HOW FOREST TREATMENT SAVED THE BRAY CREEK RANCH

Michael A. Johns*

Bray Creek Ranch is an old homestead along the Highline National Recreation Trail, which is a part of the Arizona Trail, at the base of the Mogollon Rim about twelve miles north of Payson, Arizona between Boy Scout Camp Geronimo and Girl Scout Camp Shadow Rim.¹ The ranch is surrounded by National Forest in the Ponderosa Pine type at about 6,000 feet elevation.²

I started my Federal career in 1969 on the Payson Ranger District Helitack Team. In 1972 we formed the District's first Hotshot crew and I was asked to be its first foreman. In 1973 I clerked for the U.S. Attorney's Office and was appointed as an Assistant U.S. Attorney in 1974. I have been representing the United States, Federal agencies, and Federal employees in litigation for over 40 years.

We purchased Bray Creek Ranch in 1983 from a retired District Ranger.³ In 1985 the Kehl Fire burned through the headwaters above us and down to our private land. KTVK Channel 3 had covered the fire, and loaned us helicopter time to re-seed the burn with native grasses provided by the Forest Service.

In June, 1990 the Bray Fire, an escaped camp fire, re-burned the headwaters and lands to the east and west of us along the Highline Trail.⁴ The ranch is in a canyon at the end of the road and was loaded with fuel, making it a potentially dangerous place to fight fire. Bark Beatles were killing many

^{* (}Retired) Assistant U.S. Attorney and Senior Litigation Counsel, District of Arizona. This paper is presented in the author's individual capacity as a manager of Bray Creek Ranch and not in his capacity as an attorney for the United States. Photos taken by Michael A. Johns.

^{1.} See U.S. FOREST SERV., TONTO NATIONAL FOREST 7 (2006), http://www.iafc.org/files/3FebruaryFireFuelTreatments.pdf (last visited Mar. 7, 2016).

^{2.} GILA COUNTY, AREA LAND USE PLAN 2, 5 (2003), http://www.gilacountyaz.gov/documents/docs/CommunityDevelopment/Planning/AreaLandUse Plan.pdf.

^{3.} See Stan Brown, Rim Country Places: Chapter 6—Bray Creek Ranch, PAYSON ROUNDUP (Nov. 1, 2012), http://www.paysonroundup.com/news/2012/nov/01/rim-country-places/.

^{4.} ANN YOUBERG, ARIZ. GEOLOGICAL SURVEY, DELINEATING POST-WIDFIRE DEBRIS FLOW HAZARDS FOR PRE-FIRE MITIGATION, PINE AND STRAWBERRY, ARIZONA: A FEMA 5% INITIATIVE STUDY 6 (2008), http://www.azgs.az.gov/Resources/OFR0808_Final_2008.pdf.

of the Pine trees, increasing the hazard.⁵ We were part of the Wildland Urban Interface (WUI) issue with fire threats posed to and from the National Forest.

Kehl Fire 1985



Bray Fire 1990





5. See Jose F. Negron et al., Bark Beetle-Caused Mortality in a Drought-Affected Ponderosa Pine Landscape in Arizona, USA, 257 FOREST ECOLOGY & MGMT. 1353, 1353 (2009), http://www.fs.fed.us/rm/pubs_other/rmrs_2009_negron_j001.pdf.

Two weeks later, in a similar canyon nearby, the fatal Dude Fire, ignited by lightning,⁶ blew up and burned over the Perryville Crew, killing six firefighters and injuring five more.⁷ The community of Bonita Creek lost many homes.⁸ The fire spread to other communities, burning the Zane Grey Cabin.⁹ Communities which had been protected with fuel treatments were largely spared.¹⁰



A memorial to these and additional firefighters who died fighting fires along the Mogollon Rim is located at my old Ranger Station in Payson.

^{6.} Jaime Joyce, *The Tragic Tale of Another Deadly Arizona Wildfire*, WEEK (July 3, 2013), http://theweek.com/articles/462521/tragic-tale-another-deadly-arizona-wildfire.

^{7.} Bill Gabbert, *A Fresh Look at the Tragic Dude Fire*, WILDFIRE TODAY (June 30, 2013), http://wildfiretoday.com/2013/06/30/a-fresh-look-at-the-tragic-dude-fire/.

^{8.} *Dude Fire*, RIM COUNTRY MUSEUMS, http://rimcountrymuseums.com/dude-fire/ (last visited Feb. 12, 2016).

^{9.} *Id*.

^{10.} Mike Jones, *Dude Fire Still Smokin'*, WILDFIRE MAG., June, 1996, at 1, http://www.fireleadership.gov/toolbox/staffride/downloads/lsr11/lsr11_still_smoking.pdf.



"Dedicated to Firefighters who made the ultimate sacrifice to protect our magnificent Mogollon Rim Country." ¹¹

Fires continued to threaten the ranch. The December Fire in 2000 burned across the face of the Rim to the west of the Bray Fire.¹²

^{11.} The names on the monument are: Chuck Cochane, TBM Air Tanker Pilot, 6/15/61, Roberts Fire; Constantine (Corky) Kodz, FS Employee, 6/21/61, Hatchery Fire air crash; Arthur G. Goodnow, Pilot, 6/21/61, Hatchery Fire; Ernie Cachini, Zuni Fire Crew struck by lightning, 7/10/89, Horton Fire; Sandra J. Bachman, Perryville Crew Guard, 6/26/90, burned over in Dude Fire; James E. Ellis, 6/26/90, Dude Fire entrapment; Joseph L. Chacon, 6/26/90, Dude Fire entrapment; Alex S. Contreras, 6/26/90, Dude Fire entrapment; James L. Denney, 6/26/90, Dude Fire entrapment; Curtis E. Springfield, 6/26/90, Dude Fire entrapment.

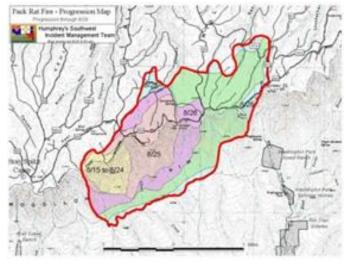
^{12.} Christmas Snow Falls on Forest Fire, PAYSON ROUNDUP (Dec. 25, 2000), http://www.paysonroundup.com/news/2000/dec/25/christmas_snow_falls/.

December Fire 2000



The Packrat Fire in 2002 burned across the face of the Rim past the Girl Scout Camp to the East Verde River. 13

Packrat Fire 2002



The Bull Owl Timber Sale analysis conducted by the Forest Service identified the need to create fuel breaks around private inholdings.¹⁴

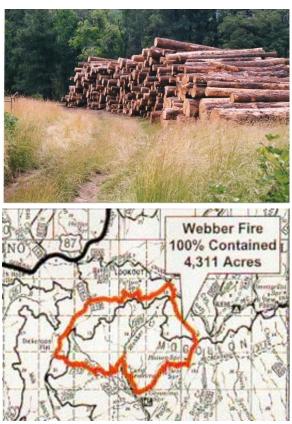
^{13.} *Pack Rat, Five Mile Fires 100 Percent Contained*, PAYSON ROUNDUP (Sept. 2, 2002), http://www.paysonroundup.com/news/2002/sep/02/pack_rat_five/.

^{14.} U.S. FOREST SERV., BIOLOGICAL OPINION SUMMARY 7–8 (1997), https://www.fws.gov/southwest/es/arizona/Documents/Biol_Opin/93019_Manaco_Analysis_Ar ea.pdf; see also U.S. FOREST SERV., supra note 1, at 7.

Bray Creek Ranch entered into a matching funds grant with the Arizona State Forestry Division to thin, pile, and burn on our property. The Forest Service likewise planned to thin, pile, and burn on its side of the boundary. We hired a contractor with a small mill to salvage the timber.

The Verde Urban Interface Analysis, funded by the National Fire Plan, authorized the burning of the fuel break and additional treatment acres around our place. ¹⁶ We installed Forest Service fire hose bibs on our property as well.

In 2003 the Forestry Division, our contractor, and the Forest Service completed the thinning and piling, and our contractor salvaged the timber. In 2004 the Webber Fire burned much of the forest between our place and Boy Scout Camp Geronimo.¹⁷



^{15.} U.S. FOREST SERV., RIM COUNTRY COMMUNITY WILDFIRE PROTECTION PLAN 9–12 (2006), http://www.egovlink.com/public_documents300/payson/published_documents/Fire-Department/Rim-Country-Comm-Wildfire-Preparedness-Plan/Rim-Country-CWPP-Update-Fall-2006-2007.pdf.

^{16.} U.S. FOREST SERV., supra note 1, at 1.

^{17.} Letter from U.S. Dep't of Interior, U.S. Fish & Wildlife Serv., to Gene Blakenbaker, Forest Supervisor, Tonto National Forest 3 (July 26, 2005), http://www.fws.gov/southwest/es/arizona/Documents/Biol_Opin/040383_WebberFire.pdf.

In November 2005 the Forestry Division and the Forest Service burned the piles and conducted broadcast burning on our property and the fuel break.¹⁸





The Bray Prescribed Fire did escape the line during the night but burned into forest on which prescribed burning had already been planned pursuant to the National Environmental Policy Act (NEPA),¹⁹ under the Verde Urban Interface Analysis, and caused no harm to the forest. The slop over was quickly suppressed. Navajo Scouts to the rescue and "help out front" or "don't let your lawyer's cabin burn down."

^{18.} Fuel Treatment Effects On Wildfires, February Fire Tonto National Forest, Arizona National Fire Plan, FORESTS & RANGELANDS, https://www.forestsandrangelands.gov/success/stories/2006/nfp_2006_az_fs_r3_tonf_fuelsredu ction.shtml (last visited Feb. 12, 2016).

^{19.} National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4370h (2012).





Three months later, in February 2006, another campfire escaped.²⁰ It was cold but dry and windy. Pushed by winds coming off the Rim, the February Fire raced toward the ranch.

^{20.} February Fire Too Close For Comfort, PAYSON ROUNDUP (Feb. 23, 2006), http://www.paysonroundup.com/news/2006/feb/23/february_fire_too/.



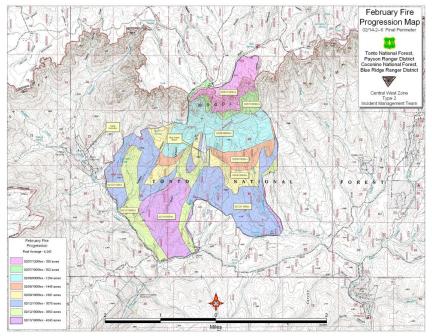


The February Fire was a running crown fire with 100% tree kill. When the fire reached the fuel break it dropped from the canopy to the ground and skipped through and around the ranch, and it was safe enough for firefighters to remain and prevent the loss of the historic structures and orchards.

Because of the previous NEPA compliance and the Verde Urban Interface Analysis,²¹ when the winds died down the Forest Service was able to manage

the fire, through mostly treated forest, to the Control Road and the Camp Geronimo Road, putting the now moderate fire to good use (4,243 acres).







Three feet of snow finally fell, a month too late.

CONCLUSION

Forest treatments work. They save lives, save property, and save the environment.

APPENDIX

Tonto National Forest, Southwestern Region, U.S. Forest Service Briefing Paper

1. Topic

National Fire Plan Urban Interface Fuel Treatments and the February Fire

2. Issue

Fuel treatment effectiveness to minimize impacts from wildfires to values at risk.

Background

The Payson Ranger District of the Tonto National Forest contains a high density of private land inholdings (urban interface areas) in and around the town of Payson in central Arizona. The District has undertaken several NEPA analyses, and then subsequent treatments to implement these analyses, to

minimize the potential impact from wildfires to the urban interface locations on the Payson Ranger District. The specific property this paper will examine in the Bray Creek Ranch, located north of Payson below the Mogollon Rim.

The Bull Owl Timber Sale analysis identified the need to use mechanical treatments to create a fuelbreak around the Bray Creek Ranch (as well as other private inholdings identified in the analysis). The subsequent treatments were completed on 44 acres around the Bray Creek Ranch in 2003 at a cost of approximately \$500 per acre.

The Verde Urban Interface Analysis, funded by the National Fire Plan, was completed in March of 2004. This analysis authorized the burning of the fuelbreak and additional treatment acres around the Bray Creek Ranch. The fuelbreak was prescribe burned in November of 2005 at a cost of approximately \$200 per acre.

On February 6, 2006, an abandoned campfire on the edge of the Mogollon Rim on the Coconino National Forest erupted into a wildfire. By the time fire crews arrived on the scene, the fire began to burn off of the Mogollon Rim onto the Tonto National Forest. On February 7, the fire progressed downhill towards the Bray Creek Ranch. At approximately 6:00 pm, strong downslope winds increased fire activity and pushed the fire towards the Bray Creek Ranch. As the fire approached the fuelbreak, the fire was in heavy fuels, with active crown fire. Crews that were located at the Bray Creek Ranch for structure protection during the advance of the flaming front reported spotting distance of up to one-half mile as the flames approached the Bray Creek Ranch. The fire crews were able to safely defend the Bray Creek Ranch until fire activity moderated at approximately 2:00 am on February 8. The flaming front dropped to the ground as it reached the fuelbreak on the northeast portion of the fuelbreak.²² To date, the fire has burned around the fuelbreak²³ and the Bray Creek Ranch has not suffered any loss of structures.

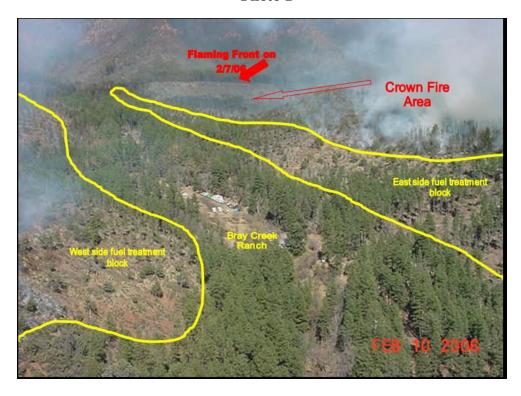
Conclusions

Fuel treatments in the urban interface are designed to minimize the threat of wildfire to values at-risk (private property, including houses, outbuildings, improvements and land). A secondary benefit of urban interface fuel treatments is to provide adequate protection for fire fighters to be able to remain safely in and adjacent to structures during a wildfire event. The fuel treatments at the Bray Creek Ranch were successful at protecting values at risk and providing for fire fighter safety.

^{22.} See infra Photos 1–5.

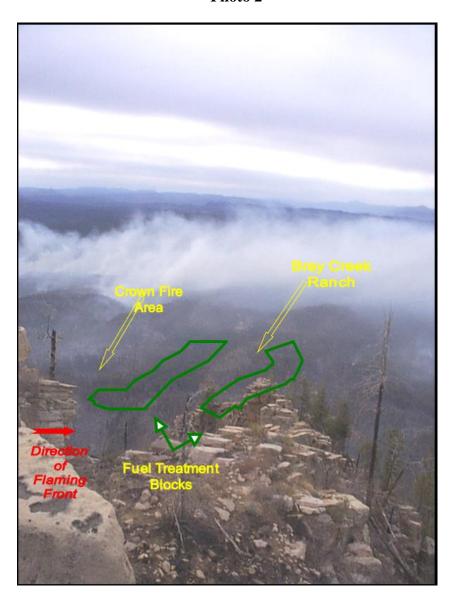
^{23.} See infra Figure 1.

Photo 1²⁴



View of Bray Creek Ranch from the air, February 10, 2006. Photos 2 and 3, *infra*, display the northeast corner of the fuelbreak.

Photo 2



Bray Creek Ranch and the February Fire from the Mogollon Rim, February 9, 2006, 9:30 am.

Photo 3²⁵



Photo taken in the northeast corner of the fuelbreak around the Bray Creek Ranch. The picture is taken on the edge between the treated (left) and untreated (right) timber facing north, with the Mogollon Rim in the background. The untreated side of the photo displays the aftermath of a crown fire through very dense young growth ponderosa pine. The treated portion of the photo displays the fuelbreak, with scorch on the canopies from the intense fire that approached from the untreated timber.

Photo 4²⁶



Photo taken adjacent to the northeast corner of the fuelbreak around the Bray Creek Ranch. The picture is taken from the crown fire area adjacent to the northeast corner of the fuelbreak that is noted in Photos 1 and 2, *supra*, as the crown fire area. Note that the ground and tree canopy in the foreground are devoid of any live vegetation. The live canopy in the background is the fuelbreak.

Photo 5²⁷



Photo taken from hill north above the northeast corner of the Bray Creek Ranch Fuelbreak. The red dashed line delineates the approximate boundary between the treated (right) and untreated (left) forest. The untreated area on the left is characterized by a total crown fire, with the treated area (right) exhibiting corn scorch adjacent to the crown fire and evidence of ground fire.

Figure 1²⁸



Fire progression map, February 6–February 9. Note that the fire was well above the Highline Trail at 6:00 pm on February and moved rapidly towards the Bray Creek Ranch. Fuel treatment areas (fuelbreak) are displayed in black diagonal cross hatch adjacent to the Bray Creek Ranch.