey Tracks as a public Target Shooting Range

Written November 30, 2024

Response to Project: Integrated Management of Target Shooting on the Pike National Forest #57807. The Pikes Peak, South Platte, and South Park Ranger Districts of the Pike National Forest located in central Colorado. RO: Jennifer DeWoody, PhD NEPA Planner

In response to the Integrated Management of Target Shooting on the Pike National Forest Environmental Assessment, November 2024 (hereafter referred to as EA): the content of this paper only pertains to Turkey Tracks Shooting Range and is not to imply inferences to the other proposed sites.

Overall, due to the inherent dangers of dispersed shooting, I am in favor of closing the local National Forest to dispersed shooting and opening properly-located and designed shooting ranges for this activity. However, the Turkey Tracks Shooting Range is not a suitable location nor do the proposed plans make it suitable. After review of the IMTS EA, I found multiple inconsistencies, inadequacies, incomplete and misleading results and conclusions, and a design plan that literally puts 300 to 500 residents in the direct line of fire. DEFINITELY a significant environmental impact.

I wrote an earlier paper with references describing in some detail the wildfire history, wildfire likelihood, noise, trash, environmental concerns, surrounding residential density and the flawed design plan as they relate to Turkey Tracks. This paper will mostly concentrate on the November 2024 EA as presented to the public while only highlighting the concepts of my earlier paper. The earlier paper ended with the proposed plan design flaw, I will start this paper on this topic due to its impending danger to human life and health.

Figures 1 through 4 show the elevations, distances, and locations of the proposed shooting galleries. Figures 3 and 4 show 3D portrayals from different angles to aid in demonstrating the inherent danger of the Hunting Simulation (1000+ yards) site and how an estimated 1000+/- rounds annually can make their way to the neighboring inhabited residential areas. This will be unbeknownst to the shooters since the view will be blocked. To recap the pertinent numbers: estimated 50,000 users per year (verbal NFS Divide meeting, Aug. 2024) each firing a median of 100 rounds. Assuming 20% use the Hunting Simulation site, and 99% of the rounds stay below the 8295 ft ridge. Accounting for gravity, a slight elevation of one's gun at or above a 5.2% angle (4.6 degrees) of a horizontal position, would loft most bullets over the ridge backdrop into the valley below. This valley, within range of most bullets (especially those used for long range target shooting), ranging from west-southwest to nearly due north of Turkey Tracks consists of about 220 homes, numerous barns and sheds, automobiles, cattle, horses, dogs, a highway, and between 300 and 500 residents depending on the time of year. Distance from the Hunting Simulation shooting site to the nearest home is less than 3/4 miles (the EA states 1/2 mile). The farthest home is about 2.5 miles. If one goes back to 2009, they may recall the Rampart Range shooting range (Estimated 40,000 users per year) was closed due to a shooting-caused death. Turkey Tracks appeared on the scene a few years after this closure. Even with the current 400 ft. backdrop several bullets attributed to Turkey Tracks have been reported in the surrounding neighborhoods – three I personally know of in Westcreek: roof of a house, garage door, and wooden fence rail, plus two others alleged in Westcreek but not confirmed by me. The local Gazette (Seth Boster, Gazette, 2021, 2022) has reported a resident finding multiple rounds around his fishing pond.

The EA grossly downplays the wildfire dangers of the Turkey Tracks site. As per the EA, “the lowest landscape burn probabilities were observed at NFSR and Turkey Tracks”. The EA reported a Burn Probability of 0.002 for Turkey Tracks, the second lowest on the list. I refute the low burn probability of this site. My research into wildfires led me to a couple of USDA and USFS documents of interest. One document had a map titled: “High-Risk Firesheds” (USDA, January 2022, Pg. 2; see Figure A). This map clearly showed Turkey Tracks well within a high risk fireshed. Of note, only about one-eighth of Colorado National Forest lands are contained in a high risk fireshed. A second USDA document had a map titled: Target Shooting and Wildland Fires (USFS, January 2021, Pg. 7; see Figure B). This map shows human caused wildfires in Colorado. The map specifically points out the wildfires caused by target shooting. Knowing the USFS has attributed 61 wildfires to Turkey Tracks from 2014 to Nov. 2024 (80 wildfires was repeatedly voiced at the Aug. meeting in Divide - prior to the Sept. 2024 wildfire), one can safely conclude that more than half the shooting-caused wildfires were at Turkey Tracks. Turkey Tracks is clearly seen in the map as the large red cluster blob near the center. Special note: local firefighters have repeatedly stated the number of fire starts is much larger than publically documented.

The EA indicated the current and proposed mitigation would allow direct attack of wildfire by hand crews. However, it was learned as recently as Sept. of this year (Turkey Tracks 5 Wildfire) that hand crews could not access the site due to large amounts of trash and live ammunition (Dani Whitaker, KOAA News 5, 2024)(Sadie Buggle, KRDO News, 2024). Air support was heavily relied on. Of note, the Turkey Tracks 5 fire occurred on days with low wind. Fire moved slow allowing fire blocks to be effective, and air support was possible. Of special note (not mentioned anywhere in the EA report): Sustained high winds (35 to 65 mph) are very common at Turkey Tracks, especially late winter to early summer, effectively negating the effectiveness of fire lines. This is a rather important omission.

And finally on this topic of High Fire Risk at Turkey Tracks, in early October of this year, the USDA, in defiance of the “lowest landscape burn probability” assessed by the EA, the entire Pike Forest and Turkey Tracks were temporarily shut down to recreational shooting due to higher than normal fire danger. (USDA, USFS Oct 2024). The emergency order cited a 2013 USFS study showing ignition by rifle bullets. Also in this order Turkey Tracks is attributed to most or all of the shooting caused fires in the Pike National Forest and the dangerous conditions for firefighters. Also noted is the need for supervision at Turkey Tracks: “proximity to urban areas with large populations... creates significant challenges for fire prevention and visitor compliance efforts”. An interesting realization comes from this shooting restriction, Turkey Tracks is allowed to exist even with the written realization that the justification of closing the range to recreational shooting now, applies much or all of the time at Turkey Tracks.

Regarding the noise from shooting activities at Turkey Tracks, noise is more pronounced in rural settings due to the relative ambient quiet, noise can be heard at greater distances. On a windless day, before Turkey Tracks became the busy range of today (estimated 15,000 shooters per year), the background noise level was easily below 10dB. Of note: during the October 2024 forest closure several days of less than 10dB were again experienced. The nonscientific noise study in the EA only used an industrial safe sound level approach in an attempt to quantify an increase in noise levels due to shooting activities. Sound testing seemed to be focused on the day's wind and adjacent road noise. No mention of where the shooting sound measurements were taken at, nor any indication of testing in any of the nearby communities. For the record, neither Turkey Tracks nor the nearby communities are in a town or city. Road noise in the communities is minimal to zero. Whereas one may faintly hear an occasional distant motorcycle, the shooting noise is nearly constant and MUCH louder. So why

was the focus on road noise testing? The EA made no attempt to account for quality of life aspects of environmental noise in the surrounding rural environment. No attempt to discuss other aspects of environmental noise was made. Some negative effects of undesirable environmental noise are: interference with speech communication; disturbance of rest and sleep; psychophysiological, mental-health and performance effects; effects on residential behavior and annoyance; and interference with intended activities. Stronger reactions have been observed when noise is accompanied by vibrations and contains low frequency components, or when the noise contains impulses, such as with shooting noise. (World Health Organization, 1999 Pg. X).

The proposed design plan for Turkey Tracks will aggravate the already loud noise levels. With the Hunting Simulation (1000+ yd) stations at the top of the first back drop (400 ft. elevation above the entrance) and targets in the direction of neighboring private residences, sounds levels will significantly increase. It is unclear from the EA if the design plans are accounting for the canyons that amplify and pass sound to Westcreek since no awareness of this natural feature was indicated.

The Environmental Assessment speaks of a reclamation requirement and Best Management Practices (BMP) for reclamation concerns but with little more than a concept of a plan. No required reclamation plan was offered. As will be explained in the next paragraph, a practical reclamation plan is not feasible at Turkey Tracks. Lead waste is regulated by the EPA through RCRA. Lead in bullets/shotgun shot is categorized as hazardous waste by EPA. Shooting ranges are only excluded if reclaimed lead from the site is recycled or reused. Documentation and regular inspections are required. RCRA enables EPA, state governments & citizens right to sue shooting ranges that are a substantial or imminent threat to public health or the environment. As mentioned in my earlier paper, lead is not the only hazardous waste metal emanating from shooting practices (Barium, Chromium, Antimony, Mercury, and Arsenic are also included (Enviro Wiki, 2022, Pg. 1)).

Turkey Tracks topography consists of mountainous terrain and drainage gullies. Hundreds of acres of steep, uneven 30% slopes with drainage gullies are not suitable for mechanical raking of waste lead bullets for recycling. Whereas the small gun shooting galleries (Traditional Galleries, Pistol Galleries, etc.) can be designed to contain bullets, the open long range shooting ranges (Long Range Precision Rifle, Hunting Simulation Range) do not contain bullets nor is raking the waste lead bullets feasible. Even today no BMP plan for containment or reclamation has been designated. Under the "dispersed shooting category", based on the current manner of use, allowing shooting at Turkey Tracks is in violation of the RCRA and shooting should be discontinued until a method of lead bullet recycling is developed. The soil types and drainage patterns are NOT advantageous for this activity (USDA, 1992, pgs 120, 128 and California Soil Resource Lab). With an estimated 10 million plus rounds fired over an area consisting of a few hundred acres the degree of lead contamination is extensive. The inability to feasibly cleanup the current and future lead bullets at the site is a lawsuit waiting to happen since it's actionable, possibly a reason for downplaying this aspect in the EA. Of special note: One of the rangers at the August Divide meeting was concerned about lawsuits. Several neighbors have gone on record as being prepared to sue (Seth Boster, Gazette, 2022). RCRA violations are viable concern. Determining the extent of lead migration was mentioned in the EA yet no actual plan. Instead pushing it off to another department to do a CERCLA Phase 1 study to determine a likelihood of any lead being onsite (Turkey Tracks is well beyond a Phase 1). A study of the drainages at Turkey Tracks shows all the runoff eventually leads to Trout Creek. Groundwater recharge occurs at many of these drainages. If proper sampling (including monitor wells), and testing are conducted, a high probability exists the results will show a cleanup being

required. For the record, I had offered my environmental analytical consulting expertise pro bono but was declined.

At the Divide meeting, the topic of lowered property values due to shooting activities was discussed. As with the EA discussion, the live meeting response was aloof and dismissive. As per the EA: "no meaningful impacts to property values would be anticipated from the development of three to nine new target shooting ranges. Property value trends would likely continue to fluctuate depending on demand and affordability." Westcreek and Trout Creek have both had a record turnover in home ownership. Whereas this by itself is not proof of Turkey Tracks being a cause, the Gazette has published accounts of people moving due to the noise from Turkey Tracks (Scott Rappold. 2009). Multiple complaints have been documented. Fear of wildfires has significantly increased property insurance rates (triple or more in many cases). A Real Estate publication specifically states: "a shooting range right next door can actually drag down your home's value. If you're looking to buy a home, think twice about purchasing one near shooting ranges. The noise of gunfire, especially from outdoor gun ranges, can be loud and disturbing." (Better Homes and Gardens, 2018, Pg. 6). Many studies on noise from traffic are available and in all cases reduced property values are indicated. Considering that home buyers move to rural areas for the peace and quiet, to even consider "no meaningful impact on property values would be anticipated" is very dismissive and deceitful.

Another important topic discussed at the Divide meeting was the need for site supervision at the planned shooting ranges. Turkey Tracks especially was repeatedly mentioned due to current ongoing problems at the site (copious trash, illegal targets, illegal bullets – tracer, alcohol, drugs, etc). The response, similar to the EA response, was no supervision was planned and it, like closure, and would only be a last resort. From reading the EA, the impression is that a major purpose of this project is to have non-fee target ranges. From both the live discussion, the EA, and regional history there's a strong impression that supervised sites are unlikely to ever be considered. The Rampart Range shooting range, closed in 2009, was only to be reopened if it is supervised. As per District Ranger Brent Botts, "a permit system and supervision of the range were too costly". It required a shooting fatality to close Rampart Range (Rappold, R. Scott, Gazette.com, 2009). Many suspect the same will have to happen at Turkey Tracks to close it. Before leaving this topic, as presented earlier, the Emergency Order issued Oct. 2024 (USDA, USFS Oct 2024) noted the need for supervision at Turkey Tracks.

Under the title of adaptive management the EA spoke of "target shooters having the opportunity to self-monitor and keep areas clean and undamaged". Another part of the EA stated the project recognizes that ALL target shooters must employ good judgment. Regulations and closures cannot completely protect public safety. Also stated in the EA regarding the proposed actions, the following assumption was held: "Target shooters will comply with the rules established at shooting ranges". In response to this I can only say, history at Turkey Tracks and other current and past unsupervised public shooting ranges does not support any of these statements, quite the contrary in fact!

Conclusion

The Environmental Assessment has multiple inconsistencies, inadequacies, incomplete and misleading results and conclusions as well as not presenting a workable solution. I got the feeling it's trying hard to accommodate 50,000 part time people at the expense of 500 full time residents. The facts show that not only is Turkey Tracks not suitable for a developed shooting range, it should not be and never should have been a shooting range. Private homes are too close and numerous, loud noise and stray bullets enter the neighboring communities now and

will only get worse with the proposed plans. The rough, heavily sloped mountainous terrain is not suitable for effective reclamation of lead, causing a huge environmental concern and subsequent difficult cleanup, possibly requiring entrance into the Superfund Site program. Wildfire danger is extremely high in this region and 81 (including the Sept. 2024 wildfire) fires at the site strongly support this conclusion. The site has already been highly mitigated to reduce fire hazards and yet fires continue to occur often. The proposed layout plans escalate the dangers of bullets entering the nearby communities. The EA has to make unrealistic assumptions (like having 100% compliance of the rules and regulations) to have the plan work. Even if changes could be made to reduce the environmental concerns, the three fold increase in the number of anticipated shooters would most likely undo any benefits of the changes and actually make the existing problems worse. In short, continuing to allow recreational shooting at Turkey Tracks is unwise and unsafe. Allowing shooting at the site is an environmental disaster and a disregard for nearby community safety, wellbeing and resident enjoyment. To “enhance” the site by developing it would be a very irresponsible action. As much as one might want to ignore the evidence to achieve a goal, the history and evidence cannot be ignored. Justifying an expenditure of hundreds of thousands of dollars, maybe even into the millions, just to have it shut down after someone is killed or communities wiped out by fire cannot, nor should it be justified.

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Buggle, Sadiee, KRDO News, September 27, 2024. Popular Teller County shooting range reopens after fire reaches 100% containment

California Soil Resource Lab – UC Davis. Soil Data Explorer (online, search by soil name)

Enviro Wiki, May 2, 2022. Metal(loid)s, Contributor: Dr. Amanda Barker – Small Arms Ranges. 8 pages

Rappold, R. Scott, Gazette.com, July 21, 2009. Rampart Range Closed.

USDA, Forest Service and Soil Conservation Service in cooperation with the CO AES, October 1992. Soil Survey of Pike National Forest, Eastern Part, Colorado, Parts of Douglas, El Paso, Jefferson, and Teller Counties (pgs 120, 128). 144 pages

USDA Forest Service, 2022. Confronting The Wildfire Crisis, A 10-Year Implementation Plan. 11 pages.

USDA Forest Service, November 2024. Integrated Management of Target Shooting on the Pike National Forest, Environmental Assessment. 158 pages

USDA Forest Service, October 10, 2024. Justification for Emergency Fire Order Containing a Recreational Shooting Prohibition Pikes Peak, South Platte, South Park Ranger Districts, Pike National Forest

US Forest Service, Jan. 13, 2021. Target Shooting on the Pike National Forest. 18 pages.

Whitaker, Dani, KOAA News 5. September 25, 2024. New details released about Turkey Tracks 5 Fire near Woodland Park

World Health Organization (WHO) April 1999. Guidelines for Community Noise. 160 pages

In adherence to CFR 218.8 (d)(1,2). Not having a line for submitting a signature, signature of authorship will be provided upon request. Name, address, phone and email is included in "Option to Submit Comment Electronically" form.

In adherence to CFR 218.8 (d)(5) and on the perchance the prevailing thought is this project is happening regardless of the dangers. Since the majority of the problems are inherent with the long range (1000+ yds) shooting ranges due to the inability to contain the resulting fired bullets, remove the long range shooting ranges from the plan in favor of the contained short ranges.

In adherence to CFR 218.8 (d)(6). Every topic mentioned in this objection paper was covered by someone during the comment period. Most of them by myself as well. Possible exception is the layout and direction of the long ranges. Only by spending the time to do a plat overlay was it possible to confirm the inherent issues with the proposed design. The two-dimensional plat in the available documents was sideways with north not facing up, relative elevations were not disclosed, and the adjacent communities were not portrayed on the plats, so visually it was difficult to realize the direction of fire was into the communities.

In adherence to CFR 218.8 (b). Separate PDF files produced with bookmarks, one with non-USDS/USFS referenced documents, the other with USDA/USFS documents. The USFS Soils mapping document file size was too large to combine so it's included as a separate file. Files are titled:

CombinedReferences_RZ_Objection_NotIncluding USFS.pdf

CombinedReferences_RZ_Objection_USFS.pdf

USFS_USDA-general-soil-map-of-pike-national-forest-eastern-part-colorado-parts-of-douglas-el-pa.pdf

Figure A

NATIONAL STRATEGY TO REDUCE WILDFIRE RISK

This implementation plan builds on a national strategy for confronting the wildfire crisis facing the Nation. The strategy calls for an unprecedented paradigm shift in land management to increase fuels and forest health treatments across jurisdictions to match the actual scale of wildfire risk to people, communities, and natural resources, especially in the Western United States.

Over a period of 10 years, the proposed strategy calls for:

- (1) Treating up to an additional 20 million acres on the National Forest System in the West, over and above current treatment levels;
- (2) Treating up to an additional 30 million acres on other Federal, State, Tribal, and private lands in the West; and
- (3) Developing a plan for long-term maintenance beyond the 10 years.

In recent years, at the Forest Service, we have treated 2-3 million acres per year for fuels and forest health across the Nation. Treatments typically involve thinning fuels and removing vegetation to reduce heavy fuel loads that can increase the risk of extreme wildfire events and using a risk-based approach to restore healthy fire to fire-adapted ecosystems. We will work with partners using a science-based approach to determine where to prioritize treatments and identify the appropriate tools, including prescribed fire and mechanical thinning to reduce hazardous fuels, change fire behavior, accomplish restoration objectives, and create healthier and more fire-resilient forests. These treatments work in concert with community, infrastructure, watershed, and other investments to protect values at risk

Under the 10-year strategy, we will fully sustain—and slightly increase—current treatment levels in the South, Midwest, and Northeast. But most additional investments will be in the West, where the wildfire risk to homes and communities is highest.

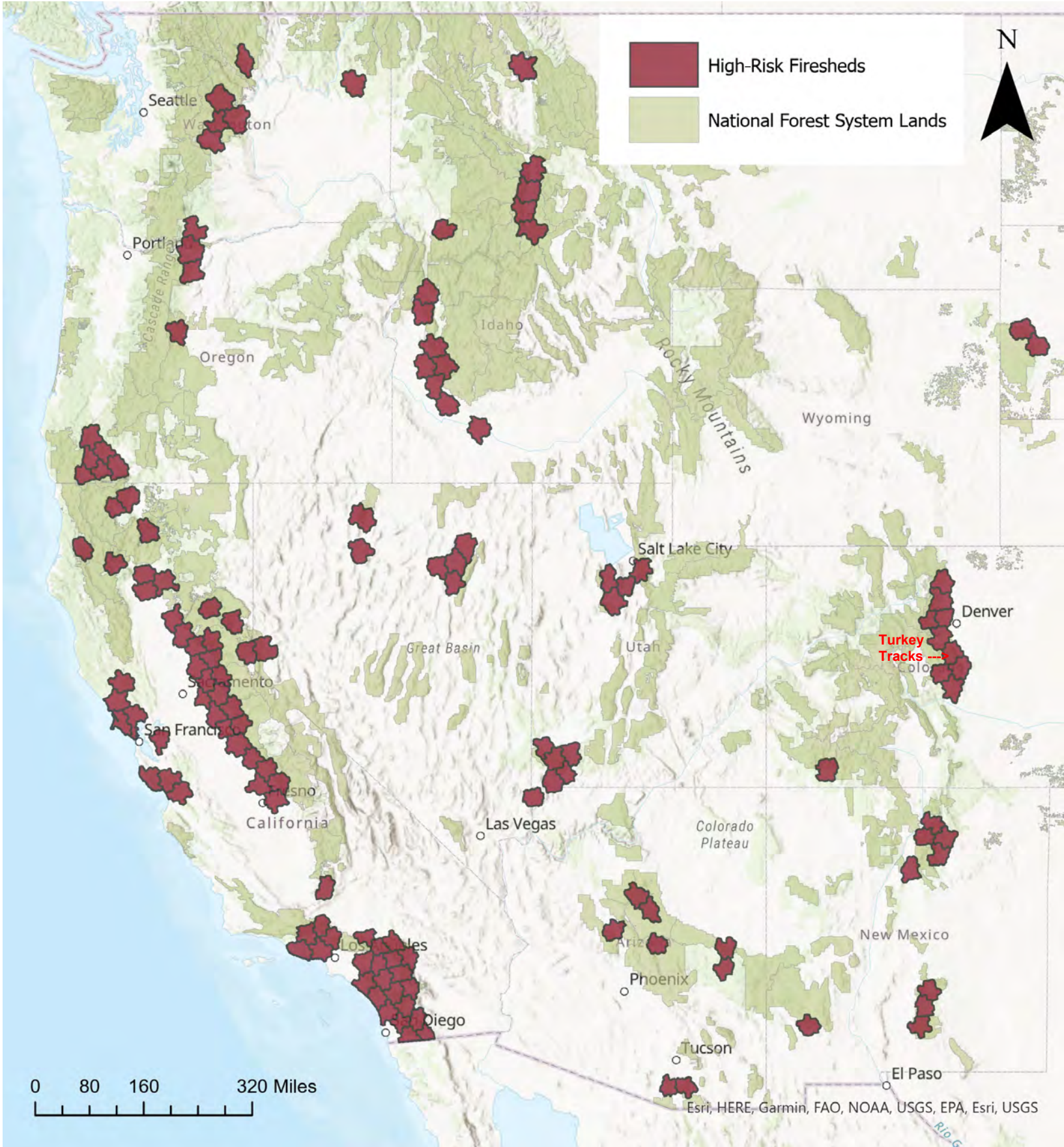
The map on the following page shows the firesheds with the highest risk of community exposure to wildfire from ignitions on all lands. It shows that a small number of firesheds present the largest risk to communities, based on historic fire behavior: in fact, less than 10 percent of fire-prone forests in the West account for roughly 80 percent of the fire risk to communities. Using this map, we can engage with Tribes, States, local communities, private landowners, and other partners to identify shared priorities for hazardous fuels treatments within these firesheds so that we can meaningfully reduce risk to communities. We can also work together to identify priorities for treatments in additional firesheds based on other values at risk and maintain prior investments in fuels and forest health.

We are currently working to develop additional information about risks to water, carbon, and wildlife, including old-growth forests, as well as risks to socially disadvantaged and underserved communities. Work with partners to identify risks to critical infrastructure, social, cultural, and economic values, and the incorporation of Indigenous and traditional ecological knowledge will be important to inform shared priorities and project design.

Building on the 10-year strategy, this implementation plan outlines a blueprint for developing and carrying out this work through partnerships and collaboration. The Forest Service, the U.S. Department of the Interior, other Federal agencies, Tribes, States, local communities, landowners, and other partners have an unprecedented opportunity for investment in this work through the Bipartisan Infrastructure Law. Those investments help to provide the resources needed to implement this plan at scale and truly change the trajectory of risk to people, communities, and natural resources at this pivotal time.

HIGH-RISK FIRESHEDS

Community exposure is a central factor in the strategy to confront the wildfire crisis. Other factors include Tribal and State plans, watersheds, equity, climate forecasts, and partner priorities.





Target shooting and wildland fires

Wildfires on National Forest System lands are tracked in a database. The cause of each fire is noted when available. This map shows the locations of human-caused (meaning not lightning) wildfire ignitions that have occurred since 2000. Wildland fires due to target shooting activities are categorized as “miscellaneous” (not a unique category), and are shown in red on the map. Local firefighters (Forest Service and county) have noted an increase in the number of fires caused by target shooting activities.

Fires can start even when all regulations related to target shooting are followed. The increasing numbers of people target shooting in dry conditions has resulted in a need for frequent fire suppression activities. In the first seven months of 2020, the Forest responded to five fires at one popular target shooting location, the Turkey Track area in Douglas County.

Turkey Tracks big red cluster spot in center

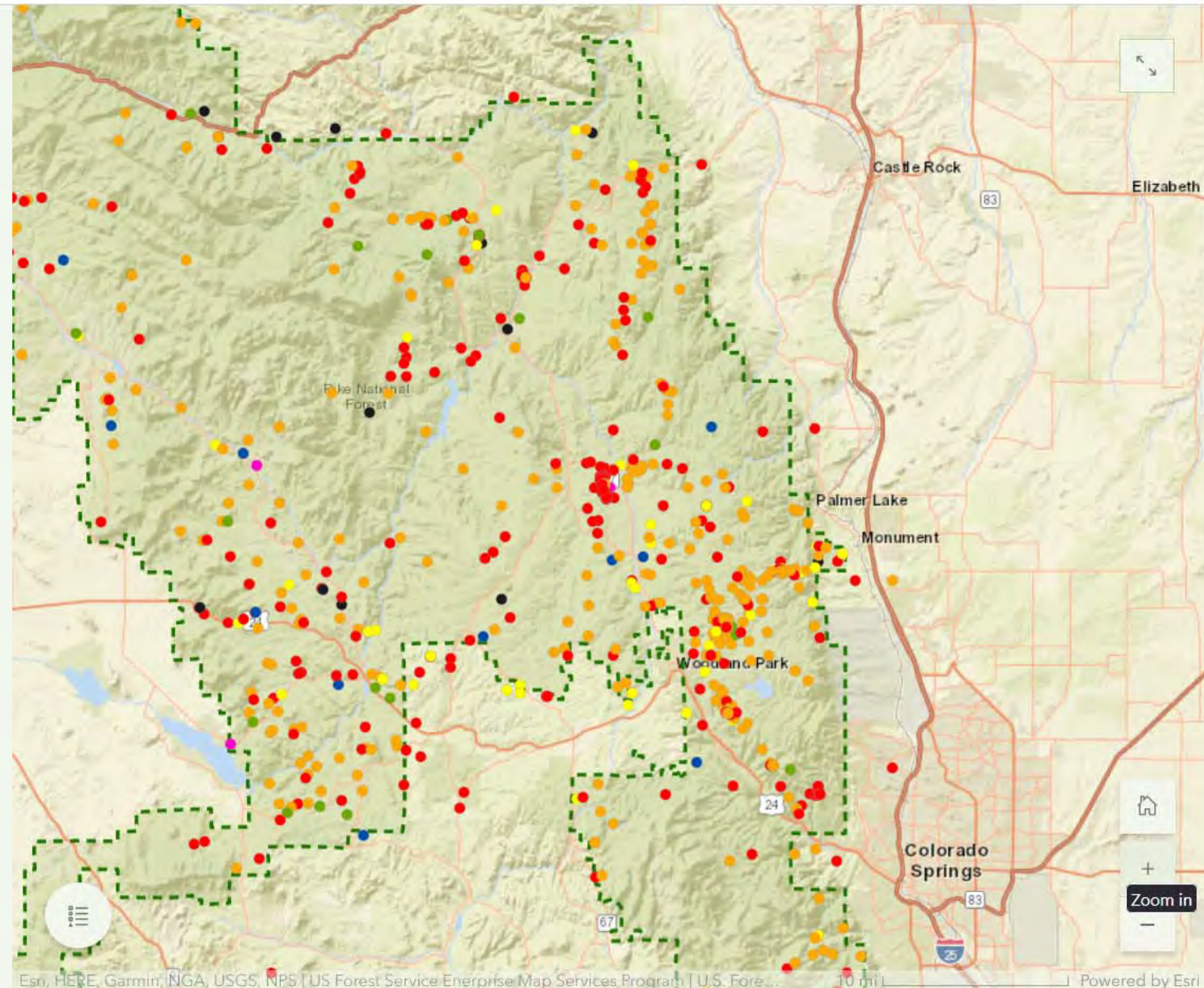


Figure 1

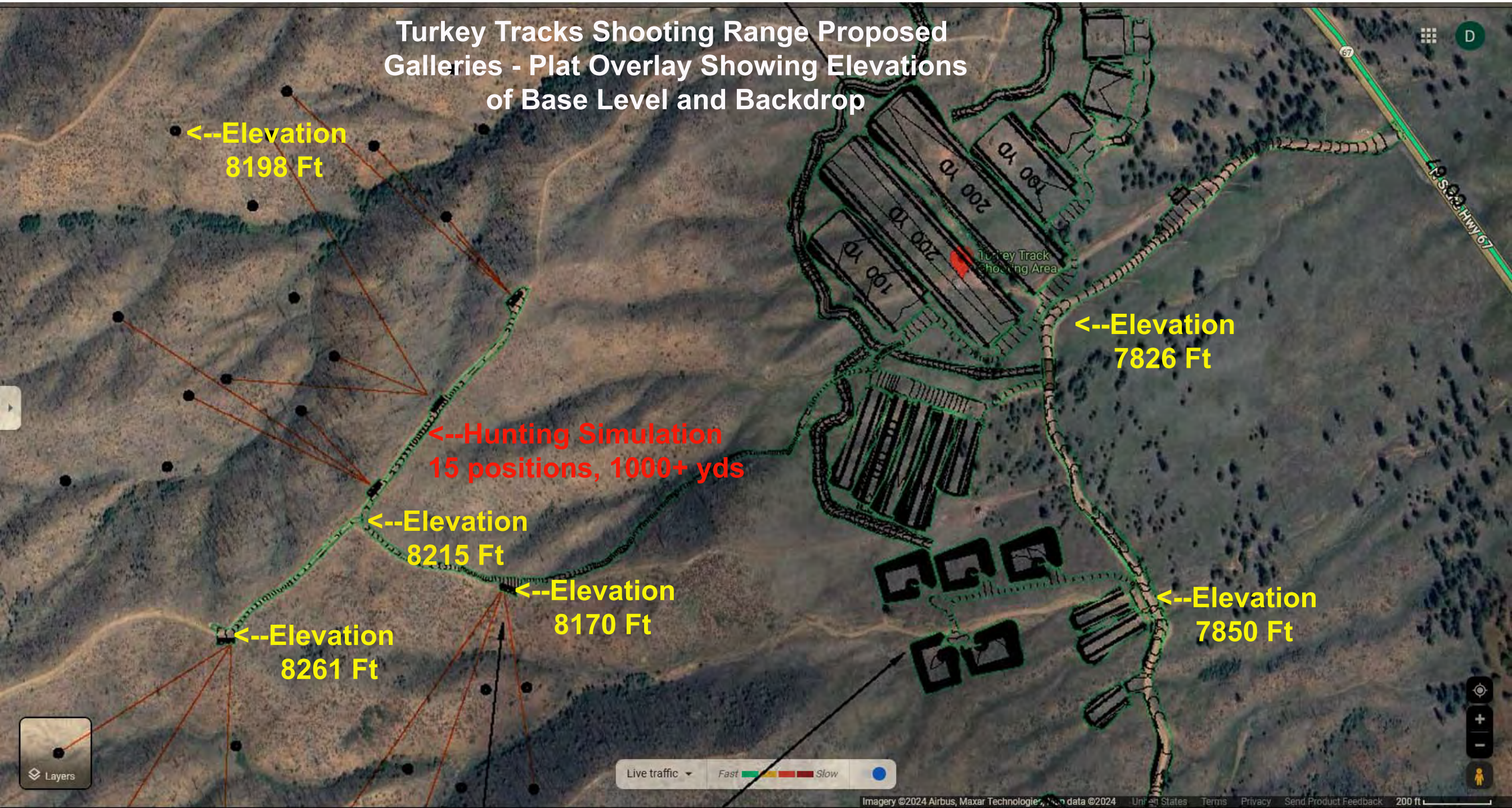


Figure 2

Turkey Tracks Shooting Range Proposed Galleries - Plat Overlay Showing Relative Elevations of Shooting Galleries and Surrounding Neighborhoods

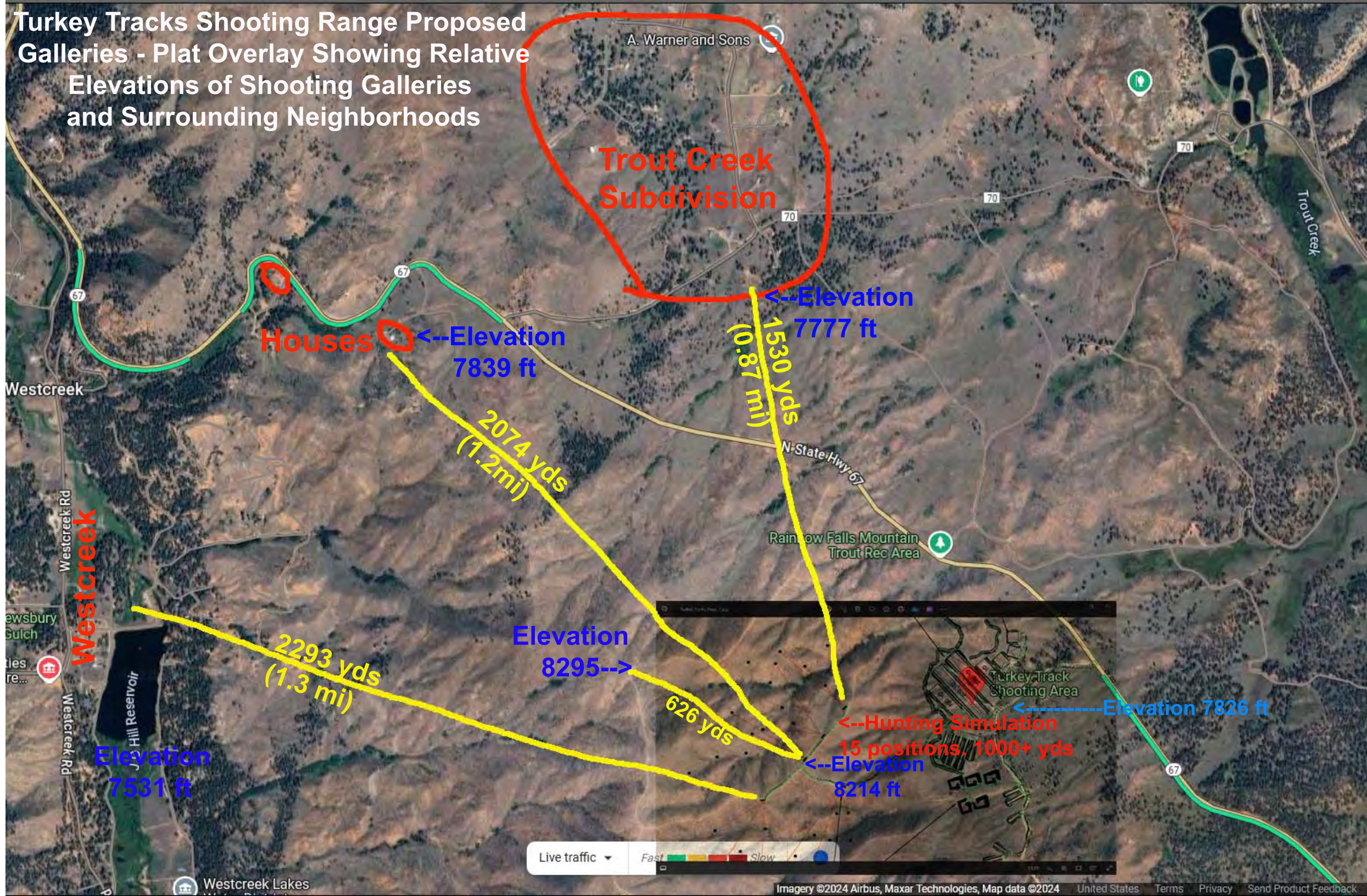


Figure 2a

Turkey Tracks Shooting Range Proposed Galleries - Plat Overlay Showing a Clearer Rendition of the Proposed Galleries and Surrounding Neighborhoods

Refer to Figure 2 for elevations and distances, note the enhanced elevation of the proposed Hunting Simulation site, the elevation of new backdrop site, direction of targets and Residential lands (pale tan areas)

- Restaurants
- Hotels
- Things to do
- Museums
- Transit

