In the United States Court of Federal Claims

McDONOUGH FAMILY LAND, LP, and INGERSOLL RANCH, FLP, Plaintiffs, v. THE UNITED STATES OF AMERICA, Defendant.	)	No. 20-368L (Filed: September 11, 2025)

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OPINION AND ORDER

Kaplan, Judge

Plaintiffs, McDonough Family Land, LP, and Ingersoll Ranch, FLP, ("the Ranches") own real and personal property in Wolf Creek, Montana. They brought this action under the Fifth Amendment's Takings Clause to secure compensation for the appropriation of certain range forage and timber, which the government used as fuel to conduct firing operations in response to the 2017 Alice Creek Fire. See generally Am. Compl., ECF No. 36.

The firing operations ("intentional burns") were conducted by the Silver City Hotshots ("the Hotshots"), a highly trained and experienced hand crew that uses intentional burns, among other techniques, to suppress the spread of wildfires. The Hotshots were called on to the scene at the direction of an incident management team led by Russell ("Russ") Bird, an employee of the United States Forest Service ("USFS"). See McDonough Fam. Land, LP v. United States, 172 Fed. Cl. 414, 421 (2024) ("McDonough I") (describing role of incident management team and USFS in directing the actions alleged to constitute a taking in this case).

On July 12, 2024, this Court denied the government's motion for summary judgment as to liability. See McDonough I. It rejected the government's argument that the actions about which the Ranches complained were not attributable to the federal government, but rather to the State of Montana. 172 Fed. Cl. at 421–22. It also found without merit the government's contention that the appropriation of the Ranches' range forage and timber was a tort, and therefore not within this Court's jurisdiction. Id. at 422–24.

Finally, the Court rejected the government's argument that summary judgment should be entered against the Ranches as to causation. The government contended that the Ranches had not produced sufficient evidence to show that, had it not taken any action in response to the Alice Creek Fire, the Ranches' loss of range forage and timber would have been less severe. Id. at 424–26. The Court denied summary judgment, concluding that a trial was necessary to resolve this fact-specific issue. Id. at 426.

A four-day trial on liability was held in Missoula, Montana in December 2024. See Trial Mgmt. Order, ECF No. 83. The witnesses and evidence presented at trial were focused on the progression of the Alice Creek Fire and the suppression efforts of the government from late August 2017 through September 14, 2017. Witnesses at the trial included: Rob McDonough and Ron Ingersoll, owners of the Ranches; Frank Thompson, Jared Lantz, and Mike Wirth, the drivers who assisted firefighting operations by digging "dozer lines" to slow the fire's spread; Darrell Schulte and Audrey Walleser Martin, Plaintiffs' experts; Russ Bird, the incident commander for the Alice Creek Fire; Robyn Broyles, the public information officer for the Incident Management Team assigned to the Alice Creek Fire; Tyler Monroe, the field operations section chief; Todd Moore, division supervisor and firefighter; Marcus Cornwell, superintendent of the Silver City Hotshots; William "Bill" Avey, then-forest supervisor for the Helena-Lewis & Clark National Forest; and Michael Stansberry, then-district ranger in the Lincoln Ranger District. See Pls.' Witness List, ECF No. 81; Def.'s Witness List, ECF No. 82.

The central issues now before the Court are: (1) whether the Ranches met their burden of proving causation by showing that "in the ordinary course of events, absent government action, [they] would not have suffered the injury [to their property interests]," St. Bernard Par. Gov't v. United States, 887 F.3d 1354, 1362 (Fed. Cir. 2018), and (2) whether, assuming that the Ranches met their burden of proving causation, the doctrine of necessity nonetheless precludes the government from being found liable for a taking. See TrinCo Inv. Co. v. United States, 722 F.3d 1375, 1378 (Fed Cir. 2013).

The Court has determined that closing arguments are unnecessary. For the reasons set forth below, the Ranches have failed to satisfy their burden of proving causation under the St. Bernard Parish standard. The Court therefore will direct the entry of judgment for the government.[1]

[1] In light of its finding that the Ranches did not meet their burden of proving causation, the Court does not reach the doctrine of necessity.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

I. The Ignition and Initial Spread of the Alice Creek Fire

On or around July 22, 2017, a lightning strike ignited the Alice Creek Fire in the Helena-Lewis and Clark National Forest, sixteen miles northeast of Lincoln, Montana. Am. Joint Stip. of Facts ("SOF") ¶ 1, ECF No. 79. The fire was fueled by the severe drought conditions that prevailed in the region that summer. There were also "[s]ignificant fuel accumulations from dead trees" which were "drier than normal for [that] time of year." JX29, at 9, ECF No. 99-27 (Wildland Fire Decision Support System ("WFDSS") Incident Decision, August 25, 2017).

Shortly after the fire began, the USFS predicted that its duration would be long and the fire would not be contained "until [there was] a significant change in the weather." JX28, at 20, ECF No. 99-26 (WFDSS Incident Decision, July 26, 2017). Further, firefighting efforts would be complicated by "[s]teep rugged terrain, large dead fuels, and numerous snags." PX2C, ECF No. 97-2. Due to "limited access" to the area, the Forest Service suggested a confine and contain strategy, with "direct attack" initiated "where possible along timber/grassland edges." JX28, at 20.

Initially, local firefighters, assisted by two helicopters conducting water drops, constructed fire control lines on the north/northeast edge of the fire. PX2C. Fire control lines are boundaries that are created and used to manage and contain a wildfire. See Tr. 725:12–21, ECF No. 90 (Cornwell); see also Tr. 191:5–9, ECF No. 86 (Thompson). They may be dug by hand, as they were in this instance, or by using heavy machinery, such as bulldozers. Tr. 725:18–21 (Cornwell); see also Tr. 266:19–20, 332:7–9 (Wirth). Their efforts were frustrated, however, by the difficult terrain, abundance of fuel, and windy conditions, which exacerbated the risk of standing dead trees falling on firefighters. See PX2C; Tr. 866:20–867:12 (Stansberry). For their safety, the firefighters were soon instructed to leave the area, and the Forest Service resumed responsibility for managing the fire on August 18. Tr. 866:20–867:12 (Stansberry); PX11C, ECF No. 97-9; see also PX8A, ECF No. 97-5.

The fire remained in a remote part of the National Forest until around August 23. By then it had grown to encompass approximately 400 acres of National Forest System lands. SOF ¶ 2. Unfavorable weather conditions were forecast, with strong winds, low humidity, a dry frontal passage, climbing temperatures, and poor humidity recovery. Id. ¶ 4. Fire managers predicted that under these conditions the fire would not remain contained to federal lands for much longer and would "potentially threaten state and private lands within [48] hours," i.e., by August 25. Id. ¶ 5. On August 24, the USFS requested that a Type 2 incident management team, typically assigned to manage complex wildfires, be assigned to the Alice Creek Fire. Id. ¶¶ 6–7. Incident management teams may be called in to assist localities that lack sufficient firefighting capacity by "tak[ing] care of all functions and run[ning] the fire." Tr. 437:22–438:3, ECF No. 88 (Bird).

The USFS described the worsening weather and fuel conditions on August 25 in a WFDSS Incident Decision. JX29. The Alice Creek area contained a significant accumulation of fuel caused by dead trees and had experienced a "missed fire interval," i.e., a longer than expected period of time between two successive fires. Id. at 9; see also Fire Effects Information System Glossary, U.S. Dep't of Agric., https://www.fs.usda.gov/database/feis/glossary2.html#FireInterval (last visited Aug. 4, 2025).

The Incident Decision also noted that there were "[f]ew barriers" and that energy release component ("ERC") values were above the 90th percentile and were expected to stay at that level or increase.[2] JX29, at 9. Long range spotting had already been observed by this date,[3] and the USFS reiterated that "[t]his will be a long duration fire needing long term planning." Id. at 11. It further noted that USFS was taking action "to keep the fire away from private property and on [National Forest] lands." Id. at 11, 31.

By August 27, the fire had expanded to 5,000 acres. DX06, at 1 (Box 7), ECF No. 98-1. The fire was "[a]ctive with the head being [e]xtreme." Id. at 2 (Box 28). The weather forecast predicted "strong gusty winds, very low humidity, and [a] dry frontal passage" that would promote "Critical Fire Weather Conditions" with no relief for at least ten days. Id. at 3 (Box 35).

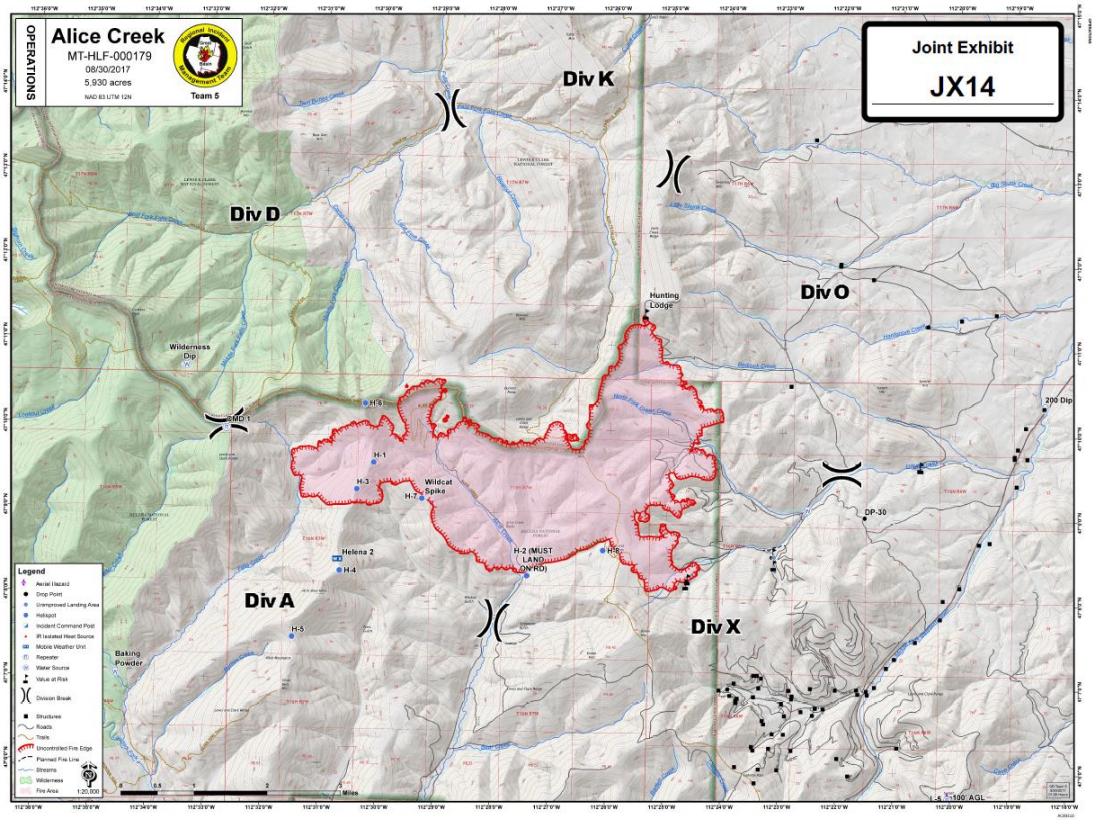
II. The Fire Expands to Private and State Lands and the Great Basin Incident Management Team 5 Takes Over

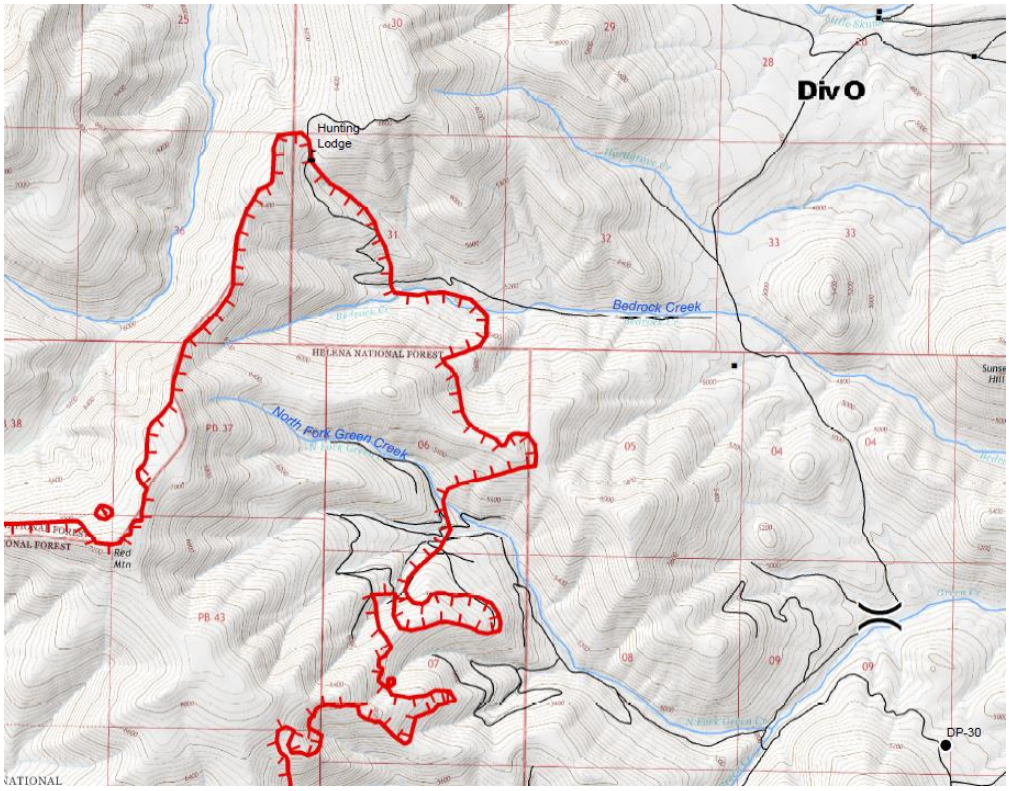
On August 28, 2017, the Great Basin Incident Management Team 5 ("Great Basin IMT5" or "the incident management team"), a Type 2 incident management team, took over management of the fire under the command of Russ Bird. SOF ¶¶ 8, 14; Tr. 437:6–7 (Bird). By the time the incident management team arrived on August 28, the Alice Creek Fire had grown to 5,000 acres and, as predicted, had spread to state and private land. SOF ¶ 9. The Great Basin IMT5 divided the fire into five geographic divisions for management purposes: A, D, K, O, and X. Id. ¶ 15. The property of the Ranches affected by the fire was located in Division O.[4] The red lines on the map reproduced below depict the approximate perimeter of the fire on August 30. See JX14, ECF No. 99-13 (August 30, 2017 Fire Operations Map). As relevant here, the map also depicts several hunting lodges owned by Plaintiff McDonough Family Land, LP, in Section 31, adjacent to the fire's perimeter. See PX15C, ECF No. 97-16 (August 29, 2017 Fire Operations Map); see also SOF ¶ 20.

[2] Energy release component ("ERC") values relate to the available energy per unit area within the flaming front at the head of the fire. ERC values reflect the contribution of all live and dead fuels towards potential fire intensity. The drier the fuel, the higher the ERC value, and the greater potential release of heat. Energy Release Component - ERC, WILDLAND FIRE APPL. INFO. PORTAL, https://www.wildfire.gov/page/energy-release-component-erc (last visited Aug. 4, 2025).

[3] "Spotting" refers to a situation where a new fire is ignited by a windblown spark that gets out ahead of the existing main fire. Tr. 99:2–5 (McDonough).

[4] McDonough Family Land, LP owned property in some or all of Sections 4–7, 17, and 18 in Township 16 N Range 6 W, Sections 19, 26, 27, and 30–36 in Township 17 N Range 6 W, and Sections 17 and 18 in Township 16 N, Range 6 W. SOF ¶ 35. Ingersoll Ranch, FLP owned property in some or all of Sections 17–19 and 21 in Township 16 N, Range 6 W. Id. ¶ 36.





Inset from PX15C

As of August 28, when Great Basin IMT5 arrived, fire managers expected that the Alice Creek Fire would continue to grow and move east towards cabins, primary residences, and a highway. Id. ¶ 10.[5] The incident management team directed that available firefighting resources be focused on checking the spread of the fire toward the residences and ranches on the fire's eastern side (Divisions O and X), including along Bedrock Creek Road. See JX01, at 6 (Box 41), ECF No. 99-1; PX15C; JX14 (depicting Bedrock Creek in Sections 31, 32, and 4 of Division O). Incident Commander Bird testified that "the big goal" was to prevent the fire from spreading to Augusta, Montana, which was then just fifteen miles to its east. Tr. 482:18–20 (Bird). Mr. Bird was aware that twenty years earlier, a fire had spread to Augusta in only one or two days, and so was on guard. Tr. 482:20–24. (Bird).

In light of the risks of spreading fire, the authorities began to provide the public with information about the threat posed to residences and structures. Evacuations were planned or already in progress, and some roads were closed. SOF ¶ 9. The incident management team predicted that the fire would continue to grow and intensify, with the "[p]robability of [i]gnition remain[ing] near 100% with spotting distances around .2 to .3 miles" within 24 hours and ERCs "expected to continue to chart new highs" within 48–72 hours. JX01, at 4 (Box 36). Based on the wind and topography, the incident management team concluded the fire was "expected to spread eastward directly towards evacuated residences and ranches." Id. at 6 (Box 40). The Lewis and Clark County Sheriff issued mandatory evacuation orders for residences and ranches on the east side of the fire. JX01, at 3–5 (Boxes 30, 33, 38); SOF ¶ 10.

III. The Silver City Hotshots Arrive

On the afternoon of August 28, the day that Great Basin IMT5 assumed management of the fire, the Silver City Hotshots arrived on scene. Tr. 668:1–2, 730:15–731:8 (Cornwell). Hotshot crews are considered "national asset[s]," "controlled at a national level," and can be deployed anywhere within the United States and Canada. Tr. 722:23–723:2 (Cornwell). Because of their expertise, hotshot crews are frequently enlisted by operations section chiefs and/or division supervisors to help establish a plan for responding to a fire. Tr. 726:3–6 (Cornwell). Hotshot crews are given "the most demanding assignments" and may operate in rough or rugged terrain. Tr. 725:7–8 (Cornwell). For these reasons, and because they may conduct intentional burns to suppress the spread of fires, members of hotshot crews must receive extensive training, including a special class to qualify to conduct and/or manage firing operations. See Tr. 724:2–6, 726:23–25, 727:18–24 (Cornwell). Hotshot crews typically have eighteen to twenty members. They are led by a superintendent (in this case, Marcus Cornwell)[6] and a foreperson, and can be broken down into smaller squads managed by squad bosses. SOF ¶ 17.

After a control line is put in place, a hotshot crew may conduct firing operations to secure the line. Tr. 726:17–727:3 (Cornwell). Those operations involve "putting fire on the ground

[5] The black boxes on the fire map to the south and east of the fire depict the structures under threat. See JX14 (reproduced above).

[6] By the time of the Alice Creek Fire, Mr. Cornwell had been with the Hotshots for ten years, serving in positions of increasing responsibility: from squad boss, to foreman, to superintendent. Tr. 666:17–21 (Cornwell).

adjacent to [the] control features between [the] control line and the main fire's edge to consume the vegetation so that fire doesn't cross [the] control line." Tr. 727:24–728:3 (Cornwell). On the job training is of particular importance. Tr. 727:19–24 (Cornwell) ("Years of being the one putting the fire on the ground with the drip torch, being directed what to do, and then working your way up to a firing boss, which is the one coordinating the folks putting the fire on the ground."). Hotshot crews must consider topography, wind, and other weather conditions when developing their strategies, so that the fires they set do not end up doing more harm than good. See Tr. 751:10–20, 727:4–14 (Cornwell).

IV. Hotshot Activity from August 28 Through September 1

The Hotshots were assigned to Division O on the east side of the fire. Tr. 667:15–16, 731:7–12 (Cornwell); see also PX15C (August 29, 2017 Fire Map for Division O). Upon arrival, Mr. Cornwell scouted the area and observed that "there was zero containment on the east side of the fire at that time." Tr. 732:20–22 (Cornwell); see also Tr. 667:20 (Cornwell) (stating that "the fire was active"). He further observed "intermittent tree torching," as well as "[s]ome group torching [m]ixed with some patches of the fire that were just creeping and smoldering and not moving." Tr. 746:17–747:1 (Cornwell).

Mr. Cornwell understood that there were a number of "potential values at risk" on the east side of the fire. Tr. 733:6–9 (Cornwell). They included "a highway corridor that was a pretty essential transportation corridor," "quite a few homes" (including "four or five immediately to the east of Division [O]"), a residential subdivision to the southeast of the fire that had 30 or 40 homes, and a structure to the north that contained jet fuel for a helicopter. Tr. 733:11–23 (Cornwell).

Also at risk, as relevant here, were the "hunting lodges that were immediately adjacent to the fire." Tr. 734:2–5 (Cornwell). Those lodges were owned by Plaintiff McDonough Family Land, LP. See SOF ¶ 20. Mr. Cornwell estimated that the lodges included more than one but less than five structures, including "[s]ome older cabin-style lodges and associated infrastructure." Tr. 742:19–23 (Cornwell).

After arrival, the Hotshots had "[p]retty quickly" gotten "engaged . . . using hand tools to scratch a fire control line around the [] hunting lodges" that belonged to McDonough Family Land, LP. Tr. 744:4–7 (Cornwell); see also Tr. 751:1–3 (Cornwell). The Hotshots also ordered installation of a water reservoir nearby. Tr. 744:4–16 (Cornwell); see also Tr. 743:1–5 (Cornwell). Mr. Cornwell then went south on the county road to North Fork Green Creek, a large drainage area, to observe the fire behavior there and gain the situational awareness he needed to develop a plan to safely suppress the fire. See Tr. 744:23–746:8 (Cornwell).

Conditions on August 29 were dangerous. The Incident Action Plan ("IAP")[7] for the Alice Creek Fire that day documented ERCs "7 points above the last historical high" and noted

[7] An IAP is an "oral or written plan containing the objectives established by the Incident Commander or Unified Command and addressing tactics and support activities for the planned operational period, generally 12 to 24 hours." NWCG Glossary of Wildland Fire, PMS 205,

that fuels were "completely dry." DX41, at 5, ECF No. 98-14. Trees were expected to "torch readily" and the "[t]ransition from smoldering to active fire behavior could be very quick," with the possibility of "[f]ire whirls." Id. In Division O, it was predicted that the fire would "take advantage of slopes and winds" and "move rapidly" with "moderate to high rates of spread and spotting" with up to "very high rates of spread" if the fire reached dry grass. Id. The IAP cautioned firefighters about the dangerous conditions, warning that "[w]ith the ERC charting new highs, the fire can and will do things that may surprise you, pay attention to it." Id.

The incident management team staffed Division O with the Hotshots and two local bulldozer teams on August 29. Id. at 8. The Hotshots returned to the lodges and continued constructing a hand line. Their immediate goal was to "contain fire spread in areas that have [a] high likelihood of success while reducing firefighter exposure," with the ultimate goal being to confine the fire "by potential indirect control lines to the North and East." Id. at 8.[8] The Hotshots worked with bulldozer teams to cut off the switchbacks on the access road to the hunting lodge and to create an indirect fire line from the hunting lodges towards Bedrock Creek. Tr. 749:6–8, 669:2–6 (Cornwell). The bulldozers cleared vegetation to the west of the switchbacks starting at the lodges and moving south into the Bedrock Creek drainage. Tr. 749:6–750:8 (Cornwell); see also Tr. 633:6–634:23 (Moore).

Fire behavior on August 30 was characterized as "EXTREME!" DX42, at 1, ECF No. 98-18. The IAP for the day warned that—given the record dry conditions, high temperatures, very low relative humidity, and potential for strong winds—"[spot fires] can become new flaming fronts within minutes." Id. Active fire behavior, torching, wind-driven runs, and short-range spotting had been observed and fire spread was "expected to continue eastward directly towards evacuated residences and ranches" in Division O. JX02, at 2, 6; see also Tr. 758:5–10 (Cornwell) (describing the fire behavior).

The stated strategic objective on August 30 was "to remove the current and immediate wildfire threat to several unincorporated communities . . . along with several ranches near the fire." DX08, at 4, ECF No. 98-2 (Box 37). The Incident Status Summary for that date stated that "[t]he fire pose[d] a considerable threat to life, property, communities and community stability." Id. The Hotshots secured the line from the previous day with firing operations, using drip torches. Tr. 669:12–20, 749:6–750:8, 751:1–2 (Cornwell). A control line was successfully established south of the hunting lodge to prevent the fire from spreading further east. Tr. 751:21–24, 752:12–15 (Cornwell).

NAT'L WILDFIRE COORDINATING GRP. (Apr. 1, 2025), https://www.nwcg.gov/publications/pms205/nwcg-glossary-of-wildland-fire-pms-205.

[8] An "indirect" attack is a method of wildland fire suppression where control lines are "located some considerable distance away from the fire[']s active edge" in order "to utilize natural or constructed firebreaks or fuel breaks in the topography" where "[t]he intervening fuel is usually backfired." NWCG Glossary of Wildland Fire, PMS 205, NAT'L WILDFIRE COORDINATING GRP. (Apr. 1, 2025), https://www.nwcg.gov/publications/pms205/nwcg-glossary-of-wildland-fire-pms-205.

On August 31, Mr. Cornwell continued to scout for a way to tie the control lines from Bedrock Creek to North Fork Green Creek. Tr. 759:5–8 (Cornwell). No firing operations were conducted that day. Tr. 671:15–20 (Cornwell). Red flag conditions continued, with a forecast of gusty winds until late in the evening. DX43, at 4.[9] The fire was expected to grow to the east in Division O "due to the topography." Id. at 5. Wind was expected to "be the major factor" affecting fire spread that day by "increasing fire behavior or drying out fuels." Id. In addition, spotting up to 0.3 miles was predicted because of stronger winds. Id.

These predictions concerning spot fires proved accurate, if not understated. Torching trees "became active" on August 31, throwing spot fires up to half a mile in front of the main fire, with the distance between the main fire and the spot fires on August 31 a cause for "concern" and even "alarm." Tr. 759:5–6, 759:13, 760:18–761:1 (Cornwell); see also SOF ¶ 21 (explaining that by the evening of August 31, wind-driven embers from the main fire had jumped over the fire line and ignited spot fires ahead of the main fire in Section 5, Township 16 N, Range 6 W). Although the Hotshots were able to respond to the spot fires closest to them, they did not have a safe or viable plan for dealing with all of them. Tr. 761:12–16 (Moore).

Despite full suppression efforts, by September 1 the Alice Creek Fire had grown to 7,400 acres. Id. ¶ 19. Red flag weather conditions on September 1, due to gusty winds, threatened to cause additional spreading of the fire and more spotting. JX10, at 4–5, ECF No. 99-10. On September 1, the Hotshots, assisted by bulldozer operators, conducted additional firing operations on McDonough Family Land property in Sections 6, 31, and 32, attempting to establish another control line along Bedrock Creek Road that would connect to the existing control line along the switchbacks. Tr. 763:10–12, 764:3–765:14 (Cornwell); see also Tr. 673:3–10 (Cornwell) (describing how the Hotshots burned a series of logging roads in Section 6, starting at the top and then downhill into Section 32 and then Section 31).

V. Firing Operations Conducted on September 2–3

By September 2, the fire had grown to 11,500 acres, with fire and weather conditions producing an increased risk of fire danger. SOF ¶¶ 23, 24. Dry strong winds from the west were expected to move the main fire east, JX11, at 5, ECF No. 99-11; spot fires persisted as a concern for additional spread, Tr. 767:22–768:2 (Cornwell). The fire behavior forecast predicted even "more active" fire behavior, with "stronger winds" potentially driving even farther spot fire ignitions. JX11, at 5.

On the morning of September 2, Mr. Cornwell determined that the fire had not crossed the containment line established by the firing operations the previous evening. Tr. 767:11–20 (Cornwell). He and a few members of the crew then hiked out to check to see if they could do anything to contain the spot fires. Tr. 767:20–768:2 (Cornwell). The crew "put some hand line and saw line on a couple of them," but upon realizing that they were not in a safe location, hiked back out. Tr. 768:19–769:2 (Cornwell). At that point, the fire "wasn't necessarily moving hard"

[9] Red flag conditions exist where there is low relative humidity, high winds, and high temperature, as well as "extreme fire behavior." Tr. 635:23–25; 636:11–13 (Moore); see also Tr. 635:21–23 (Moore) (a red flag warning "means it is going to be a long day").

but had not stalled, because there was "still plenty of heat [and smoke] along the fire perimeter." Tr. 769:16–770:6 (Cornwell).

At some point on the afternoon of September 2, Mr. Cornwell met Mr. Moore at the junction of Bedrock Creek and the county road, where they observed helicopters conducting water drops on the spot fires. Tr. 770:19–771:6 (Cornwell). Because the forecast of windy conditions for that day had not yet materialized, the helicopter drops were "fairly effective." Tr. 771:14–18 (Cornwell).

At 2:00 PM, fire management personnel from Great Basin IMT5 held a meeting with local landowners, including Messrs. McDonough and Ingersoll, on the county road to the north of Bedrock Creek (depicted as H-9) to answer questions and observe the fire's progress. See Tr. 853:22–855:19 (Stansberry); Tr. 54:24–55:22 (McDonough). Mr. Ingersoll testified that while at the meeting it appeared that the spot fire was being effectively controlled by helicopter water drops. Tr. 123:8–17 (Ingersoll).

The evidence shows, however, that conditions worsened in the hours after the 2PM meeting. The fire began spreading rapidly to the northeast in Section 5, Township 16 N, Range 6 W. SOF ¶ 25. The main fire became a "rotating column" and a spot fire became "very active," spreading in response to increased west winds. Tr. 645:18–20 (Moore); Tr. 772:9–773:6 (Cornwell). Eventually, because of the wind conditions, the helicopters became ineffective. Tr. 645:20–24 (Moore); Tr. 772:9–11 (Cornwell).[10]

With the increasing winds, Mr. Cornwell knew that the fire "was going to threaten that county road and potentially our other values at risk," and so "came up with a plan to fire that Bedrock Creek Road." Tr. 773:9–12 (Cornwell). At around 5:30 PM, the Hotshots, having concluded that the fire had already hit certain "trigger points" and was moving "fast," Tr. 601:9–23 (Moore), began "a defensive burn operation" taking into consideration "the life and property that was in the area," Tr. 604:4–14 (Moore); Tr. 773:15–16 (Cornwell); see also Tr. 603:22–25 (Moore) (describing trigger points hit sometime between 3:00 and 6:00 PM). The defensive operation began at "the intersection of the county road in Section 33 with the Bedrock Creek access road" "in the southwest corner of Section 33." Tr. 402:6–17 (Schulte); see also SOF ¶ 26.

The crew split into two squads. SOF ¶ 27. One squad went south laying fire along the county road but was forced to turn around when the main fire swiftly reached and jumped the road. Tr. 611:19–612:17, 648:9–649:2 (Moore); Tr. 685:14–687:20 (Cornwell); SOF ¶ 27. The crew had not gotten very far, perhaps 100 yards down the road, when Mr. Cornwell saw that the fire was "pushing hard" and had already crossed the road. Tr. 774:1–8 (Cornwell). At that point, the firing operations "would not be successful to stop that main fire coming off the hill," and proceeding further would be "a lost cause on that piece of the fire." Tr.774:8–12 (Cornwell).

In the meantime, the other squad "mov[ed] west from the T-intersection along Bedrock Creek Road (the road paralleling the creek [on its south side]) to the north of the main fire." SOF

[10] By September 2, the two fire-specific helicopters that had previously been used on the Alice Creek Fire, had been reallocated and replaced by less effective Chinook helicopters sourced from the National Guard. Tr. 643:18–645:11 (Moore); Tr. 771:8–772:15 (Cornwell).

¶ 28. That squad worked along the road through the night into the early morning of September 3, eventually tying into the control line that the Hotshots and bulldozer operators had established south of the hunting lodges from August 29 to September 1, 2017. Id.; see also Tr. 775:5–776:13 (Cornwell). By the morning, the Hotshots were able to install some hand line where bulldozers were unable to operate due to the terrain. Tr. 785:8–12 (Cornwell). Their efforts were complemented by those of private citizens also trying to contain the fire to protect their homes further to the east. Tr. 785:2–7 (Cornwell); Tr. 72:6–22 (McDonough) (describing fire suppression actions taken by Mr. McDonough and persons from neighboring ranches). The immediate result of these efforts was that the fire did not cross north over the firing line secured alongside Bedrock Creek Road, and the hunting lodges were not damaged. SOF ¶ 29; Tr. 647:25–648:8 (Moore); Tr. 776:20–23 (Cornwell).

VI. September 4–14

On the evening of September 4, the Hotshots were able to establish additional fire control lines to the south of the fire. Tr. 790:20–791:1, 791:22–792:16 (Cornwell); SOF ¶ 30. The Hotshots were demobilized from the fire around September 6. Tr. 794:2–4 (Cornwell). On September 9, firefighters conducted additional firing operations to create a buffer around two McDonough Family Land cabins. SOF ¶ 31. On that day, the fire passed through the area where the cabins were located but did not damage them. Id. ¶ 32. On September 10, a Type 1 IMT took over from Great Basin IMT5. Id. ¶ 33. The Alice Creek Fire was finally extinguished by a snowstorm on September 14. Id.

VII. Causation

As this Court has previously noted, "a takings plaintiff bears the burden of proof to establish that the government action caused the injury." St. Bernard Par., 887 F.3d at 1362. To meet that burden, a plaintiff must show "what would have occurred" if the government had not acted. United States v. Archer, 241 U.S. 119, 132 (1916), see also Bd. of Supervisors of Issaquena Cnty. v. United States, 84 F.4th 1359, 1368 (Fed. Cir. 2023) (explaining that there is no physical or regulatory takings liability "without a showing of 'what would have occurred if the government had not acted'" (quoting St. Bernard Par., 887 F.3d at 1362)). Specifically, the plaintiff must "show that in the ordinary course of events, absent government action, [they] would not have suffered the injury." St. Bernard Par., 887 F.3d at 1362–63 (also observing that the question the Court must decide is "whether 'the [] damage that actually occurred' was worse than 'the [] damage that would have occurred if there had been no government action at all").

In determining what would have occurred had the government done nothing the Court must consider "the entirety of government actions that address the relevant risk by assessing whether the plaintiff's damage was greater than it would have been if the government had not acted to 'prevent[] the same type of injury on the same property where the damage occurred.'" Issaquena Cnty., 84 F.4th at 1365 (quoting St. Bernard Par., 887 F.3d at 1364, 1366). Therefore, to prove causation in this case, the Ranches must show by preponderant evidence that—absent the firing operations and other firefighting efforts undertaken by the government, beginning at the outbreak of the Alice Creek Fire—the damage to their property by fire would have been less severe. See McDonough I, 172 Fed. Cl. at 425 (emphasis added) (quoting St. Bernard Par., 887 F.3d at 1362).

The Ranches not only failed to meet this burden; they have mischaracterized it. Their argument is that Great Basin IMT5 "sacrificed Ranch property to mitigate risk to residences, a highway, power transmission lines, a jet-fuel depot, and a ballistic missile silo." Pls.' Br. at 28, ECF No. 101. They further contend that "had [the incident management team] not conducted firing operations to defend the[se] 'values at risk,' more likely than not, the Ranch property burned on September 2–3, 2017, would have been unaffected by the Alice Creek Fire." Id.[11] The Ranches further argue that but for the firing operations conducted on September 4–5, Plaintiffs' property (in Sections 7, 17, and 18) would not have burned in the Alice Creek Fire. Id.

The Ranches, in other words, seek to meet their burden of showing causation by marshalling evidence that shows what would have happened had no firing operations been undertaken from September 2–3 and 4–5. But they do not attempt to address what would have happened if the government had foregone all of the fire suppression efforts that it undertook, not only on September 2–3 and 4–5, but from the time the fire began until the fire was fully contained. These efforts included not only the firing operations, but also the establishment of fire control lines (by hand and bulldozer), the earlier firing operations conducted to secure those fire control lines, and the helicopter water drops.

The Court concludes that the Ranches failed to show that had the government just allowed the fire to take its natural course, their property would not have burned. In fact, both the evidence and common sense are to the contrary.

The Alice Creek Fire was ignited by a lightning strike. It is indisputable that had there been no firefighting response at all, it would have spread naturally based on the available fuel, weather conditions, and topography. The evidence shows that at the end of August and beginning of September 2017, Montana was experiencing extreme drought conditions. It further shows that the fuels in the area were dry. There were a series of red flag warning days marked by gusty winds. There were reasons to fear that the winds would cause the fire to spread to the east toward homes and infrastructure, threatening the community of Augusta, Montana.

As the evidence also shows, the wind and dry conditions caused spot fires to ignite ahead of the main fire to the east of the control line on September 1 and 2, and the government was ultimately unable to hold the spot fires in check using helicopter drops. In addition, conditions worsened as the day progressed on September 2, as increased winds caused the fire to spread rapidly to the northeast. SOF ¶ 25.

Moreover, the record shows that the firing operations the Hotshots conducted in the vicinity of the McDonough Ranch's hunting lodge both in late August and on September 2–3 were largely successful, preventing the spread of the natural fire and protecting the McDonough Ranch hunting lodge's structures. The Court agrees with the government, therefore, that a case

[11] The property that was burned on September 2–3, and which the Ranches contend would not have burned but for the firing operations the Hotshots conducted on those days, was the McDonough Family Land property in Sections 4, 5, 27, and 32–36, and the Ingersoll Ranch property in Section 36. Pls.' Br. at 5, ECF No. 101.

could be made that the Ranches' property was burned "despite the government['s] actions, not because of them." Def.'s Br. at 22, ECF No. 103.

The Court further notes that no one with expertise in fire behavior, firefighting, or firing operations testified that the Ranches would have been better off had the government done nothing at all to attempt to suppress the Alice Creek Fire. The Ranches' fire behavior expert, Darrell Schulte, did not and could not offer an opinion whether the Ranches' property would have burned absent the government's actions to contain the fire because he was not asked to analyze that question and it was not addressed in his expert report. Instead, he was asked to provide an opinion concerning whether the firing operations were a "substantial factor" in causing damage to the Ranches' property. See Order, ECF No. 80.

The Takings Clause does not employ a substantial factor standard of causation. For that reason, the Court granted in part the government's motion in limine to preclude Mr. Schulte from testifying regarding causation. See id. Without his testimony, the Ranches are left without evidence sufficient to support a finding that their property would not have burned even if the government had taken no actions to suppress the fire.

For example, the Ranches cite Fire Spread Probability ("FSPro") models for August 25 and 29, 2017 which they claim show that—left to burn freely without any action to suppress it—the fire was unlikely to spread to the Ranches' property. See Pls.' Br. at 20–21 (citing JX29, at 8) (arguing that the model run on August 25, which "assumes no suppression action is taken," demonstrates that the likelihood for the natural fire to spread to the ridge top was "less than two tenths of one percent"); id. at 21 (citing JX30, at 7–8, ECF No. 99-28) (arguing that the August 29 FSPro model shows that with no suppression action, the fire had a less than five percent likelihood of spreading east of the county road, towards the Ranches); id. at 32–33 (citing JX29, at 8) (arguing that the FSPro models from August 25 and 29 demonstrate the fire at the time posed "no risk to Green Creek Draft, and less than a .2% chance it will reach the head of North Fork of Green Creek").

The models, however, estimate the likelihood of future fire behavior under hypothetical future weather conditions as of a particular moment in time. The models of August 25 and 29 did not and could not have taken into consideration the weather conditions that actually occurred later, on September 1 and 2, for example. Nor did they account for the fire suppression actions undertaken at the direction of the incident management team and Mr. Cornwell (including those that did not involve firing operations) both before and after the models were run. In short, FSPro models are not especially useful for the purposes deployed here—as proof of what would have happened absent the other suppression actions the government undertook.

Further, by the time the Hotshots conducted their firing operations on September 2, the models upon which the Ranches rely had been superseded by actual events. Specifically, there had been red flag warnings in effect every day from August 29 (the date the latest model was run) until September 2 because of gusty winds and low relative humidity. Not only had the fire behavior forecasts on those dates predicted active fire behavior, the actual observed fire exhibited torching, wind-driven runs, and spotting as the fire grew. Because the August 29 model pre-dated and could not consider actual weather conditions, fire behavior, and fire growth that later developed, it is entitled to little weight as evidence of how the Alice Creek Fire would have spread had the government taken no actions in response.

Further, the Court is persuaded by the testimony of Messrs. Cornwell and Moore that the weather and conditions on the ground (and not the firing operations undertaken by the Hotshots) caused the fire to spread to the east during the evening of September 2 into September 3. The Court acknowledges that several attendees at the 2:00 PM "cooperator meeting" on September 2, including Messrs. McDonough and Ingersoll, were of the opinion that the spot fires allegedly visible from H-9 (on the county road north of Bedrock Creek) had been brought under control as a result of helicopter water drops. See Pls.' Br. at 14. But the fact is that—as described above—conditions changed. In the hours after that meeting, the winds kicked up, helicopter drops ceased, trigger points were reached, and defensive burns were initiated to protect life and property.

Finally, the Ranches cite infrared ("IR") map evidence to support their contention that the fire would not have reached the Ranches' property absent any government action. Pls.' Br. at 21–25.[12] Plaintiffs argue that the IR maps captured on August 28, taken prior to fire suppression efforts undertaken by the Hotshots and others, demonstrate that the fire's "growth to the northeast [had] almost completely stalled." Pls.' Br. at 22. Plaintiffs contrast this map with a September 3 snapshot taken after firing operations in an effort to show that the Hotshots (and not the wind and natural fire) had ignited additional hot spots. Id. at 23–24 (citing JX27, ECF No. 99-25). They allege that "given the IR data" it was impossible for the natural fire to be "the source of the blowup on September 2." Pls.' Br. at 27. Plaintiffs similarly rely nearly exclusively on IR map evidence to support their contention that the September 4 firing operations caused Plaintiffs' property in the vicinity of Green Creek Draft to burn. Id. at 30–32.

However, the Ranches' heavy reliance on IR data and maps is misplaced. For one thing, IR data is "interpreted data that's been overlaid on [geographic information system] data, so there [are] a lot of hands in the mix." Tr. 696:2–4 (Cornwell). IR maps "frequently [do not] pick up all the heat sources," Tr. 695:22–25 (Cornwell), and the accuracy of the specific IR maps the Ranches rely upon here has been credibly questioned, see Tr. 768:10–12 (Cornwell) ("There were more spot fires than I see here represented in the infrared."); Tr. 661:18–19 (Moore) (explaining there were "a lot of times" when the IR maps were not accurate); Tr. 662:19–24 (Moore) ("I think it's unfair to say that [the IR map is] the accurate footprint or the perimeter of the fire.").

To be sure, IR maps may be a useful tool for fire management. However, the Court puts more stock in the testimony of Messrs. Cornwell and Moore regarding the causes and behavior of the fire on the days in question, than it does on the maps. And, according to Mr. Moore, the fire in Division O was still active and had not stalled on September 2. Tr. 639:5–6 (Moore); see also Tr. 769:16–770:6 (Cornwell) (emphasizing that the fire had not stalled and still maintained "plenty of heat" even if the fire "wasn't necessarily moving hard.").

In short, the Ranches have not proven that—had the government simply allowed the Alice Creek Fire to burn and not undertaken any containment or fire suppression efforts—their

[12] IR maps are generated with data from an overflight by the USFS; they depict "where intense or scattered heat is" and "establish a fire perimeter." Tr. 412:11–23 (Schulte); Tr. 493:14–21 (Bird).

property would not have burned. Therefore, they have not met their burden of proving causation under the Takings Clause.

CONCLUSION

On the basis of the foregoing, the Clerk is directed to enter judgment for the government.

IT IS SO ORDERED.

s/ Elaine D. Kaplan
ELAINE D. KAPLAN
Judge