U.S. Forest Service
Prescott National Forest
Justification for Emergency Recreational Shooting Order

June 2024

TOPIC: The implementation of Stage 1 Fire Restrictions, to include shooting restrictions, to protect public and firefighter safety, as well as National Forest System lands and resources during a period of Very High to Extreme wildfire danger.

SUMMARY:

On the Prescott National Forest, shooting is a recognized cause of wildfire ignition when elevated fire danger conditions are present. Fire danger conditions are monitored closely from spring through summer, or through the end of fire season, to determine when Fire Restriction Orders are appropriate as documented in the Western Arizona - *Interagency Fire Danger Operating Plan.* These orders have regularly included a prohibition on "discharging a firearm" (with an exception for legal hunting activity) pursuant to 36 C.F.R. 261.58(m), to protect the public and our natural resources from the risk of a recreational shooting-caused ignition during the extreme environmental conditions associated with Arizona summers. These are recurring seasonal conditions, normally occurring from mid-April to early July, and can be variable as they are condition driven and may occur for longer or shorter periods depending on weather and resultant effects on fuel conditions (i.e. fire danger). Given the extremely high recreational use on the Prescott National Forest, there is a need to restrict recreational shooting for public safety and resource protection across the forest when these conditions are present. This occurs in concert with entering Stage 1 Fire Restrictions (prohibiting campfires, smoking, etc.), Stage 2 Fire Restrictions, and Fire Closures. The Prescott National Forest's Stage 1 Fire Restrictions for 2024 include a forest-wide prohibition against "Discharging a firearm, except while engaged in a lawful hunt pursuant to state, federal, or tribal laws and regulations. 36 C.F.R. § 261.58(m).", in compliance with, and under the authority of, the 2019 *John D. Dingell, Jr. Conservation, Management, and Recreation Act* (commonly known as the "Dingell Act"), due to the presence of Very High to Extreme fire danger conditions across the entire forest.

BACKGROUND:

The Prescott National Forest is a 10-minute drive for the 130,000 people living in the greater Prescott, Quad City area and a 1 hour drive for the 4.9 million people from the Phoenix Metropolitan Area. Forest visitors also come from all over the state, including Flagstaff and Tucson. Yavapai County is the seventh largest county in Arizona and home to approximately 250,000 people making it the fourth most populous county in Arizona. Yavapai county is larger

than 3 U.S. states (Rhode Island, Delaware, and Connecticut). The Prescott area was the seventh fastest growing place among all cities and towns in Arizona. As a result, recreational shooting, along with many other recreational activities on the Prescott National Forest, has increased over the past several years and that increase is expected to continue.

Recent Recreational Shooting Caused Wildfires

The presence of indirect evidence (shell casings, ear plugs, bullet impact marks on rocks, impacted targets including trash, witness statements, etc.) and origin cause determination clearly identifies that recreational shooting causes unplanned wildfires on the Prescott National Forest. Fire Managers report numerous smaller recreational shooting-caused fires per year, with larger fires dependent historically on location and fuel load. Fires on the Prescott National Forest caused by recreational shooting include:

- Doce Fire: 7,000 acres
- Horse Fire: 9,500 acres
- Sour Fire: 1,200 acres
- Buck Fire: 31 acres
- Orme Fire: 915 acres

The Doce fire noted above crossed roads and rapidly grew to almost seven thousand acres burning through previous fire scars and unburned vegetation in a matter of a few hours, despite rapid and aggressive initial firefighting efforts by numerous agencies. Close to 335,000 gallons of retardant via 75 large airtanker drops were used to slow the growth of the Doce fire (see attached photo, last page). Evacuation efforts by firefighters and law enforcement were successful at preventing loss of life during these fires by escorting hundreds of recreating members of the public from recreation areas out of the fires' paths. However, there are no guarantees that evacuations will be repeatable with the same level of success in the event of a future ignition. The need for evacuation prevents firefighters from suppression efforts as they are engaged in the process of assisting law enforcement to ensure public safety. The resource damage from the Doce fire to the Granite Mountain Wilderness is irreversible in some areas. Prohibiting recreational shooting during periods of high fire danger not only mitigates risk to the public and natural resources, but also the risk to firefighters and aviators who must respond to a fire in the event of an ignition.

Current Environmental Conditions:

Previous years' rainfall on the Prescott National Forest was average but Spring precipitation was above average and has led to increased vegetation, including the abundance of Red Brome (*Bromus rubens*) and other invasive grasses. Red Brome is an invasive non-native annual grass that has far more extreme burn characteristics than native perennial grasses. The biological cycle of this grass is that it sprouts in cooler conditions far earlier than native grasses, grows very rapidly utilizing the available soil moisture and nutrients, then produces seeds, dies, and

cures or dries out. Visually, this results in a carpet of green grass that lasts only a couple of weeks and then becomes a brown swath of standing dead grass.

The density and coverage of this grass, coupled with its biological cycle, results in a continuous carpet of fine fuel that is easily ignitable and spreads fire rapidly under Very High to Extreme fire danger. These grasses are more dominant at lower elevations on the Prescott National Forest, but they also reach into the mid and upper elevations. Cured, grassy fine fuels are more susceptible to ignition and fire spread as fire danger conditions worsen. Drought conditions bring all fine fuels as well as heavier fuels into susceptible conditions for easy ignition (current drought monitor, temperature and precipitation history and outlooks at the end of document).

We have reached Very High fire danger which is considered an emergency – one in which fire managers increase fire prevention and preparedness actions, including increased patrols, implementation of fire restrictions, and the augmentation of staffing resources as available to address the increased risk of fast-moving, damaging fires. Vegetation becomes volatile and susceptible to ignition due to seasonal curing and high temperatures, leading to very low fuel moistures and often high levels of continuous fine-fuel loading. The presence of these factors creates an environment in which ignitions from human-caused activities can occur at a much higher rate than normal, including the increased risk of igniting a wildfire from discharging a firearm. Furthermore, wildfires from ignitions under these conditions can spread extremely fast and pose a significant risk to the public and firefighters and create substantial difficulty and danger to firefighters during wildfire suppression. Under these conditions, fire activity and workload increase dramatically resulting in a shortage of firefighting resources.

Fire-Related Restrictions:

The conditions that typically warrant other fire restrictions (i.e., prohibitions on campfires, smoking) are the same conditions that warrant the prohibition of recreational shooting. Recreational shooting and other human activities, such as campfires, charcoal grills, and use of vehicles or equipment that may lead to sparking, have a high likelihood under the conditions previously described to create a situation that threatens human life and property. Fires caused by recreational shooting happen numerous months throughout the year across the Prescott National Forest due to the use of binary exploding targets and tracer ammunition. However, under Very High to Extreme fire danger conditions, the risk of ignition from ordinary shooting activities increases significantly due to weather and fuel conditions. Contrary to common understanding, a spark from a steel bullet jacket or rock is not necessary to ignite a fire under these conditions especially when fine fuels are present. Rather, the simple instantaneous transfer of kinetic energy to heat energy from an ordinary lead bullet suddenly stopping and landing/spattering in available fine fuel can ignite a fire. The purpose of fire restrictions, including a prohibition of recreational shooting, is to mitigate the risk of fire when environmental conditions favor substantial fire spread, and any resulting fires would be difficult to control.

Current Management:
The Prescott National Forest's urban nature and proximity to large population centers create significant challenges to fire prevention efforts. The Prescott National Forest borders hundreds of miles of private property and Wildland-Urban Interface in the Verde and Prescott Valley area and surrounding towns (Jerome, Walker, Groom Creek). The potential for ignition of destructive fires under Very High to Extreme fire danger conditions presents a public and firefighter safety threat. To address this, the Prescott National Forest, and many surrounding land management agencies, typically implement collaborative, emergency recreational shooting restrictions based on fire danger. Past years have shown that recreational shooting fires are nearly eliminated when shooting is prohibited as part of Stage I, or higher, fire restrictions. These restrictions need to be implemented quickly to respond to changing weather and fuel conditions, which we deem an emergency to the public safety and natural resources, as well as all our firefighting personnel and law enforcement who must respond to human-caused fires.

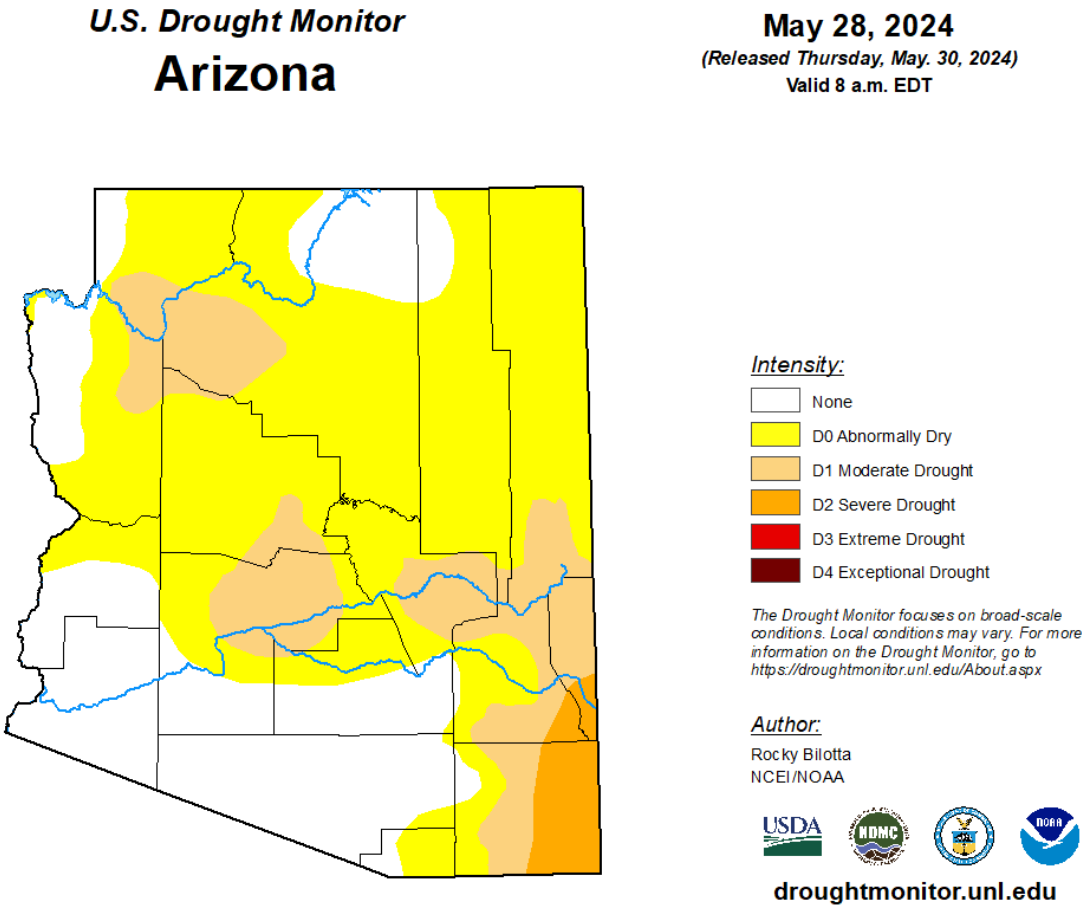
Dingell Act Compliance:
Under the Dingell Act, designations of areas in which recreational shooting is prohibited must be for "the smallest area for the least amount of time that is required for public safety . . .." Section 4103(a)(2). Recreational shooting needs to be restricted across the entire Prescott National Forest during periods of Very High to Extreme fire danger until there is a substantial and prolonged change in fuel and weather conditions, decreasing fire danger below Very High. These are the same conditions that lead the forest to implement Stage 1 Fire Restrictions and higher, such as Stage 2 restrictions, and complete Forest closures in the most extreme conditions.

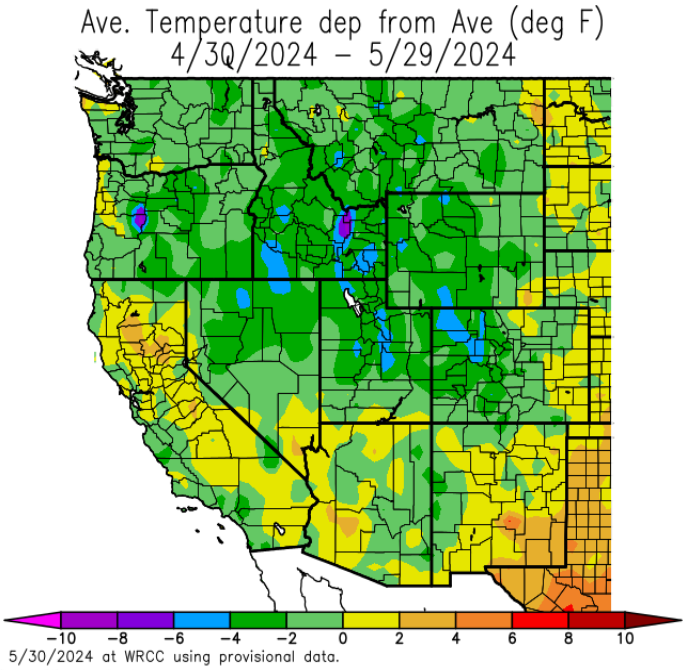
These restrictions are only put in place when indicated by current and forecasted weather conditions and their relationship to actual and predicted fire danger, as reflected in our Western Arizona - *Interagency Fire Danger Operating Plan,* and after careful consideration by fire and land managers in coordination with partners and neighboring agencies. This plan uses the best available science to calculate fire danger levels utilizing the National Fire Danger Rating System (NFDRS), that are correlated to local fire occurrence and problematic fires in the area.

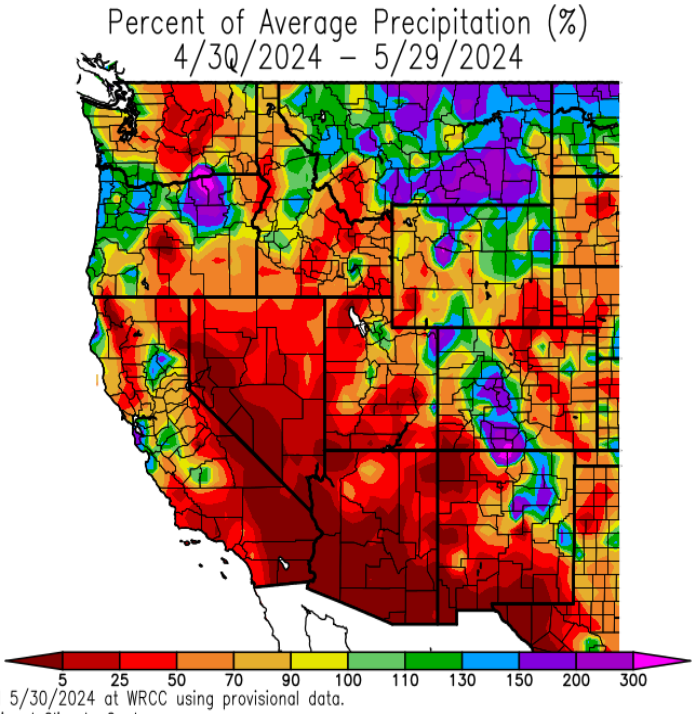
To utilize an emergency recreational shooting restriction on the Prescott National Forest during Stage 1 Fire Restrictions, and higher, would mirror the approach taken on the Bureau of Land Management's Phoenix District and the Tonto, Coconino, and Kaibab National Forests, as well as the permanent year-round approach by the state of Arizona regarding state lands. This provides for a consistent and thorough wildfire mitigation and public safety strategy across this portion of the Arizona landscape.

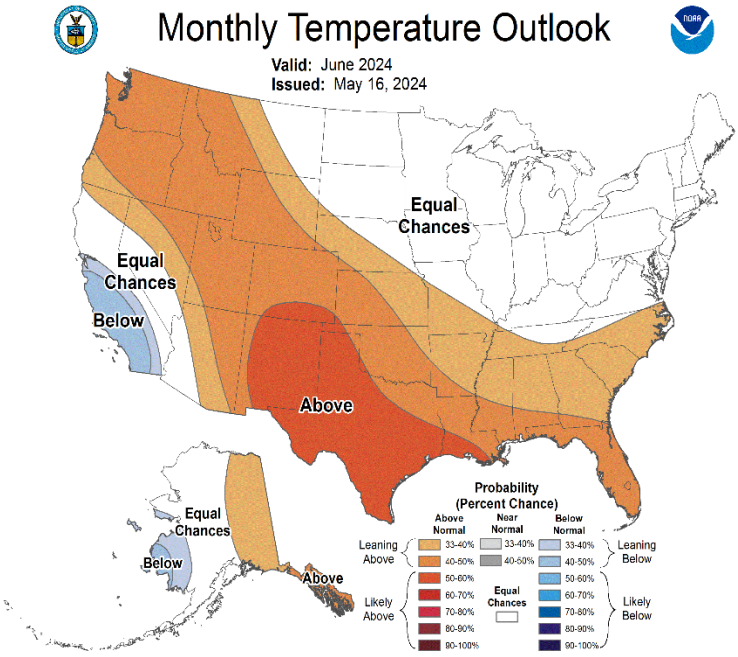
It would be virtually impossible to identify individual areas or exclude elevations on the Prescott National Forest where recreational shooting would not present an unacceptable risk of ignition during Very High to Extreme fire danger conditions. As such, Shooting Restrictions must be imposed across the entire National Forest. In terms of duration of the restrictions, based on

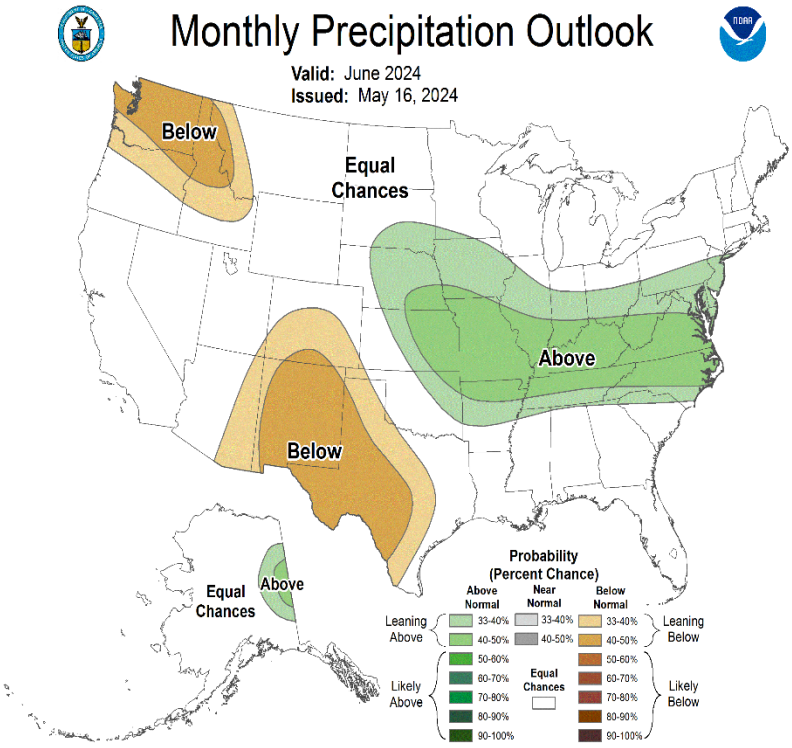
experience and typical weather patterns, the high risk of ignition normally exists during May, June, and July. Notably, there are exceptions, as Very High to Extreme fire danger conditions can continue past July due to the lack of significant moisture necessitating continued fire restrictions, including recreational shooting. Conversely, fire danger lasts for a much shorter period in some years, or may never reach that threshold, in other years. The Prescott National Forest, along with our partners, continuously monitor weather and fuel conditions, with the resultant fire danger ratings and restrictions being modified or rescinded as soon as conditions no longer warrant restrictions. We anticipate maintaining Stage 1 or Stage 2 restrictions, including the recreational shooting prohibition, until the current emergency fire situation abates due to favorable weather and fuels conditions that reduce fire danger.




Ave. Temperature dep from Ave (deg F)
4/30/2024 – 5/29/2024
−10 −8 −6 −4 −2 0 2 4 6 8 10
Generated 5/30/2024 at WRCC using provisional data.
NOAA Regional Climate Centers


Percent of Average Precipitation (%)
4/30/2024 – 5/29/2024
5 25 50 70 90 100 110 130 150 200 300
Generated 5/30/2024 at WRCC using provisional data.
NOAA Regional Climate Centers


Monthly Temperature Outlook
Valid: June 2024
Issued: May 16, 2024
Equal Chances
Equal Chances
Below
Above
Equal Chances
Below
Above
Probability (Percent Chance)
Above Normal
Near Normal
Below Normal
Leaning Above
Likely Above
Equal Chances
Leaning Below
Likely Below
33-40%
40-50%
50-60%
60-70%
70-80%
80-90%
90-100%


Monthly Precipitation Outlook
Valid: June 2024
Issued: May 16, 2024
Below
Equal Chances
Above
Below
Equal Chances
Above
Probability (Percent Chance)
Above Normal
Near Normal
Below Normal
Leaning Above
Likely Above
Equal Chances
Leaning Below
Likely Below
33-40%
40-50%
50-60%
60-70%
70-80%
80-90%
90-100%

Arizona | U.S. Drought Monitor (unl.edu)

WRCC (dri.edu)

Climate Prediction Center - Updated OFFICIAL 30-Day Forecasts (noaa.gov)

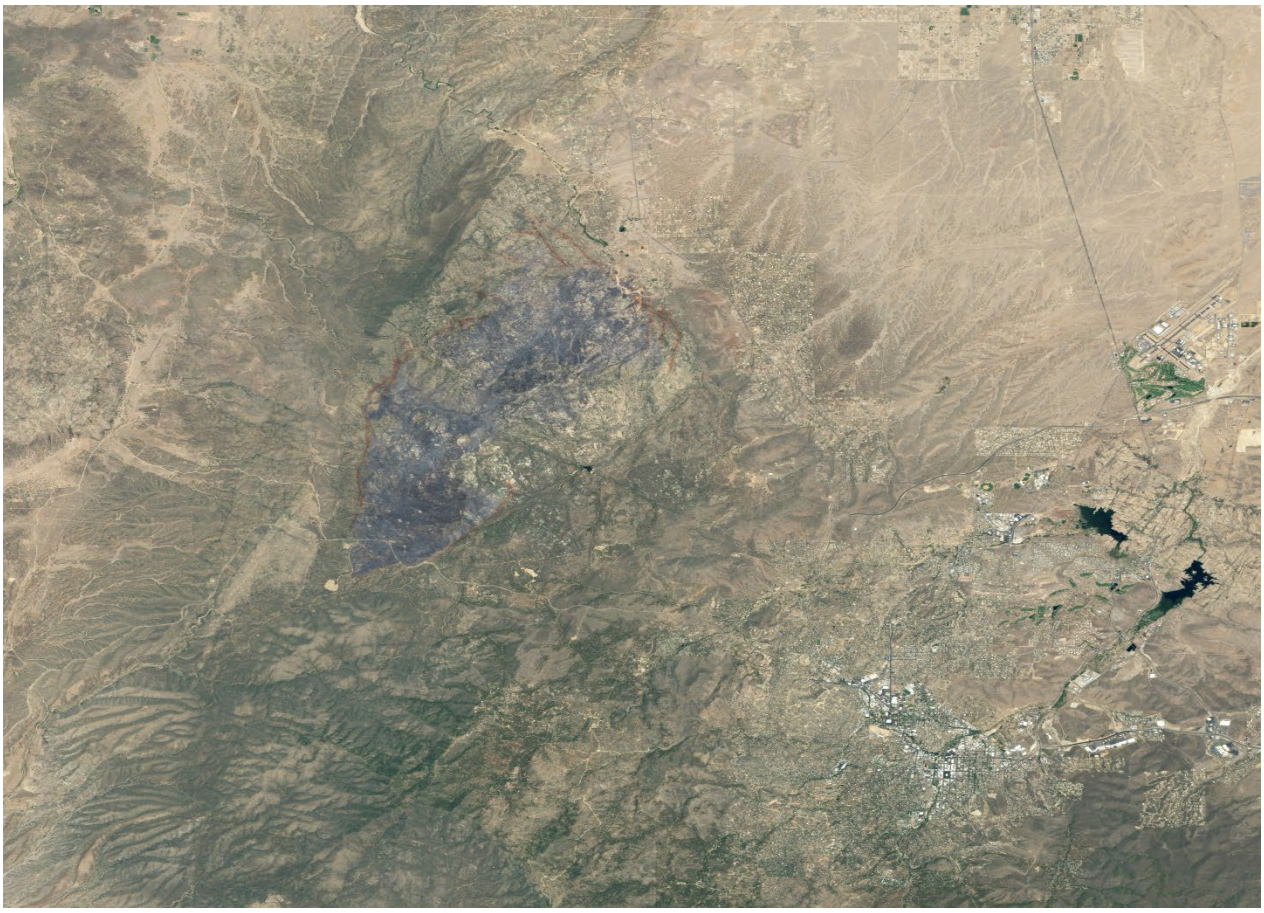


Photo taken from the NASA Earth Observatory Satellite of the Doce Fire, June 2013.