IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF SOUTH DAKOTA CENTRAL DIVISION

GOVERNOR KRISTI NOEM, in her official capacity as the Governor of South Dakota, et al.,

Plaintiffs,

Case No. 3:21-cv-03009

v.

DEB HAALAND, in her official capacity as United States Secretary of the Interior, et al.,

Defendants.

PLAINTIFFS' MOTION FOR PRELIMINARY INJUNCTION

South Dakota has hosted an annual Independence Day fireworks celebration at Mount Rushmore National Memorial (the "Memorial") since 1998. After a several-year pause due to forest conditions, the State resumed the event in 2020, pursuant to a permit issued by the Department of the Interior (the "Department"). The Department conducted a risk assessment and determined that the fireworks show posed little risk to the environment or public safety, and the State hosted a safe and successful event on July 3, 2020.

This year, however, the Department denied the State's permit request for an identical fireworks celebration in July 2021, even though risk levels are even lower this year than they were in 2020. Worse, the Department provided no substantive

explanation for the denial. Plaintiffs, Kristi Noem, in her official capacity as Governor of South Dakota, and the State of South Dakota (the "State"), challenge this denial as an arbitrary and capricious agency action under the Administrative Procedure Act, 5 U.S.C. §706.

Plaintiffs ask this Court to issue a preliminary injunction requiring Defendants to grant the State's request for a permit to host a fireworks celebration at the Memorial on July 3, July 4, or July 5, 2021. Fed. R. Civ. P. 65; D.S.D. Civ. LR 65.1.

Plaintiffs are entitled to preliminary relief. The permit denial is a likely violation of the APA because it was issued without any reasoned explanation, and DOI's decision runs counter to the evidence in the record. Plaintiffs will be irreparably harmed in the absence of preliminary relief: The State and its economy will lose tens of millions of dollars in direct spending and earned advertising if the fireworks event is canceled, and the State will also suffer reputational damages that cannot be remedied through an award of damages. And because the permit denial is likely unlawful, the equities and public interest necessarily favor an injunction. For all these reasons, which are detailed in an accompanying memorandum of law, per D.S.D. Civ. LR 7.1(B), the Court should grant this motion and enter a preliminary injunction.

Dated: April 30, 2021

Respectfully submitted,

/s/Katie Hruska

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CERTIFICATE OF SERVICE

I hereby certify that on April 30, 2021, I caused the foregoing document to be served on all parties through in-person service of process.

/s/Katie Hruska Katie Hruska

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PLAINTIFFS' MEMORANDUM OF LAW IN SUPPORT OF MOTION FOR PRELIMINARY INJUNCTION

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INTRODUCTION

Independence Day should "be celebrated" by every generation of Americans "with Pomp and Parade, with Shews, Games, Sports, Guns, Bells, Bonfires and Illuminations from one [e]nd of this Continent to the other." John Adams, Letter from John Adams to Abigail Adams, July 3, 1776, archived at Massachusetts Historical Society, https://bit.ly/3ahI2Ef. As a "distinctly national monument," Mount Rushmore National Memorial (the "Memorial") was designed to be "a national shrine to which future generations will repair to declare their continuing allegiance to independence [and] self-government." Calvin Coolidge, Address at the Opening of Work on Mount Rushmore in Black Hills, SD, Aug. 19, 1927, archived at https://bit.ly/32qBiiZ. Throughout its existence, the Memorial has "celebrated the national history and spirit of democracy during the July 4th holiday." Ex. A, National Park Service, July 4th Holiday Fireworks Program Environmental Assessment, 1-3 (April 2003) ("April 2003 Assessment").

The Department of the Interior ("DOI") itself has recognized the "need for the Memorial to host a fun, inspirational, traditional, and educational program celebrating our nation's birthday," through "a marquee event, such as fireworks." *Id.* Thus, consistent with the Founders' vision for Independence Day commemorations and the purpose of the Memorial itself, the Memorial has hosted safe and responsible Independence Day fireworks shows many times over. The events draw thousands of visitors every year and have "a huge impact" on the State's economy and its residents'

"sense of pride." Justin Gurley, *Booms, Blasts, and Cracks Heard* Round the World, Pennsylvania State University Library Center for the Book, Spring 2010.

Each of the previous four presidential administrations allowed the Memorial to conduct a patriotic fireworks show on Independence Day Weekend; permits were denied only when concrete, precisely articulated safety risks or logistical roadblocks rendered the shows objectively unsafe or impracticable. Even then, the State and the federal government were in lockstep agreement about the importance of the Memorial's Independence Day celebrations and the necessity of their continued existence. In October 2019, DOI and the State signed an agreement to continue the traditional fireworks show in 2020 and the years thereafter. Just last year, DOI issued the State a permit to hold an outdoor Independence Day celebration at the Memorial. That event was a rousing success, and not a single COVID-19 case was traced back to it.

Earlier this year, however, DOI departed from this longstanding precedent and reneged on its agreement with the State. On March 11, 2021, DOI sent the State an abrupt, 620-word letter stating that the Independence Day fireworks show would not be allowed at the Memorial this year. The letter contained no specific factual findings and referenced no implementing laws or governing regulations.

The denial letter was instead a patchwork of vague and speculative purported concerns about: (1) the COVID-19 risk to spectators who would visit the Memorial; (2) the event (paradoxically) preventing "tens of thousands" of others from visiting the Memorial; (3) tribal leaders' opposition to the event; (4) the potential environmental

impact; and (5) a hypothetical conflict with an unidentified construction project scheduled to be completed in June. The letter made no attempt to quantify or otherwise characterize the risk level for this year's planned event nor did it explain how the risks purportedly differed from the risk level for the exact same event last year, which DOI approved.

This Court should preliminarily enjoin DOI's denial of the permit and order it to issue a permit for the event expeditiously. First, the State is likely to succeed on the merits. The reasons DOI offered for its denial were inconsistent with its own regulations and contradicted by the administrative record. Tellingly, none of DOI's explanations are longer than a few sentences or contain any discussion of objective criteria or factual findings. And DOI did not even attempt to justify its abrupt about-face following a successful event last year. That is the definition of an arbitrary and capricious agency action under the Administrative Procedure Act ("APA"). See, e.g., Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983) (an agency's failure to "articulate a satisfactory explanation for its action" is arbitrary and capricious). DOI's decision is also not supported by the record it had before it.

Second, the State will suffer several irreparable injuries in the absence of preliminary injunctive relief. The State and its businesses will (1) lose substantial income that they cannot recover because of the federal government's sovereign immunity, (2) lose incalculable publicity and good will that normally accompanies the event, and (3) suffer reputational harm from the perception that visiting the Memorial is unsafe.

Third, the balance of equities and public interest strongly cut in favor of injunctive relief. There is no counterbalance to the harms that the State will suffer. DOI itself is not harmed by the event. And COVID-19 is the only public harm that DOI has claimed with any specificity. The safety and success of last year's event—when the pandemic was far worse than it is now—completely undermine DOI's claim on this score. The public interest likewise favors the State because thousands of Americans visit the Memorial for the fireworks show with many more watching from home. In addition, it is always in the public's interest to compel federal agencies to abide by their governing regulations when deciding whether to issue permits.

For these reasons and those outlined below, the Court should grant the State's motion for preliminary injunction and order DOI to issue it a permit to conduct the fireworks show.

BACKGROUND

A. The Memorial's unique importance to Independence Day celebrations in the United States

"A visit to Mount Rushmore is a moment of communion with the very soul of America." George H.W. Bush, Remarks at the Dedication Ceremony of the Mount Rushmore National Memorial in South Dakota, July 3, 1991. Presidents from across the political spectrum have consistently recognized the Memorial as a monument of "permanent importance" that future generations would visit to celebrate the liberties enshrined in the Constitution and seek inspiration from the ideals of the American founding.

Franklin Delano Roosevelt, Informal Extemporaneous Remarks By The President: Mount Rushmore National Memorial, Aug. 30, 1936 (predicting that Americans would visit the Memorial for "thousands and thousands of years" to celebrate their forebearers' efforts "to preserve ... a decent form of government to operate under"). And, indeed, Americans have done just that. Millions visit the Memorial each year. Many of them do so over the Fourth of July weekend because "the significance of Independence Day holds special meaning at Mount Rushmore." Ex. B, Memorandum of Agreement Between the Department of the Interior of the United States of America and the State of South Dakota, 1, May 6, 2019 ("MOA")

The fireworks show is a crucial, and "marquee," part of that experience. April 2003 Assessment at 1-2. DOI itself has noted that "[t]he addition of the fireworks program in 1998" spurred "a substantial increase in the number of visitors to the Memorial and surrounding area." From 1998 to 2009, tens of thousands of Americans across the country traveled to South Dakota to participate in what DOI has described as a "patriotic event that celebrates the best of America and provides an emotional experience for all those who attend." April 2003 Assessment at 3-13. Last year, for example, 7,500 people visited the State to celebrate Independence Day at the Memorial. Declaration of James Hagen ¶6. And those visitors spent more than \$2 million over the holiday weekend alone. *Id.* With millions of Americans receiving the COVID-19 vaccine every day, the State expects the number of visitors will increase over last year if the event occurs. *Id.* ¶7.

The fireworks show does not just draw visitors for the event, however—it also provides a significant boost to the State's economy and small businesses in other ways. Critically, it burnishes "the image of South Dakota and the Black Hills" by providing "valuable free advertising" about the State "from local, national, and international news coverage of the [event]." April 2003 Assessment at 3-13. Because the event is watched on television by millions of people in the United States and across the world, the State receives tens of millions of dollars in advertising value that increases tourism to the State both on Independence Day weekend and throughout the rest of the year. Declaration of James Hagen ¶6, 8-9. That leads directly to significant income for the State's small business and tax revenue for the State and local governments. $Id \P 6, 10$. Last year's event had an advertising value of at least \$22 million according to conservative estimates. Id. ¶4. And Google searches for "Mount Rushmore" during and after the event reached an all-time high—1,250% higher than the previous record—and web traffic to the State's tourism website increased by 872% compared to 2019. *Id.* ¶5. There is no doubt that the event was an economic lifeline for the nearly 50,000 South Dakotans who work in the State's tourism industry and who were battered by the effects of the COVID-19 pandemic. *Id.* ¶10.

The event's popularity is precisely why it was so harmful when the State and DOI jointly decided to cancel the show in 2010 because a rare infestation in the pine forest surrounding the Memorial created a wildfire risk that was "unlike any year before." Rapid City Journal, *Mount Rushmore fireworks canceled*, Jan. 14, 2010,

https://bit.ly/2P0b2cd. At that time, both parties expressed confidence that the show would return the following year. *Id.* Those conditions ultimately persisted for several years and prevented the show from returning quickly. Throughout those years of postponement, however, the State and DOI were aligned in the belief that that the fireworks show was a seminal event Rapid City Journal, Mount Rushmore fireworks canceled, Jan. 14, 2010, https://bit.ly/2P0b2cdfor both South Dakota and the nation, and that it should be resumed as soon as feasible.

B. The State and DOI enter into a Memorandum of Agreement and Project Agreement to restore the Memorial's fireworks show.

The State and DOI initiated substantive discussions in early 2019 about restarting the traditional fireworks show on Independence Day weekend. Declaration of Kennedy Noem ¶3. Those discussions culminated with DOI and the State signing a memorandum of understanding on May 6, 2019 committing "to exercise their full authorities ... to work to return fireworks to [the Memorial] in a safe and responsible manner on July 3, July 4, or July 5, *beginning in the year 2020*." MOA at 2 (emphasis added).

On October 3, 2019, DOI's then-Deputy Assistant Secretary for Fish and Wildlife and Parks Ryan Hambleton sent South Dakota Governor Kristi Noem a draft Project Agreement to renew the fireworks show. Hambleton "reach[ed] out personally" to Governor Noem "on behalf of DOI in order to be certain" that the State knew "how

important" the partnership was to DOI and that DOI "value[d]" the State's "input on this process." MOA at 4.

As part of the Project Agreement, the State committed to use a "GO/NO-GO Checklist" as a "last-minute decision-making tool prior to ignition of the fireworks." Ex C, Appendix B. The checklist included eleven separate safety conditions that had to be satisfied before the fireworks show was authorized. *Id.* Those determinations included whether the Fire Danger Rating was at a level of "concern," whether the wind speed was below the "preferred" level of "less than 10mph for a 10-minute average," and whether the National Weather Service had "predicted red flag warnings" for the show day or the following day. *Id.* All of the conditions were to be evaluated within one hour of the scheduled start time, and the event would be canceled if any of the results were not "acceptable." *Id.* Furthermore, the State was required to present the contents of the checklist and a recommended course of action to the Secretary of the Interior, who held final approval authority for the show. *Id.*; *see also* Declaration of Kennedy Noem ¶4-9.

On July 3, 2020, the event passed all of these safety protocols and the State hosted approximately seven thousand visitors for its annual Independence Day fireworks show. *Id.* State and Memorial employees dutifully ensured that all safety measures were properly in place, and the event occurred without incident—as it always has. Moreover, although the event took place during a peak in the COVID pandemic—

long before any vaccines had been administered—there were zero documented cases of COVID transmission linked to the event. *Id.* ¶11

C. DOI abandons the Memorandum of Agreement and refuses to permit the 2021 fireworks display.

On October 19, 2020, the State submitted a new permit request to DOI to conduct an Independence Day fireworks show that would be virtually identical to the show DOI had approved the previous year. Ex. D. The State followed up on that application on December 11, 2020, December 22, 2020, and January 4, 2021, to ensure that DOI had all the information it needed for the event. Ex. E. DOI never asked for any additional information. As result, and because the 2020 show was conducted successfully under substantially higher risk conditions than the proposed 2021 event, the State assumed that DOI would continue to operate in good faith under the MOA and approve the request.

But on March 11, 2021, DOI suddenly denied the permit request in a short, one-and-a-half page letter. Ex F, Herbert C. Frost, *Letter to Jim Hagan*, Mar. 11, 2021 ("Denial Letter"). In that letter, DOI claimed that it denied the State's request after "careful consideration" of the relevant facts, briefly pointing to five "factors" that "all weigh into the decision whether to hold a 2021 event":

First, DOI noted the waning COVID-19 pandemic and remarked that "planning an event of this size and magnitude that draws people from across the country raises very serious concerns about the ability to adhere to Center for Disease Control

guidance" on social distancing. The letter further stated that, at the outdoor fireworks show "last year, most participants were not wearing face coverings, which are now required in all national parks." DOI did not mention the fact that there was no requirement that visitors to national parks wear face coverings when the previous event was held in 2020.

Second, DOI noted in a single sentence that unidentified tribal leaders opposed fireworks at the Memorial, and that it was "committed to respecting tribal connections to the site and building stronger relationships with associated tribes." DOI also revealed, however, that its knowledge of tribal opinions was outdated because "the park committed to the 13 affiliated tribes to conduct a Tribal Cultural Sites/Traditional Cultural Properties Survey of the Memorial in 2020," but that survey had been "delayed until summer 2021."

Third, DOI mentioned that "[t]he park continues to monitor levels of perchlorates in the water and the potential for wildfire."

Fourth, DOI suggested that the fireworks show on July 3 could limit visitor access to the park on Independence Day because, in DOI's view, the 2020 event prevented "tens of thousands" of people from entering the park on and/or forcing them to cut their visits short.

Fifth, DOI stated that the July 3 event could delay the "final phase of a significant construction project in the park" that is already "scheduled to be complete in June 2021."

D. Governor Noem responds to DOI's decision.

The State tried to address DOI's alleged concerns in the Denial Letter and reach a resolution that would allow the show to happen. On April 13, 2021, Governor Kristi Noem sent a letter to President Biden with a point-by-point rebuttal of DOI's reasons for denying the State's permit request. Ex. G, Kristi Noem, Letter to President Joseph R. Biden, April 13, 2021 ("Noem Letter"). Governor Noem started by pointing out that on March 11, 2021—the same day that DOI rejected the July 4th fireworks show—President Biden addressed the nation from the Oval Office and said that the nation would "mark [its] independence from this virus" by July 4, 2021. Governor Noem also highlighted that last year the Memorial "hosted more than seven thousand people" and "[c]ontact tracing weeks after the event could not trace a single case of COVID-19 to the event."

Governor Noem also responded to DOI's concerns about the event's effect on tribal relations. Though DOI did not elaborate on those concerns in the Denial Letter, Governor Noem explained that "the tribes were consulted before last year's event and invited to attend our planning meetings," the "Department of Tribal Relations was involved in every step of the process," and there was "Native American-led programming before the fireworks itself." *Id.*; *see also* Declaration of Kennedy Noem ¶4 (highlighting the State's outreach to tribal leaders and NPS's regional Office of Tribal Relations/Indian Affairs).

In addition, Governor Noem explained that the "environmental risks to the park" that NPS mentioned in its letter should be of no concern. "[P]rior to conducting the 2020 celebration, NPS published a 35-page Finding of No Significant Impact (FONSI) stating that the event would not harm the natural environment to the Black Hills." And "when environmental conditions have not been favorable to the fireworks celebration We have refrained from holding the event. The same approach would occur this year."

Governor Noem likewise responded to DOI's concern that the event could preclude others from visiting the memorial. She explained that DOI "is painting a very misleading picture" because "[l]ong before the pandemic hit, the State of South Dakota agreed to limit attendance for the fireworks due to previous years' poor crowd control and the resulting overcrowding." That is "also why we celebrate on July 3, so that everyone can enjoy the Memorial on July 4."

Governor Noem concluded by detailing the extensive precautions and procedural safeguards the State and NPS used to ensure that last year's show would "be held safely and responsibly." Those protocols included, among other things, "follow[ing] every item on the National Environmental Policy Act (NEPA) compliance checklist"; "creat[ing] a Go/No-Go checklist with conditions that must be met on the day of the event, including fire preparedness levels, wind speeds, and burning index; complying with the requirement that the checklist be "signed by the Interior Department on the day of the event"; "implement[ing] an incident management team

that met every guideline outlined by Ready.gov"; ensuring there was "an emergency operations center on site for two weeks"; creating "an emergency response checklist and manual" for staff; and "coordinat[ing] with NPS on all communication activities relating to the event." *Id.*; *see also* Declaration of Kennedy Noem ¶¶4-9.

Governor Noem did not receive a response, and DOI provided no further clarification or justification separate from the Denial Letter. Faced with no other option and no prospect of cooperation from DOI, the State brought this suit to prevent the irreparable harm caused by DOI's denial of its permit request.

STANDARD OF REVIEW

"A district court considering injunctive relief evaluates the movant's likelihood of success on the merits, the threat of irreparable harm to the movant, the balance of the equities between the parties, and whether an injunction is in the public interest." Sessler v. City of Davenport, Iowa, 990 F.3d 1150, 1154 (8th Cir. 2021). A plaintiff satisfies the first prong if it demonstrates a "fair chance of prevailing" on the merits. Richland/Wilkin Joint Powers Auth. v. United States Army Corps of Engineers, 826 F.3d 1030, 1040 (8th Cir. 2016) (quoting Planned Parenthood Minnesota, N. Dakota, S. Dakota v. Rounds, 530 F.3d 724, 732 (8th Cir. 2008)). This test is "appropriate" in challenges to "forms of other government action such as administrative actions by federal, state, or local government agencies," when the "full play of the democratic process [is not] involved." D.M. by Bao Xiong v. Minnesota State High Sch. League, 917 F.3d 994, 1000 (8th Cir. 2019).

ARGUMENT

I. The State is likely to succeed on the merits of its APA claim.

The APA requires a reviewing court to hold unlawful and set aside any agency action that is "arbitrary, capricious, [or] an abuse of discretion." 5 U.S.C. §706(2)(A). Like all agency actions, an agency's decision to deny a permit falls under the APA and therefore must satisfy the arbitrary and capricious standard. *See McClung v. Paul*, 788 F.3d 822, 828-30 (8th Cir. 2015); *see also Drakes Bay Oyster Co. v. Salazar*, 921 F. Supp. 2d 972, 985 (N.D. Cal. 2013) ("[A] decision not to issue a special use permit constitutes 'agency action' under the APA.").

"To withstand judicial review under this standard, an agency must 'articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made." Grace Healthcare of Benton v. U.S. Dep't of Health & Hum. Servs., 603 F.3d 412, 422 (8th Cir. 2009) (quoting Motor Vehicle Mfrs., 463 U.S. at 42). Agencies must provide such a "reasoned explanation" for their actions "to ensure that all agencies offer genuine justifications for important decisions, reasons that can be scrutinized by the courts and the interested public." Dep't of Com. v. New York, 139 S. Ct. 2551, 2575–76 (2019). Whether an agency decision is justified by a reasoned explanation is determined solely by the agency's "contemporaneous explanations" for the decision. Dep't of Homeland Sec. v. Regents of the Univ. of California, 140 S. Ct. 1891, 1909 (2020).

An agency also may not "offer[] an explanation for its decision that runs counter to the evidence before the agency." *Sugule v. Frazier*, 639 F.3d 406, 411 (8th Cir. 2011). And it must "support its predictive judgments" with actual evidence. *Bus. Roundtable v. S.E.C.*, 647 F.3d 144, 1149-50 (D.C. Cir. 2011); *see also Grace Healthcare of Benton*, 603 F.3d at 422 (holding that agency failed to satisfy arbitrary and capricious review where its decision "was based on pure speculation"). And although courts afford some deference to agency decisions, "deference ... does not mean [a] rubber stamp." *Niobrara River Ranch, L.L.C. v. Huber*, 373 F.3d 881, 883 (8th Cir. 2004) *see also McClung*, 788 F.3d at 828 (upholding agency permitting decision only after determining that the administrative record "provide[d] ample support" for the agency's action); *Bd. of Cty. Comm'rs of Cty. of Adams v. Isaac*, 18 F.3d 1492, 1497 (10th Cir. 1994) (A "court will not defer to irrational agency judgments").

DOI does not come close to meeting this standard, for several independent reasons.

A. DOI's decision is arbitrary and capricious because it failed to provide a reasoned explanation for its actions.

DOI's cursory Denial Letter—which is barely more than a page long—does not supply a "reasoned explanation" for the agency's refusal to allow an event that was held successfully just last year. Four of DOI's five justifications span just a sentence or two and contain no accompanying facts, elaboration, or explanation. On the neighboring tribes, for example, DOI noted that some tribes "expressly oppose fireworks at the

memorial." But DOI did not identify the tribes, explain why they oppose fireworks, explain why that opposition could not be accommodated, or explain how this consideration has changed since last year's successful event.

DOI also noted that it "continues to monitor levels of perchlorates in the water and the potential for wildfire." Denial Letter at 2. Yet DOI did not explain whether the perchlorate levels are at inappropriate levels or whether there is a current risk of wildfire, much less explain why those issues weigh against issuing a permit. All DOI could say is that it "continues to monitor" these issues.

Likewise, DOI noted in a single sentence that "[t]he 2020 event ... impacted tens of thousands who were not able to visit the memorial or had their visit cut short." Denial Letter at 2. But DOI does not actually *say* that it believes the same would be true for 2021 if the event were executed in the same way. And DOI did not explain whether changes to the event could mitigate that perceived problem.

DOI also suggested in a single sentence that the event could delay an unidentified construction project. But DOI did not explain how a one-day event could affect this project when it is (a) already in its "final stages" and (b) set to be completed June—a month *before* the event.

None of these explanations provides "a rational connection between the facts found and the choice made," *Grace Healthcare of Benton*, 603 F.3d at 422. Nor do they provide sufficient information so that they "can be scrutinized" by the Court. *Dep't of*

Com, 139 S. Ct. at 2575–76. DOI's reliance on these factors is thus arbitrary and capricious.

That leaves DOI's fifth justification: its purported concerns about COVID-19. Unlike the other four justifications, DOI dedicated a paragraph to COVID-19. Yet DOI managed to contradict its own reasoning just a few sentences later. Allowing the fireworks event would be too risky, DOI explained, because it "draws people from across the country" and "raises very serious concerns about the ability to adhere to Center for Disease Control guidance, which recommends that large gatherings be avoided." Denial Letter 1. Immediately thereafter, however, DOI justified its decision by noting that the event could prevent "tens of thousands" of tourists from accessing the Monument. Id. at 2. In other words, DOI claimed that crowds are undesirable for fireworks but desirable for other purposes. And DOI made no attempt to distinguish between these situations—all of which involve outdoor activities, where transmission risk is low—in terms of their COVID risk. DOI's reasoning is "internally inconsistent and therefore arbitrary." Bus. Roundtable, 647 F.3d at 1153; Nat'l Parks Conservation Ass'n v. E.P.A., 788 F.3d 1134, 1141 (9th Cir. 2015) ("An internally inconsistent analysis is arbitrary and capricious."); see also Scholl v. Mnuchin, 489 F. Supp. 3d 1008, 1037 (N.D. Cal. 2020) ("While the court is cognizant of the burdens imposed by society's response to the COVID-19 ... a basic tenet of the APA (and government generally) is to explain the basis for an agency's decision that affects legal rights and responsibilities.").

Even setting aside these internal inconsistencies, however, DOI's decision is arbitrary and capricious because the agency does not explain why it changed positions from last summer when it approved a substantially similar event. To be sure, agencies can change their mind. But the APA requires that they "provide a reasoned explanation for the change." *Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2125 (2016). And the agency must "at least 'display awareness that it is changing position' and 'show that there are good reasons for the new policy." *Id.* (emphasis added). That is because "a reasoned explanation is needed for disregarding facts and circumstances that underlay and were engendered by the prior policy." *Id.*

Nowhere does DOI explain why it changed its position after last year's successful event. For example, it did not explain why COVID-19 was an acceptable risk last year (when the pandemic was worse) but not this year (when cases are plummeting and millions of Americans are being vaccinated every day); did not explain why tribal concerns were not an issue last year but are this year; and did not explain why water perchlorates and the potential for wildfire were not problems last year but are this year. Indeed, one would hardly know from the Denial Letter that DOI had changed positions at all, much less that the event was successfully held just one year ago. DOI's failure to offer a reasoned explanation for its abrupt about-face renders its decision arbitrary and capricious. *Id.*

B. DOI's decision is arbitrary and capricious because it runs counter to the evidence.

There is also no evidence in the record supporting DOI's justifications. Again, DOI provided *nothing* beyond ipse dixit to document its claims of tribal opposition; how the event would interfere with an unnamed construction project; or the park's water perchlorate levels or risk of wildfire. These failures to "provide a satisfactory explanation for its actions based on relevant data," *Niobrara River Ranch, LLC.*, 373 F.3d at 884, constitute classic arbitrary and capricious decision making. And DOI's proffered concerns about "tens of thousands" of visitors is misleading. Long before the COVID-19 pandemic, South Dakota agreed to limit attendance for the fireworks show to ensure adequate crowd control measures could be implemented. Noem Letter at 2; Declaration of Kennedy Noem ¶4.

DOI's failure to cite any specific evidence is unsurprising because the record flatly contradicts its proffered justifications. *See, e.g., Sugule,* 639 F.3d at 413 (agency acted arbitrarily and capriciously because its "conclusion 'runs counter to the evidence before the agency."); *Dep't of Commerce,* 139 S. Ct. at 2593 (same). For example, DOI's suggestion that the show could create unsafe perchlorate levels in local water sources is inconsistent with the 2020 FONSI. That comprehensive environmental assessment stated that "additional analysis may be necessary to evaluate future events" if soil samples showed "that conditions had *changed meaningfully*" after the 2020 event. Ex. H at 3 (emphasis added). DOI did not claim that perchlorate levels had changed

meaningfully, only that it would "continue[] to monitor the levels of perchlorate." Denial Letter at 2.

This again leaves COVID-19. On that issue, the Denial Letter rested on factual assumptions that are at odds with the administration's own public statements. The Biden administration has delivered on its promise that every American adult will be eligible to get a COVID-19 vaccine months before Independence Day, and state governments are increasingly lifting social distancing mandates. See Press Briefing by White House COVID-19 Response Team and Public Health Officials, White House (April 23, 2021) ("[T]hanks to President Biden's directive, everyone 16 and over is now eligible to get the vaccine."), https://bit.ly/2R159fi ("Vaccine Announcement"). DOI's description of the COVID-19 risks posed by an outdoor fireworks show are also inconsistent with CDC guidance, which states that outdoor activities pose the lowest risk. See Participate in Outdoor and Indoor Activities, CDC (Jan. 14, 2021), https://bit.ly/3nnrwro. When an agency's explanation for a decision so clearly conflicts with the executive branch's public posture, courts "are not required to exhibit a naivete from which ordinary citizens are free" and should "not ignore the disconnect between the decision made and the explanation given." *Dep't of Com.*, 139 S. Ct. at 2575-76.

DOI's COVID-19 concerns also rest on "pure speculation" rather than being grounded in objective facts. *See Grace Healthcare of Benton*, 603 F.3d at 422. DOI relies on two factors to support its COVID-19 justification. First, DOI asserts that the size of the event would "make it difficult, if not impossible, to comply with social distancing

protocols if they continue to be in place in early July." Denial Letter at 1 (emphasis added). By its own admission, then, DOI denied a permit request in March 2021 because it speculates that temporary public health guidance about outdoor events may still be in place in July 2021. In fact, the CDC has already begun to update its guidance regarding outdoor activities in light of undisputed science showing that such activities pose minimal risks of COVID transmission, especially for those who (like nearly 52% of Americans) have been vaccinated. See Interim Public Health Recommendations for Fully Vaccinated People, CDC (Apr. 27, 2021), https://bit.ly/3t06qk9; Vaccine Announcement"), supra.

Second, DOI wrote that "as we saw last year, most participants were not wearing face coverings" Denial Letter at 1. But unlike in 2020, masks "are now required in all national parks where physical distancing cannot be maintained." *Id.* DOI's explanation, in other words, rests on a suggestion that visitors disregarded a park policy that *did not exist last year*, and speculation that (assuming the policy is still in place in July) visitors will actually disregard it later this year. Such rank speculation does not come close to constituting reasoned decisionmaking under the APA.

For all these reasons, the State is likely to succeed on its claim that DOI's decision was arbitrary and capricious.

II. The State satisfies the remaining criteria for a preliminary injunction.

The State easily satisfies the remaining criteria for a preliminary injunction.

Irreparable harm. The State will suffer irreparable harm in the absence of an injunction for several independent reasons. First, the State and its businesses will lose substantial income that they cannot recover because the federal government's sovereign immunity forecloses any possibility of recovering monetary damages. See Gen. Motors Corp. v. Harry Brown's, LLC, 563 F.3d 312, 320 (8th Cir. 2009) ("Irreparable harm occurs when a party has no adequate remedy at law, typically because its injuries cannot be fully compensated through an award of damages."); Xiaomi Corp. v. Dep't of Def., 2021 WL 950144, at *10 (D.D.C. Mar. 12, 2021) ("[W]hen a plaintiff's alleged damages are unrecoverable, such as here, due to the sovereign immunity enjoyed by Defendants, courts have recognized that unrecoverable economic loss can indeed constitute irreparable harm.").

Second, and separate from that lost income and tax revenue, the State will lose incalculable publicity and good will. *See Xiaomi Corp.*, 2021 WL 950144, at *9 ("[B]ecause '[i]njury to reputation or goodwill is not easily measurable in monetary terms' it is typically 'viewed as irreparable."") (collecting cases). Last year's event created enormous publicity for the State. Web traffic to the South Dakota Department of Tourism's website increased by 872% and pushed Google searches for "Mount Rushmore" to an all-time high—1,250% higher than the previous record. Declaration of James Hagen ¶5. That type of exposure inspires thousands of visitors to travel to the State during other parts of the year; and similar benefits will be lost if the State cannot hold the event this year. *Id.* ¶¶8-10, 14. The fireworks celebration has another intangible benefit for

the State: it burnishes the State's image and reinforces residents' sense of pride in their home state. *Id.* ¶11. Cancelling it will erase that as well.

Third, DOI's suggestion that it is unsafe to visit the Memorial in July—even for low-risk outdoor activities—inflicts reputational harm. Because tourism is such a significant part of South Dakota's economy, the State has taken many steps to convince potential tourists that visiting the State during the pandemic is safe. Declaration of James Hagen ¶12. For example, the Department of Tourism has included a "safe travel" message in all of its television, print, and digital marketing. *Id.* It has also developed a COVID-19 resource page for the South Dakota tourism industry that includes the latest guidelines and recommendations from the CDC and South Dakota Department of Health. Id. It has also shared monthly COVID-19 email updates with thousands of members of the tourism industry. Id. Denying the permit on grounds that visiting Memorial is unsafe will contradict the State's own efforts to encourage tourism. *Id.* ¶13. And because the Memorial and the fireworks show are a significant part of the State's image, it will unnecessarily deter visitors who otherwise would have visited the State. *Id.*; see Xiaomi, 2021 WL 950144, at *10 (holding that it is irreparable harm for an agency to mislabel a party in a manner that harms its reputation). And there is simply no way to measure these losses, Declaration of James Hagen ¶9, 11, 13, which means DOI's actions will cause the State irreparable harm.

Balance of harms. The balance of the equities also favors an injunction. The State has highlighted all the harms that will befall it if the event does not go forward.

See supra. On the other hand, the State is not aware of even the "slight[est]" harm that would befall DOI if the Court enters an injunction. D.M. by Bao Xiong, 917 F.3d at 1004. As for the public at large, the only harm to the public that DOI identified with more than a cursory mention is COVID-19. But last year the State was able to put on the exact same event by implementing a panoply of protocols to ensure the safety of its visitors and park employees. Declaration of Kennedy Noem ¶11. And even though the pandemic was far worse than it is today, contact tracers could not identify a single case of COVD-19 that originated at the event. Id. And this year's event will be even safer given that every American will have been eligible for a COVID-19 vaccine for almost three months before Independence Day. See Vaccine Announcement"), supra.

On safety more generally, the State would conduct the event with the same extensive precautions and procedural guardrails the State and DOI used last year. For example, the State would follow every item on the National Environmental Policy Act (NEPA) compliance checklist; adhere to a Go/No-Go checklist with conditions that must be met on the day of the event, such as fire preparedness levels, wind speeds, and burning index; plan the event subject to DOI's ultimate signoff on the day of the event; and implement an incident management team that meets every guideline outlined by Ready.gov, among other things. Declaration of Kennedy Noem ¶4-9.

For these reasons, a preliminary injunction will merely allow the State to hold the same Independence Day celebration that it successfully and safely held last year, and to do so under better conditions in terms of the COVID pandemic.

Public interest. An injunction would also be in the public interest. The Memorial's Fourth of July weekend fireworks is attended by thousands of Americans from every part of the country and watched on television by millions more. Declaration of James Hagen ¶¶6, 8. After the recent hardships imposed by the pandemic, the deprivation of an eagerly anticipated, patriotic event will be especially dispiriting. And "just as important as the public interest in potential economic gains is 'the public's confidence that its government agencies act independently, thoroughly, and transparently when reviewing permit applications." Sierra Club v. U.S. Army Corps of Engineers, 645 F.3d 978, 997 (8th Cir. 2011).

III. The Court should direct DOI to issue the fireworks permit.

The APA provides that "a reviewing court shall ... compel agency action unlawfully withheld or unreasonably delayed." 5 U.S.C. §706(1). "[A]n arbitrary and capricious action is one that is 'unlawful' within the meaning of section 706(1)." *Hondros v. U.S. Civ. Serv. Comm'n*, 720 F.2d 278, 297 (3d Cir. 1983). So "when an agency arbitrarily or capriciously withholds action, [courts] may compel the agency to act." *Id.* at 297-298 (citing *Carpet, Linoleum & Tile Layers, Local Union No. 419 v. Brown*, 656 F.2d 564, 566–67 (10th Cir. 1981)); *see also ILMC v. Perez*, 2014 WL 1668131, at *15-16 (M.D.N.C. April 25, 2014) (same); *Huff v. Vilsack*, 195 F. Supp. 3d 343, 361-63 (D.D.C. 2016) (holding that an agency acted arbitrarily and capriciously and granting the plaintiff injunctive relief); *Roe v. Dep't of Def.*, 947 F.3d 207, 226 (4th Cir. 2020) (upholding district court's injunction based on arbitrary and capricious finding). A plaintiff thus can obtain

such relief where it "asserts that an agency failed to take a *discrete* agency action that it is required to take." New Holy v. DOI, 2020 WL 3542251, at *4 (D.S.D. June 30, 2020). And this framework applies where it is the agency's own regulations that remove the agency's discretion to act. See Norton v. S. Utah Wilderness Alliance, 542 U.S. 55, 65 (2004) ("The limitation to required agency action" applies to "agency action" that is "demanded by law (which includes, of course, agency regulations that have the force of law).").

DOI's regulations state it "shall deny a permit that has been properly applied for only upon a determination that ... one or more of the factors set forth in [36 C.F.R. §1.6(a)] would be adversely impacted." 36 C.F.R. §1.6(d) (emphasis added). Section 1.6(a), in turn, provides that DOI can deny a permit only if granting it would be inconsistent "with applicable legislation, Federal regulations and administrative policies," or would "adversely impact[]" (1) "public health and safety"; (2) "environmental or scenic values"; (3) "natural or cultural resources"; (4) "scientific research"; (5) "implementation of management responsibilities"; (6) the "proper allocation and use of facilities"; or (7) "the avoidance of conflict among visitor use activities." 1.6(a). By the plain text of the regulation, these are the "only" reasons that justify a permit denial. See 36 C.F.R. §1.6(d).

The 2021 fireworks show does not implicate any of the reasons for a denial listed in sections 1.6(a). As demonstrated, *supra*, 11, 17-18, DOI identified zero actual *evidence* that the event would "adversely impact" public health, the environment, or the "proper allocation and use of" the Memorial. And it certainly would not "conflict" with other

"visitor use activities" at the Memorial. With no viable factor to rely on under §1.6(a), DOI had no discretion to deny the permit under §1.6(d). *C.f.*, *Regents*, 140 S. Ct. at 1909 (holding that any agency can rely only on its "contemporaneous explanations for agency action.")

This is particularly true because DOI denied the State's permit request "after careful consideration." *See* Denial Letter at 1. To that end, "the Court must presume that the individual employees who" reviewed the State's application "undertook their duties in good faith." *Huff*, 195 F. Supp. 3d at 362-63. That requires a court to "credit the agency's representation that the [] application was given 'careful consideration' during the [review] process," which means "it is entirely reasonable to infer, based on the agency's own evaluation of the application at issue, *that no other reasons for the denial exist.*" *Id.*

As a result, "in lieu of remanding the case to the agency to perform its only permissible task (grant the application) ... the best course is for this Court to apply [the] obvious result." *Id.* When a court determines that an agency's justifications for the denial are meritless or inconsistent with its own regulations, "there is only one rational course for the Agency to follow upon remand.," *id.* at 362—granting the requested permit. This principle applies with even greater force where, as here, "time is of the essence." *Id.* at 363.¹

¹ DOI has (1) failed to articulate its reasoning and (2) its decision runs contrary to the evidence. *Compare* Section I(A) *with* Section I(B). The former can result in a remand to the agency to try again.

If the Court does not order DOI to grant the State its permit, then it should at a minimum remand the case to DOI with instructions to reconsider the State's application. The State needs at least 30 days before Independence Day to plan the event. Declaration of James Hagen ¶15. So should the Court remand, it should do so with an order compelling DOI to grant the permit or issue an updated decision by May 31, 2021. *See, e.g., A.L. Pharma, Inc. v. Shalala*, 62 F.3d 1484, 1492 (D.C. Cir. 1995) (remanding with a deadline to issue an updated decision with adequate justification for the agency's decision, after which the challenger would automatically be entitled to full relief); *Forest Guardians v. Babbitt*, 174 F.3d 1178, 1193 (10th Cir. 1999) (remanding with order for the agency to issue a new decision "as soon as possible."); *Rodway v. USDA*, 514 F.2d 809, 817-18 (D.C. Cir. 1975) (remanding with a deadline for the agency to reconsider its decision). That will give the State sufficient time to prepare for the fireworks show.

CONCLUSION

For the foregoing reasons, the State respectfully requests that this court grant the State's motion for preliminary injunction.

See Union Pacific R. Co. v. U.S. Dept. of Homeland Sec., 738 F.3d 885, 901 (8th Cir. 2013). The latter, however, counsels in favor of injunctive relief because "the application of the correct legal standard could lead to only one conclusion." *Id.*

Respectfully submitted,

Dated: April 30, 2021

/s/Katie Hruska

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CERTIFICATE OF SERVICE

I hereby certify that on April 30, 2021, I caused the foregoing document to be served on all parties through in-person service of process.

/s/Katie Hruska

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF SOUTH DAKOTA CENTRAL DIVISION

GOVERNOR KRISTI NOEM, in her official capacity as the Governor of South Dakota, et al.,

Plaintiff,

Case No. 3:21-cv-03009

v.

DEB HAALAND, in her official capacity as United States Secretary of the Interior, et al.,

Defendants.

DECLARATION OF KATIE HRUSKA

- 1. I am deputy general counsel for the South Dakota Governor's Office and counsel for plaintiff South Dakota (the "State").
- 2. I am over the age of eighteen and under no mental disability or impairment. I have personal knowledge of the following facts and, if called as a witness, I would competently testify to them.
- 3. The following materials attached as exhibits are true and accurate copies of documents pertaining to the State's permit applications to the Department of the Interior ("DOI") for fireworks celebrations at Mount Rushmore National Memorial (the "Memorial"):

- a. Exhibit A is an April 2003 National Park Service ("NPS") Report entitled
 "Mount Rushmore National Memorial July 4th Holiday Fireworks
 Program: Environmental Assessment";
- b. Exhibit B is a May 6, 2019 Memorandum of Agreement to renew the annual Independence Day fireworks celebration at the Memorial, signed by DOI and the State;
- c. Exhibit C is a June 24, 2020 Project Agreement between the State, NPS, and DOI for the 2020 fireworks celebration at the Memorial;
- d. Exhibit D is a permit request for the 2021 fireworks celebration at the Memorial, submitted to DOI by the State on October 19, 2020;
- e. Exhibit E is email correspondence about the State's 2021 permit request, exchanged between Wanda Goodman from the South Dakota Department of Tourism and Bradley Eggers from NPS on December 11, 2020, December 22, 2020, and January 4, 2021;
- f. Exhibit F is a March 11, 2021 letter from NPS Regional Director Herbert Frost to South Dakota Secretary of Tourism Jim Hagen denying the State's request for a permit to host the 2021 fireworks celebration;
- g. Exhibit G is an April 13, 2021 letter from South Dakota Governor Kristi Noem to President Joe Biden about the State's 2021 permit request; and

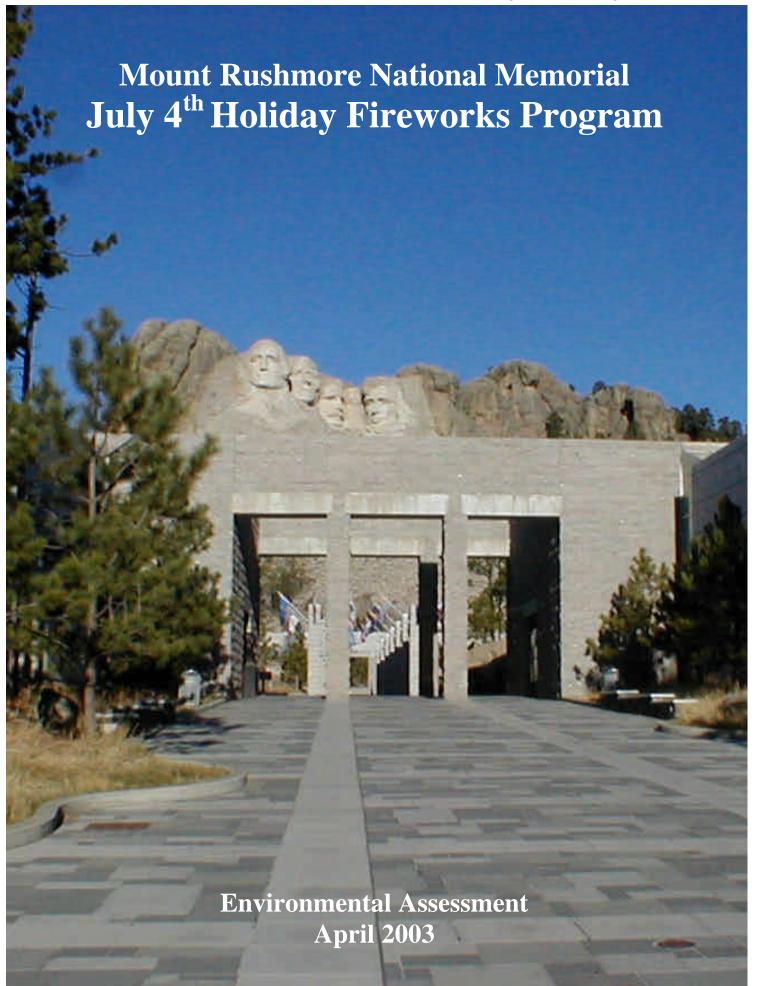
h. Exhibit H is an April 2020 NPS report entitled "Finding of No Significant Impact: Mount Rushmore National Memorial Independence Day Holiday Fireworks Event."

Pursuant to 28 U.S.C. §1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed this 30th day of April, 2021

/*s/Katie Hruska*Katie Hruska

EXHIBIT A



National Park Service Mount Rushmore National Memorial Environmental Assessment July 4th Holiday Fireworks Program

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Chapter 1 - Purpose and Need

1.1 Introduction

This Environmental Assessment (EA) documents the results of a study of the potential environmental impacts of an action proposed by the National Park Service to continue a

fireworks display at Mount Rushmore National Memorial as part of its July 4th Holiday celebrations.

This EA has been prepared in compliance with:

- The National Environmental Policy Act (NEPA) of 1969 (42 United States Code (USC) 4321 et seq.), which requires an environmental analysis for major Federal Actions having the potential to impact the quality of the environment;
- Council of Environmental Quality Regulations at 40 Code of Federal Regulations (CFR) 1500-1508, which implement the requirements of NEPA;

The Purpose of an Environmental Assessment (EA)

There are three primary purposes of an EA:

- To help determine whether the impact of a proposed action or alternative could be significant, thus an environmental impact statement (EIS) is needed;
- To aid in compliance with NEPA when no EIS is necessary by evaluating a proposal that will have no significant impacts, but that may have measurable adverse impacts; and
- To facilitate preparation of an EIS if one is necessary.
- National Park Service Conservation Planning, Environmental Impact Analysis, and Decision Making; Director's Order (DO) #12 and Handbook.

Key goals of NEPA are to help Federal agency officials make well-informed decisions about agency actions and to provide a role for the general public in the decision-making process. The study and documentation mechanisms associated with NEPA seek to provide decision-makers with sound knowledge of the comparative environmental consequences of the several courses of action available to them. NEPA studies, and the documents recording their results, such as this EA, focus on providing input to the particular decisions faced by the relevant officials. In this case, the Superintendent of Mount Rushmore National Memorial is faced with a decision to continue a fireworks display at Mount Rushmore National Memorial as part of its July 4th Holiday celebrations.

In making decisions about National Park Service administered resources, the Park Service is guided by the requirements of the 1916 Organic Act and other laws, such as the Clean Air Act, Clean Water Act, and Endangered Species Act. The authority for the conservation and management of the National Park Service is clearly stated in the Organic Act, which states the agency's purpose: "...to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." This authority was further clarified in the National Parks and Recreation Act of 1978: "Congress declares that...these areas, though distinct in character, are united...into one national park system.... The

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authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress."

The busts of four American Presidents – George Washington, Thomas Jefferson, Abraham Lincoln, and Theodore Roosevelt – were sculpted on the southeastern granite face of Mount Rushmore as "...a memorial... commemorative of our national history and progress..." (Act of March 3, 1925). This basic legislation authorized the carving and established the purpose of what was to become Mount Rushmore National Memorial. Subsequent legislation included charges to "administer, protect, and develop" the memorial. President Franklin Delano Roosevelt placed Mount Rushmore under the jurisdiction of the National Park Service by executive order on June 10, 1933. The purpose for which the park was established is to preserve and protect the memorial sculpture and the natural setting, and to provide for the access of the public and for the inspirational and educational appreciation of the cultural and natural resources of the memorial.

The requirements placed on the National Park Service by these laws, especially the Organic Act mandate that resources are passed on to future generations "unimpaired" (DOI, 2001a). This EA addresses whether the actions of the various alternatives proposed by Mount Rushmore National Memorial impair resources or values that are (1) necessary to fulfill specific purposes identified in the enabling legislation of the memorial, (2) key to the natural or cultural integrity of the memorial or opportunities for enjoyment of the memorial, and (3) identified as a goal in the memorial's general management plan or other Park Service planning documents (see *Chapter 3 – Environmental Consequences*).

1.2 Purpose and Need

The mission statement for Mount Rushmore National Memorial is "to preserve and protect [the Memorial] while providing for the education and enjoyment of the public." The purpose statement for the Memorial is to "commemorate our national history and progress through the visages of George Washington, Thomas Jefferson, Abraham Lincoln, and Theodore Roosevelt" and "provide the opportunity for a contemplative visitor experience as related to the sculpture and its setting." It further states that the purpose for the Memorial is to provide for recreational opportunities.

The purpose for conducting a marquee event, such as fireworks, at Mount Rushmore National Memorial during the July 4th holiday is to celebrate the national history and spirit of democracy, and to provide for the education and enjoyment of the public. There is a need for the Memorial to host a fun, inspirational, traditional, and educational program celebrating our nation's birthday that reaches a diverse local, national, and international audience.

1.3 BACKGROUND

Mount Rushmore National Memorial consists of 1,238 acres and is located on the central slope of the Black Hills of western South Dakota, in Pennington County (see Figure 1-1). The Black Hills are a forested mountain range in southwest South Dakota and northern Wyoming covering approximately 2 million acres. Granite knobs, peaks, ridges and valleys covered with ponderosa pine and dotted with meadows characterizes Mount Rushmore. Nearby communities include Rapid City, Hill City, and Keystone. Federal, state, and private lands surround the memorial. It is adjacent to the Black Elk Wilderness Area, the Peter Norbeck Wildlife Preserve, and the Hell Canyon and Mystic Districts of the Black Hills National Forest. The northeast corner of the memorial is bordered by the town of Keystone with a year round population of 300 and a significant increase of seasonal population from April through September.

Throughout its history, Mount Rushmore National Memorial has celebrated the national history and spirit of democracy during the July 4th Holiday. More recently, the Memorial has sponsored a variety of programs and activities during the Holiday celebration as part of its on-going effort to reach out to a diverse local, national, and international audience. Beginning in 1998, the Memorial included a fireworks program during the July 4th Holiday to celebrate the completion of the new visitor facilities. The popularity of that first fireworks program led to subsequent fireworks displays over the next three years. The fireworks program was cancelled in 2002 because of the severe drought in the Black Hills and the resulting fire danger. During 4 of the past 5 years, the fireworks program held during the July 4th Holiday has become widely popular on a local, national, and international scale. In 2001, over 30,000 people visited the Memorial to watch the fireworks display, and approximately 10 million people viewed news coverage about it on local, national, and international television.

Eighteen wildfires have started on the Memorial as a result of the fireworks programs; however, all of the fires were quickly suppressed and, in total, burned no more than 2 acres. Nevertheless, one hundred years of wildland fire suppression in the region has resulted in an increased density of pine stands and abundant ladder fuels (e.g. dead and dry lower limbs, small trees), which create ideal conditions for severe crown fires. Fire suppression activities have also reduced the complex mosaic of forests and grasslands and increased the risk of catastrophic fire. The historic pre-European settlement pattern of frequent, low-severity ground fire, which removed ground fuels, has shifted to a pattern of potential high severity wildfires that may threaten life, property, and memorial resources.

The Memorial recently approved its revised and updated Fire Management Plan (December 2002). This plan calls for the suppression of all naturally ignited and man-made wildfires, and allows for proactive efforts to help reduce the current high fire risk to the Memorial and surrounding communities. The Memorial intends to reduce the

Wildfires are any non-structure fires, other than prescribed fires, that occur in the wildland.

Prescribed Fires are any fires ignited by management actions in defined areas under predetermined weather and fuel conditions to meet specific objectives.

hazardous fuel levels in its ponderosa pine forests over the next several years by expanding its thinning and prescribed fire program. A majority of past and on-going thinning activities have been conducted along the road corridor and adjacent to visitor use areas. Under the expanded fire management program, additional thinning treatments will first be conducted in forest stands near the Memorial boundaries, especially near Keystone, and within approximately 1,500 feet of the sculptures. The Memorial will also employ prescribed fire in previously thinned areas to reduce hazardous fuels and to restore the natural fire regime to the ponderosa pine forests.

The Memorial follows the 2001 National Park Service Management policies associated with fireworks as guidance for the fireworks program. The policy states that fireworks displays will not be permitted if they pose an unacceptable risk to park resources or values. In all instances, the decision to approve or deny a request is made by the superintendent, following consultation with the regional safety office. Fireworks displays are conducted in compliance with the National Fire Protection Association Code for the Display of Fireworks (NFPA 1123).

1.4 FIREWORKS OBJECTIVES

The overall objectives of the Mount Rushmore July 4th Holiday Celebration Fireworks Program are the following:

- Provide a quality educational program for visitors;
- Provide an emotional experience that will build a constituency for the Memorial;
- Provide a nationally recognized event that promotes visitation to South Dakota;
- Promote partnerships and sprit of cooperation between the tourism organizations locally and statewide;
- Provide for visitor, employee, and partner safety and resource protection;
- Provide management and support for wildland and structural fire protection, law enforcement and emergency medical services;
- Effectively manage parking and traffic flow expected for the event;
- Effectively manage and support the logistics for the event.

1.5 SCOPING ISSUES AND IMPACT TOPICS

On November 15, 2002, a scoping letter describing the Proposed Action and requesting public comments was sent to a mailing list of 163 individuals and organizations (see Coordination and Consultation Section in this document for a complete listing of those individuals, organizations, and agencies who received the scoping notice). On November 28, the Memorial issued a press release to multiple news outlets (newspaper, radio, television) about the proposed action and the open-house public scoping meeting to be held on December 6, 2002. On December 4, 2002 and December 6, 2002 the Memorial distributed a press release in the Rapid City Journal that invited the public to an open house to discuss the Proposed Action and offer their thoughts and concerns about the advantages, disadvantages, and impacts that might occur. The open house was held on December 6, 2002 in Rapid City, South Dakota and 20 people signed the attendance list. Local television news aired coverage of the public open house meeting and the Rapid City Journal published an article about the meeting on the following day, December 7, 2002.

The Memorial also conducted 2 internal scoping meetings with National Park Service employees on December 3, 2002 and December 5, 2002. The former meeting was held in Omaha, Nebraska

at the National Park Service Midwest Regional Office, where 18 people signed the attendance list. The latter meeting was held in Keystone, South Dakota at Mount Rushmore National Memorial, where 32 people signed the attendance list.

The major issues and concerns that came from the open house, internal scoping meetings, and other public input (e.g. email, written and telephonic correspondence) were evaluated and sorted. The park received 133 comments from interested parties during the scoping process. Issues determined to be important were those related to the effects of the proposed action, and those not already adequately addressed by laws, regulations, and policies. Important issues were considered in developing and evaluating the alternatives to the Proposed Action discussed in this EA. The following issues were developed and paraphrased from the comments received during the scoping period and are not actions or issues developed by the Memorial management.

1.5.1 Important Issues

General Issues

- <u>Issue</u>: It is appropriate that the Memorial have some type of fun, inspirational July 4th celebration; it is inappropriate for that event to be a fireworks program because of the fire danger and because National Park Service policy prohibits fireworks from being ignited over forested areas;
- <u>Issue</u>: The Memorial should consider Laser Light Shows or other displays (music, historians, historic portrayals) as a safer alternative for a great patriotic entertainment event:
- <u>Issue</u>: The Memorial should have a combination of events, such as fireworks and a laser show, and the fireworks should be phased out over time;
- <u>Issue</u>: The Environmental Assessment should include the "Go/No-Go" decision-making criteria for the fireworks program, and that criteria should be publicized prior to the program;
- <u>Issue</u>: We should focus our efforts on a patriotic program that is guaranteed to occur every year; and
- <u>Issue</u>: It is unlawful for any person or agency to light fireworks in the Black Hills Fire Protection District.

Vegetation Issues

Issue: The ponderosa pine stands on the Memorial and in the adjacent Black Hills National Forest, Black Elk Wilderness Area, and Norbeck Wildlife Preserve are at risk to catastrophic fire from accidental fire ignitions resulting from the Mount Rushmore fireworks program.

Wildlife Issues

• <u>Issue</u>: The fireworks program may impact wildlife in and around the Memorial.

Park Operations

- <u>Issue</u>: Past fireworks have damaged electrical cables in the vicinity; and
- <u>Issue</u>: The National Park Service should not continue to pay the expenses for this program; the money spent by the Memorial to fund this program would be better spent on other more pressing park operations and needs.

Wilderness Issues

- <u>Issue</u>: Noise from the fireworks program may degrade the wilderness experience of recreationists in the adjacent Black Elk Wilderness Area; and
- <u>Issue</u>: The Black Elk Wilderness Area is at risk to catastrophic fire from accidental fire ignitions resulting from the Mount Rushmore fireworks program.

Economic Issues

- <u>Issue</u>: Fireworks at Mount Rushmore have had a very positive effect on the image of South Dakota and have gone a long way in promoting tourism in the state;
- <u>Issue</u>: The program is very expensive and may not really result in a large increase in revenue for the local and state economies;
- <u>Issue</u>: The fireworks program benefits the local and regional economies and indirectly promotes visitation to South Dakota and the Black Hills during other parts of the year, not just the July 4th Holiday;
- <u>Issue</u>: The State of South Dakota and the Black Hills gets free and valuable advertising from local, national, and international news coverage of the fireworks event;
- <u>Issue</u>: There would be a large impact to the natural resources and uses of the surrounding Forest Service lands (timber and grazing) if a wildfire escaped suppression efforts during the fireworks display;
- <u>Issue</u>: Volunteer and non-profit groups are financially benefited as a result of their participation with Memorial concessions during the fireworks celebration;
- <u>Issue</u>: Providing law enforcement personnel to help with the fireworks program can be expensive for the South Dakota Highway Patrol, Rapid City Police Department, and Pennington County Sheriff's Department; and
- <u>Issue</u>: The costs incurred by the NPS to prepare for this event are high, and the expenses will be real costs even if the fireworks program is cancelled in any given year.

Socio-economic Issues

- <u>Issue</u>: The fireworks program is a patriotic display that celebrates the best of America
 and provides an emotional experience for all those who attend or view it through the
 media;
- Issue: Fireworks at Rushmore instill a great sense of patriotism;
- <u>Issue</u>: The Fireworks program is getting so popular that there are too many people attending, or trying to attend, the event;

- <u>Issue</u>: There is no better place than Mount Rushmore for citizens located in the West to celebrate the July 4th Holiday with fireworks; citizens on the East Coast have the National Mall and Statue of Liberty to celebrate July 4th;
- <u>Issue:</u> Because of the controversial nature of the fireworks program, I believe the event has now created a rift between the National Park Service and some Rushmore Society members, and we should not continue with a program that threatens that special relationship;
- <u>Issue:</u> The program helps cultivate partnerships between the NPS, the Mount Rushmore Society and numerous independent tourism organizations and attractions in the Black Hills; and
- Issue: The fireworks event promotes esprit de corps among the local population.

Human Health and Safety Issues

- <u>Issue</u>: Fireworks at Mount Rushmore are proven to cause wildfires;
- <u>Issue</u>: If the fireworks program is to proceed, the NPS should strongly consider drought conditions, the state of hazardous fuels in surrounding forests, and the terrain that firefighters would have to traverse to suppress any ignitions;
- <u>Issue</u>: The continuation of this planned ignition of wildfire without secure fire perimeters, adequate firefighting forces, or a written plan runs counter to professional fire management;
- Issue: Fireworks at Rushmore would be unsafe because there is a concentration of the general public, very limited access, and congested traffic conditions. The opportunity to compromise public safety is real;
- <u>Issue</u>: With the high fire risk associated with the forest in the area, I would suggest that, at the very least, the ponderosa pine should be thinned and prescribed fire applied to the area prior to restoring the fireworks event;
- <u>Issue</u>: The Memorial should have an evacuation plan in place in case a catastrophic wildfire occurs during the event;
- <u>Issue</u>: It is unsafe to expose firefighters to the suppression of wildfires at night in extremely steep and rocky terrain; suppression efforts have already caused 2 injuries to firefighters during the fireworks programs, one of them a serious knee injury;
- <u>Issue</u>: Fireworks at the Memorial will commit dozens of firefighters to manage the event when they would be better served elsewhere during the peak of the fire season;
- Issue: The wildfire risk to nearby towns, such as Keystone, and private property is high; and
- Issue: Because there is a finite number of fire management and law enforcement personnel in the Black Hills region, and since most, if not all of these personnel are required at the Mount Rushmore fireworks program, other parts of the region are temporarily at greater risk should an emergency occurs that requires the attention of these same personnel.

Cultural Resource Issues

- <u>Issue</u>: The talus slope and surrounding area is littered with remnants of past firework shells;
- <u>Issue</u>: The concussion from the fireworks explosions may create structural failure on the visages;
- <u>Issue</u>: A section 106 Consultation must be completed 1) since the Hall of Records canyon lies within the Historic District and the potential impacts to the Historic District from the preparation and lighting of the fireworks, and 2) since there would be a fire risk to the historic structures on the Memorial;
- Issue: Tribal concerns should be addressed in the Environmental Assessment; and
- <u>Issue</u>: The cultural landscape will be impacted if the forested areas of the Memorial are burned up in a wildfire.

1.5.2 Other Issues Considered but not Further Analyzed

- Issue: An Environmental Impact Statement should be conducted on this program because it is too political and the manager cannot say "No Significant Impact". At this time, it is unclear whether or not there would be a significant impact to the human environment as a result of conducting a fireworks program to celebrate the July 4th Holiday. This Environmental Assessment is being prepared to identify and determine the environmental consequences resulting from a fireworks event, or other alternative program, such as a laser show, and a determination of significance will be made as a result of the analysis. If the analysis determines that a significant impact would occur, then the Superintendent would prepare an Environmental Impact Statement. The fact that an individual believes the program is too political is not a "trigger", as defined by the National Environmental Policy Act, that automatically requires the National Park Service to prepare an Environmental Impact Statement.
- Issue: This EA process is dishonest because it is being conducted to justify past and future fireworks event. The Superintendent is preparing this environmental assessment to help identify and determine the environmental consequences resulting from a fireworks events, or other alternative program, such as a laser show, to celebrate the July 4th Holiday. Armed with the environmental assessment, the Superintendent can make a more informed decision about whether or not he/she should continue the fireworks program or replace it with another fun and inspirational event. The fact that an individual(s) perceives this process as dishonest in that it seeks to justify past and future fireworks programs is outside the scope of this environmental assessment.
- <u>Issue: Mount Rushmore should get legislative approval and funding for conducting fireworks so that it will not continue to contradict National Park Service policy on fireworks over forested areas.</u> In all past fireworks displays at Mount Rushmore National Memorial, the Superintendent requested and obtained a waiver from the Director of the National Park Service, which permitted the fireworks celebration. Seeking legislative approval from the United States Congress to conduct and fund fireworks at Mount Rushmore every July 4th Holiday is an option available to the Superintendent. Seeking a

waiver each year from the Director of the National Park Service is another option. Regardless of which path the Superintendent takes, the issue of whether or not the Superintendent should seek legislative approval is outside the scope of this environmental assessment.

- Issue: The National Park Service no longer observe the traditions of the sculpture maintenance crew preparing for the work or use of the traditional equipment (bosun's chair, winches, cables, etc.). The fact that the National Park Service no longer observes the traditions of the sculpture maintenance crew's preparing for the work or use of traditional equipment is outside the scope of this environmental assessment. The decision by the Superintendent of Mount Rushmore National Memorial to continue or discontinue the fireworks program during the July 4th Holiday has no cause and effect relationship with his/her decision to observe the traditions of the sculpture maintenance crew.
- Issue: Security "improvements" in the Hall of Records valley will forever detract from the feeling one derives from entering the valley. These improvements have eclipsed the historic fabric and replaced it with the coldness of technology and the surrounding hardened barriers. Security improvements in the Hall of Records Valley, and any potential environmental consequences resulting from those improvements are outside the scope of this environmental assessment. The decision by the Superintendent of Mount Rushmore National Memorial to continue or discontinue the fireworks program during the July 4th Holiday has no cause and effect relationship with past and any on-going security improvements.
- <u>Issue</u>: The fireworks explosions are a violent means of celebration and simulate <u>bombing</u>. The use of fireworks to celebrate the nation's birthday is widely considered as a "traditional" way to celebrate the July 4th Holiday. While some individuals may perceive fireworks as violent and disapprove of their use in any celebration, that perception reflects their personal beliefs. Therefore, the issue is outside the scope of this Environmental Assessment.
- Issue: The Superintendent of Mount Rushmore should not be the only person responsible for making a "go" decision for the fireworks event in any given year. While the Superintendent may look to others for their opinion on whether to conduct or not conduct the fireworks event in any given year, the final decision and ultimate responsibility for the event rests solely with the Superintendent at Mount Rushmore National Memorial. Therefore, this issue is not considered for further analysis in this Environmental Assessment.

1.5.3 Impact Topics Considered in this EA

Impact topics are derived from issues raised during internal and external scoping. Not every conceivable impact of a proposed action is substantive enough to warrant analysis. The following topics, however, do merit consideration in this EA:

Soils: Wildfires that may result from a fireworks program and fire suppression activities can adversely impact soils, therefore, impacts to soils are analyzed in this EA.

Water Resources (including Wetlands): NPS policies require protection of water resources consistent with the Federal Clean Water Act. Mount Rushmore National Memorial contains several intermittent streams and wetlands. Fire suppression efforts and wildfires that may result from a fireworks program can adversely impact stream channels and wetlands, therefore, impacts to water resources are analyzed in this EA.

Vegetation: Ponderosa pine of varying age is the dominant vegetation type in the memorial. An area of the memorial contains one of the largest stand of old growth ponderosa pine in the Black Hills. Starling Basin, located in the southern part of the memorial, has been described as a "type habitat" that is rare in the Black Hills. Since fire suppression efforts and wildfires that may result from a fireworks program can impact vegetation and the ponderosa pine forest stands on and off the Memorial, vegetation impacts are analyzed in this EA.

Wildlife: There are resident populations of various species of reptiles, amphibians, birds, mammals, fish, and invertebrates that can be impacted by the concussion blasts and by wildfires that may result from a fireworks program. Therefore, impacts to wildlife are evaluated in this EA.

Air Quality: The Federal 1970 Clean Air Act stipulates that Federal agencies have an affirmative responsibility to protect a park's air quality from adverse air pollution impacts. Moreover, Mount Rushmore is located in a Class II area. While the park generally enjoys excellent air quality, it is not pristine air quality. Air pollution from industrial and electric utility facilities in the region, which includes nitrate and sulfate emissions, impact air quality at the memorial. All types of fires generate smoke and particulate matter, which can impact air quality within the Memorial and surrounding region. In addition, cars and buses that transport people to and nearby the Memorial also produce emissions that may impact local air quality. Therefore, air quality impacts are analyzed in this EA.

Noise: Noise is defined as unwanted sound. Fire suppression efforts can involve the use of noise-generating mechanical tools and devices with engines, such as chain saws, trucks, helicopters, and airplanes. Each of these devices, in particular helicopters and chain saws at close range, are quite loud (in excess of 100 decibels). In addition, fireworks can have loud concussion blasts. While there are few "sensitive receptors" (schools, churches, elderly homes) in the areas surrounding the Memorial, a designated wilderness area lies on the western border of the Memorial and would be exposed to elevated noise levels from a fireworks program. Therefore, this impact topic is analyzed further in this EA.

Visitor Use and Experience: The 1916 NPS Organic Act directs the Service to provide for public enjoyment of the scenery, wildlife and natural and historic resources of national parks "in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations." A fireworks program can affect the visitor use and experience of the Memorial. Therefore, impacts on visitor use and experience are addressed in this EA.

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Socio-economics: NEPA requires an analysis of impacts to the "human environment" which includes economic, social and demographic elements in the affected area. A fireworks program can benefit the local and regional economies, and can positively affect the "quality of life" of residents and visitors alike. Therefore, this impact topic is included for further analysis in this EA.

Human Health and Safety: Wildfires can be extremely hazardous, even life-threatening, to humans, and a fireworks program at the Memorial may result in the ignition of wildfires during the course of the program. In addition, firefighters that must suppress any wildfires resulting from the fireworks program must initially do so in step terrain and at night. Injuries to the wildland firefighters have been documented during suppression of wildfires that were started by fireworks at the Memorial. Therefore, impacts to human health and safety are addressed in this EA.

Cultural Resources: Section 106 of the National Historic Preservation Act of 1966 provides the framework for Federal review and protection of cultural resources, and ensures that they are considered during Federal project planning and execution. Mount Rushmore National Memorial is listed on the National Register of Historic Places. In addition, numerous designations for historic protection of the memorial have been made such as the Hall of Records, the Sculptor's Studio, the residence, the Borglum View Terrace and other affiliated facilities from the time of the creation of the sculpture. These cultural resources may be affected both by wildfire, fire suppression activities, fireworks, and fireworks debris, thus potential impacts to cultural resources are addressed in this EA.

Park Operations: Severe wildfires can potentially affect operations at national parks, especially in more developed sites like visitor centers, campgrounds, administrative and maintenance facilities. These impacts can occur directly from the threat to facilities of an approaching fire, and more indirectly from smoke and the diversion of personnel to firefighting. In addition, an annual fireworks program at the Memorial requires months of planning and personnel to oversee the event. Thus, the potential effects of the alternatives on park operations will be considered in this EA under Visitor Use and Experience.

Transportation: Past fireworks on the July 4th Holiday have created traffic congestion as thousands of people flock to the Memorial and surrounding areas to view the program. Following a fireworks event, it can take up to 2-2 ½ hours for traffic to disperse. Therefore, this topic will be addressed in this analysis.

Wilderness: According to National Park Service Management Policies (2001), proposals having the potential to impact wilderness resources must be evaluated in accordance with National Park Service procedures for implementing the National Environmental Policy Act. Because Mount Rushmore is bordered by the Black Elk Wilderness Area, wilderness impacts are evaluated further in this EA.

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1.5.4 Impact Topics Considered but dropped from Further Analysis

NEPA and the CEQ Regulations direct agencies to "avoid useless bulk...and concentrate effort and attention on important issues" (40 CFR 1502.15). Certain impact topics that are sometimes addressed in NEPA documents on other kinds of proposed actions or projects have been judged to not be substantively affected by any of the alternatives considered in this EA. These topics are listed and briefly described below, and the rationale provided for considering them, but dropping them from further analysis.

Threatened and Endangered Species: The Federal Endangered Species Act prohibits harm to any species of fauna or flora listed by the U. S. Fish and Wildlife Service (USFWS) as being either threatened or endangered. Such harm includes not only direct injury or mortality, but also disrupting the habitat on which these species depend. There are no known threatened or endangered species that reside within Mount Rushmore National Memorial, nor is there any critical habitat. Therefore, this impact topic is not included for further analysis in this EA.

Floodplains: Presidential Executive Orders mandate floodplain management and protection of wetlands. The Memorial does not contain any floodplains, and therefore impacts are not analyzed further in this EA.

Utilities: Generally speaking, some kinds of projects, especially those involving construction, may temporarily impact above and below-ground telephone, electrical, natural gas, water, and sewer lines and cables, potentially disrupting service to customers. Other proposed actions may exert a substantial, long-term demand on telephone, electrical, natural gas, water, and sewage infrastructure, sources, and service, thereby compromising existing service levels or causing a need for new facilities to be constructed. None of the alternatives will cause any of these effects to any extent, and therefore utilities are eliminated from any additional analysis.

Waste Management: During any fireworks program, the Memorial would install several porto-lets and additional trash receptacles to help supplement its existing waste management infrastructure. Therefore this impact topic is not further addressed in this EA.

Land Use: Land use of the Memorial and surrounding area would not be directly impacted by the fireworks program. It is not reasonably foreseeable that the city of Keystone or other areas within the vicinity of the Memorial would be impacted by catastrophic wildfire as a result of fireworks; therefore land use is not further addressed in this EA.

Environmental Justice / Protection of Children: Presidential Executive Order 12898 requires Federal agencies to identify and address disproportionate impacts of their programs, policies and activities on minority and low-income populations. Executive Order 13045 requires Federal actions and policies to identify and address disproportionately adverse risks to the health and safety of children. None of the alternatives would have disproportionate health or environmental effects on minorities or low-income populations as defined in the Environmental Protection Agency's Environmental Justice Guidance; therefore, these topics are not further addressed in this EA.

Prime and Unique Agricultural Lands: Prime farmland has the best combination of physical and chemical characteristics for producing food, fed, forage, fiber, and oilseed crops. Unique land is land other than prime farmland that is used for production of specific high-value food and fiber crops. Both categories require that the land is available for farming uses. Lands within Mount Rushmore National Memorial are not available for farming and, therefore, do not meet these definitions. This impact topic is not evaluated further in this EA.

Indian Trust Resources: Indian trust assets are owned by Native Americans but held in trust by the United States. Indian trust assets do not occur within Mount Rushmore National Memorial and, therefore, are not evaluated further in this EA.

Resource Conservation, Including Energy, and Pollution Prevention: The National Park Service's *Guiding Principles of Sustainable Design* provides a basis for achieving sustainability in facility planning and design, emphasizes the importance of biodiversity, and encourages responsible decisions. The guidebook articulates principles to be used such as resource conservation and recycling. The alternatives would not minimize or add to resource conservation or pollution prevention on the Memorial and, therefore, this impact topic is not evaluated further in this EA.

Table 1-1 Impact Topics for Mount Rushmore National Memorial July 4 th Holiday Fireworks Program Environmental Assessment			
Impact Topic Retained or Dismissed from Further Evaluation		Relevant Regulations or Policies	
Soils	Retained	NPS Management Policies 2001	
Water Resources	Retained	Clean Water Act; Executive Order 12088; NPS Management Policies	
Wetlands	Retained	Executive Order 11988; Executive Order 11990; Rivers and Harbors Act; Clean Water Act; NPS <i>Management Policies</i>	
Vegetation	Retained	NPS Management Policies	
Wildlife	Retained	NPS Management Policies	
Air Quality	Retained	Federal Clean Air Act (CAA); CAA Amendments of 1990; NPS <i>Management</i> <i>Policies</i>	
Noise	Retained	NPS Management Policies	
Visitor Use and Experience	Retained	NPS Management Policies	
Human Health & Safety	Retained	NPS Management Policies	
Cultural Resources	Retained	Section 106; National Historic Preservation Act; 36 CFR 800; NEPA; Executive Order 13007; Director's Order #28; NPS Management Policies	
Socio-economics	Retained	40 CFR Regulations for Implementing NEPA; NPS <i>Management Policies</i>	
Park Operations	Retained	NPS Management Policies	
Transportation	Retained	NPS Management Policies	
Wilderness	Retained	The Wilderness Act; Director's Order #41; NPS Management Policies	

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Threatened and Endangered Species and their Habitats	Dismissed	Endangered Species Act; NPS Management Policies
Utilities	Dismissed	NPS Management Policies
Waste Management	Dismissed	NPS Management Policies
Land Use	Dismissed	NPS Management Policies
Environmental Justice	Dismissed	Executive Order 12898
Prime and Unique Agricultural Lands	Dismissed	Council on Environmental Quality 1980 memorandum on prime and unique farmlands
Indian Trust Resources	Dismissed	Department of the Interior Secretarial Orders No. 3206 and No. 3175
Resource Conservation, Including Energy, and Pollution Prevention	Dismissed	NEPA; NPS Guiding Principles of Sustainable Design; NPS Management Policies

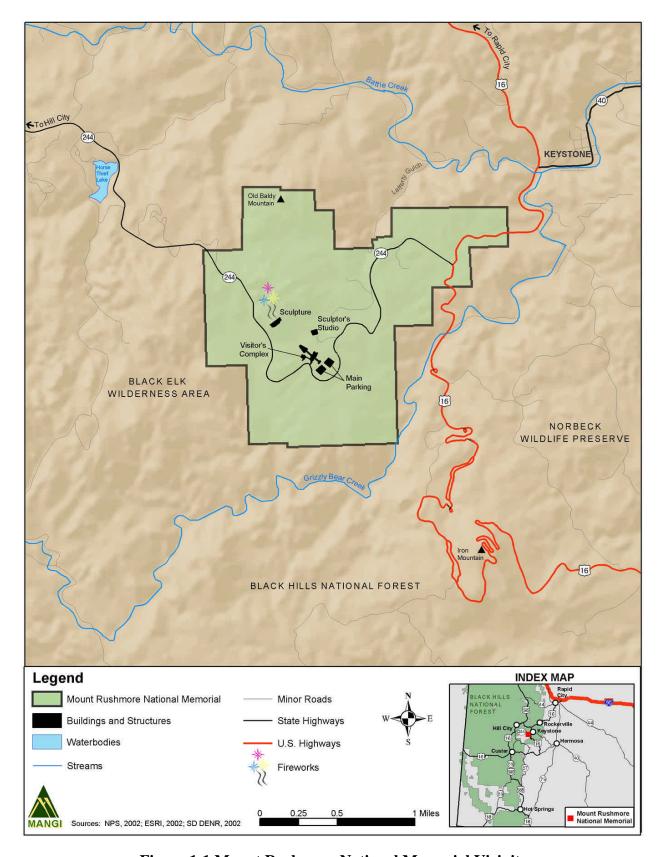


Figure 1-1 Mount Rushmore National Memorial Vicinity

Chapter 2 - Issues and Alternatives

This Chapter describes the range of alternatives, including the Proposed Action and No Action Alternatives, formulated to address the purpose of and need for the proposed project. These alternatives were developed through evaluation of the comments provided by individuals, organizations, governmental agencies, and the Interdisciplinary Team (IDT).

2.1 ALTERNATIVES CONSIDERED AND ANALYZED IN THIS EA

2.1.1 Alternative 1 (No Action Alternative) – July 4th Holiday Celebrations at Mount Rushmore National Memorial without a Marquee Program

Under the No Action Alternative, the Memorial would continue its regular July 4th Holiday celebrations, which typically include educational and entertainment programs (e.g. musical performances, lighting ceremony) between July 3rd and July 5th; however, these celebrations would not include a marquee event such as fireworks.

2.1.2 Alternative 2 (Proposed Action) – July 4th Holiday Celebrations to include a Fireworks Program

Under the Proposed Action, the Memorial would continue its fireworks program as a part of the July 4th Holiday celebrations. The fireworks program would be conducted on July 3rd and would include approximately 2,500 fireworks and would last 24-27 minutes.

Several days prior to the event, the fireworks and launch equipment would be transported by helicopter to the Hall of Records valley behind the sculptures. Preparation of the staging area and launch site would not involve any excavation in the valley. During the actual fireworks program, memorial staff and visitors would not be allowed within 1,000 feet of the launch site as a majority of the fallout from the display would land in this buffer. This temporary restriction would result in the closure of the Presidential Trail on the Memorial. In the morning of the following day, all the fireworks equipment from the staging and launch site would be transported from the valley by helicopter, and the 1,000-foot restricted area would be re-opened to the public. Shortly after the July 4th Holiday, Memorial staff and, if possible, volunteer groups would then traverse the fallout area to pick up the litter generated from the exploding firework shells.

In the months leading up to the fireworks program, Memorial staff would prepare management plans for traffic, visitor services, security, fire protection, and visitor and employee safety. Each of these topics is included in the "Incident Plan" prepared by the Memorial for the fireworks program. In order to safely manage traffic and protect human health and safety during the event, the Memorial would work cooperatively with local, state, and other federal law enforcement and fire management personnel, and would temporarily supplement its own staff with National Park Service personnel from nearby park units. In 2001, over 100 local, state, and federal law enforcement and fire management personnel were on site to manage traffic and fire protection. Fire protection measures that will be in place during the celebration are described in detail in

Appendix A of this EA. Figure A-1 (see Appendix A) shows the location of these fire protection measures in relation to the launch site.

2.1.3 Alternative 3 – July 4th Holiday Celebrations to Include a Laser Light Show

In response to public comment about potential human health and safety issues surrounding a fireworks program, this alternative would include a laser light show to replace the fireworks program during the July 4th Celebrations. The laser light show would be choreographed to patriotic music with either taped or live entertainment and would complement readings about the presidents. The laser show would last approximately 24-30 minutes.

The majority of the laser show equipment would be located in the grandview terrace and the theatre complex. A reflector unit would likely be placed on the top of the sculptures, however, it would not be permanently mounted into the granite, and it would not require any construction into the rock. A large generator would be placed nearby the grandview terrace to help power the laser show.

2.1.4 Environmentally Preferred Alternative

The National Park Service is required to identify the environmentally preferred alternative(s) for any of its proposed projects. That alternative is the alternative that will promote the national environmental policy expressed in NEPA (Section 101 (b)). This includes alternatives that:

- 1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- 2) ensure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- 3) attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- 4) preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- 5) achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- 6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

In essence, the environmentally preferred alternative would be the one(s) that "causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources" (DOI, 2001a).

In this case, Alternative 1 is the environmentally preferred alternative for Mount Rushmore National Memorial since it best meets goals 1, 2, 3, and 4 described above. This alternative best protects and helps preserve the historic, cultural, and natural resources in the Memorial for current and future generations because it would constitute a more typical day at the memorial and would not require the preparation or witness the visitation experienced with a fireworks or laser show.

2.3 IMPACT DEFINITIONS

Table 2-1 depicts the impact definitions used in this Environmental Assessment. Significant impact thresholds for the various key resources were determined in light of compliance with existing state and federal laws, compliance with existing Mount Rushmore National Memorial planning documents.

Table 2-1 Impact Definitions			
	"Minor" Impact "Major" or "Significant" Impa		
Key Resources			
Soils	Minor damage to or loss of the litter/humus layers that causes minor localized increases in soil loss from erosion; fire severe enough to cause minor harm to soil community; minor, temporary surface sterilization of soils that does not cause long term loss of soil productivity that would alter or destroy vegetation community; short-term and localized compaction of soils that does not prohibit re-vegetation	Damage to or loss of the litter/ humus layers that would increase soil loss from erosion; fire severe enough to damage soil community; substantial surface sterilization of soils that may cause long term loss of soil productivity and that may alter or destroy a portion of the vegetation community; long-term and widespread soil compaction that affects a large number of acres and prohibits re-vegetation	
Water Resources (Including Wetlands)	Minor damage to or loss of the litter/humus layers that increases sedimentation on no more than 0.1% of a subwatershed; localized and indirect riparian impact that does not substantively increase stream temperatures or affect stream habitats; no alteration of natural hydrology of wetlands	Damage to or loss of the litter/ humus layers that increases sedimentation on greater than 0.1% of a subwatershed; localized and indirect riparian impact that may substantively increase stream temperatures or affect stream habitats; alteration of natural hydrology of wetlands	
Vegetation	Short-term changes in plant species composition and/or structure, consistent with expected successional pathways of a given plant community from a natural disturbance event	Violation of the Endangered Species Act of 1973; loss of numerous old growth trees in Starling Basin	
Wildlife	Temporary displacement of a few localized individuals or groups of animals; mortality of individuals of species not afforded special protection by state and/or federal law; mortality of individuals that would not impact population trends	Violation of the Endangered Species Act of 1973; mortality of species that jeopardize the resident population	
Air Quality	Minimal to negligible air emissions and temporary smoke accumulation; temporary and limited smoke exposure to sensitive resources	Violation of state and federal air quality standards; violation of Class II air quality standards; prolonged smoke exposure to sensitive receptors	
Noise <65 dBA at sensitive receptors; temporary noise levels <90 dBA		>65 dBA noise level at sensitive receptors (schools, nursing homes, etc.); continued	

		exposure to noise levels > 90 dBA for workers and/or the general public
Visitor Use & Experience	Temporary displacement of recreationists or closure of trails, and recreation areas; temporary or short-term alteration of the vista, or temporary presence of equipment/structures in localized area; temporary smoke accumulation	Permanent closure of trails and recreation areas; long-term change in scenic integrity of the vista; substantive smoke accumulation during peak recreation use
Human Health & Safety	Minor injuries to any worker (e.g. minor cuts or bruises); limited exposure to hazardous compounds or smoke particulates at concentrations below health-based levels	Serious injury to any worker or member of the public (life-threatening injury or major disability); exposure to hazardous compounds or smoke particulates at concentrations above health-based levels.
Cultural Resources	Temporary, non-adverse effects to registered cultural resource sites, eligible cultural resource sites, sites with an undetermined eligibility, and traditional cultural properties	Temporary or long-term adverse impacts to registered cultural resource sites, eligible cultural resource sites, sites with an undetermined eligibility, and traditional cultural properties
Park Operations	Temporary suspension of non-critical memorial operations; negligible impact to memorial buildings and structures	Prolonged suspension of all memorial operations; adverse impacts to memorial buildings and structures
Socioeconomics	Potential to alter the social setting, limit access to necessary services; disrupt resident or user populations or change economic characteristics that is localized, infrequent, of relatively short duration, and narrow in scope.	Longer term or permanent, alteration of the social setting and character that is extensive and readily observable and extended over a larger community or socioeconomic region; or a change in the levels of employment or business activity sufficient to substantially affect the income of local residents.
Transportation	Temporary traffic increase that exceeds the level of service for a particular road network	Extended increase in traffic that exceeds the level of service of a particular road network
Wilderness	Any impact that does not conflict with wilderness values	Temporary or long-term, local or regional adverse impact to wilderness values – violation of the Wilderness Act

2.4 MITIGATION MEASURES AND MONITORING

Mitigation measures are prescribed to prevent and/or mitigate adverse environmental impacts that may occur from fire management activities. Mitigation measures are common to all alternatives.

2.4.1 Fire Management Activities

- All suppression guidelines will follow Minimum Impact Suppression Tactics (MIST) guidelines. These include:
 - Keep fire engines or slip-on units on existing roads;
 - Restrict the use of heavy equipment such as bulldozers or plows for constructing fire lines. A tractor with box blade or disc will be used for fire line construction only in extreme situations when high value resources are at risk, and then only with the authorization of the superintendent or designee;

- Prohibit the use of fire line explosives;
- Use existing natural fuel breaks and human-made barriers, wet line, or cold trailing the fire edge in lieu of handline construction whenever possible;
- Keep fire line widths as narrow as possible when they must be constructed;
- Avoid ground disturbance within known natural (e.g. cedar glade habitat, T&E species) and archeological/cultural/historic resource locations. When fire line construction is necessary in proximity to these resource locations, it will involve as little ground disturbance as possible and be located as far outside of resource boundaries as possible;
- Use water instead of fire retardant. If retardant must be used, use a non-fugitive type, and avoid surface water resources;
- Use soaker hose, sprinklers or foggers in mop-up; avoid boring and hydraulic action;
- Minimize the cutting of trees;
- Scatter or remove debris as prescribed by the incident commander; and
- Protect air and water quality by complying with the Clean Air Act, the Clean Water Act, and all other applicable federal, state, and local laws and requirements.
- Erosion control methods will be used on slopes exceeding 10% where handline construction took place; and
- All sites where improvements are made or obstructions removed will be rehabilitated to prefire conditions, to the extent practicable.

2.4.2 Soil and Water Resources (Including Wetlands)

- Stream crossings would be limited to set and existing locations;
- Fire line construction and fire retardant and foam suppression use would not be permitted in wetlands; and
- Fire lines would be located outside of highly erosive areas, steep slopes, and other sensitive areas. Following fire suppression activities, fire lines would be re-contoured, water barred, and possibly seeded (with native plant species)

2.4.3 Cultural Resources

- Prior to all firework program activities, cultural resources would be identified and avoided.
 Fire suppression units would be positioned at Sculptor's Studio and Residence II for fire protection; and
- No excavation would be permitted in the Hall of Records valley.

2.5 COMPARISON OF ALTERNATIVES

Table 2-2 briefly summarizes the environmental effects of the various alternatives. It provides a quick comparison of how well the alternatives respond to the project need, objectives, important issues and key resources. Chapter 3 discusses the environmental consequences of the proposed alternatives in detail.

Table 2-2 Comparison of Potential Impacts of the Alternatives			
Key Resources	Alternative 1 - No Action	Alternative 2 - Proposed Action	Alternative 3 – Laser Light Show
Soils	No soil impacts	Potential minor short-term soil erosion and compaction impacts resulting from fire suppression activities. Some localized minor benefits may also be observed at these sites.	No soil impacts
Water Resources (including wetlands)	No water resources impacts	Potential short- and long-term impacts to water resources from the mishandling or misapplication of fire retardants or foams	No water resources impacts
Vegetation	No impacts to vegetation	Potential minor and temporary impacts to vegetation resulting from wildfire and fire suppression activities. Some localized minor benefits may also be observed at these sites.	Plant habitat and diversity degraded in the absence of prescribed fire; continued spread of noxious weeds at the expense of native grasses and forbs
Wildlife	Minor and temporary disturbance to wildlife; potential increase in road kill resulting from increased traffic volumes	Temporary displacement of some wildlife species; potential risk of individual mortality as a result of wildfire; no impact on T&E or Sensitive species; potential increase in road kill resulting from increased traffic volumes	Minor and temporary disturbance to wildlife; potential increase in road kill resulting from increased traffic volumes
Air Quality	Negligible impacts from increased traffic volumes	Potential temporary impacts from firework smoke, small wildfire smoke, increased traffic volumes.	Negligible impacts from increased traffic volumes
Noise	No significant noise impacts on sensitive receptors (wilderness area, state and federal listed species)	Temporary increases in noise above the normally acceptable level will be anticipated as a result of the fireworks display. Some temporary impacts (disruption, dispersion) to wildlife will likely occur. No significant noise impacts are anticipated on sensitive receptors, however (wilderness area, state and federal listed species)	No significant noise impacts on sensitive receptors (wilderness area, state and federal listed species)
Visitor Use and Experience (including Park Operations)	Minor and short-term beneficial impact on visitor use and experience; park operations would benefit from a decrease in costs and labor associated with preparing and organizing for the event	Beneficial long-term impacts on local and regional visitor use and experience; minor impact on park operation	Short-term beneficial impacts on visitor use and experience; park operations would benefit from a decrease in costs and labor associated with preparing and organizing for the event
Socio-economics	Community experiences minor impact resulting from the loss of a valued recreational	Minor benefit to the local community associated with enhanced sense of community and patriotism, and increased visibility of local region.	Effects essentially similar to those for Alternative 2, but potentially diminished by the smaller number

Table 2-2 Comparison of Potential Impacts of the Alternatives			
Key Resources	Alternative 1 - No Action	Alternative 2 - Proposed Action	Alternative 3 – Laser Light Show
	experience and the beneficial economic effect of direct spending by additional visitors to the memorial. Temporary inconvenience and potential damage associated with additional visitors eliminated.	Local economy benefits from direct and induced impact of spending by visitors. Potential to alter community setting or inconvenience local residents is temporary and minor.	of visitors anticipated. Minor effect associated with absence of traditional "Fireworks on the Fourth" celebration. Potential for controversy associated with fireworks display minimized.
Human Health & Safety	Very minor and temporary impact on human health and safety	Minor short-term impacts during preparation, and launching of fireworks; potential for injury from fire suppression activities in case of wildland fire	Very minor and temporary impact on human health and safety
Cultural Resources	No impact to known cultural resources	No impact to known cultural resources	No impact to known cultural resources
Transportation	Minor and short-term impact resulting from increased traffic volume	Minor and short-term impact resulting from increased traffic volume	Minor and short-term impact resulting from increased traffic volume
Wilderness	No wilderness impacts	Temporary noise disturbance to wilderness users; potential impacts from catastrophic fire	No wilderness impacts

Chapter 3 – Environmental Analysis

This chapter summarizes the existing environmental conditions and the probable environmental consequences (effects) of implementing the action and No-Action alternatives. This chapter also provides the scientific and analytical basis for comparing the alternatives. The probable environmental effects are quantified where possible; where not possible, qualitative descriptions are provided.

3.1 **SOILS**

3.1.1 Affected Environment

Soils in the memorial generally consist of a 1-2 foot layer of mixed organic matter and decomposed granite resting on bedrock. In the lower elevations, soils are deeper and of a finer texture, allowing for the growth of hardwoods and grasses. Development of visitor use facilities and social trail development from backcountry activities such as recreational rock climbing plus the steep slopes have resulted in soil erosion, compaction, and loss of vegetative cover.

3.1.2 Environmental Consequences

3.1.2.1 Alternative 1 – No Action

Under the No Action alternative, the July 4th celebration event at the Memorial would continue in a manner similar to celebrations prior to initiation of the fireworks program in 1998, without a marquee event such as fireworks or laser light show. The celebration would include educational and entertainment programs that would not impact soil resources at the Memorial.

3.1.2.2 Alternative 2 – Proposed Action

No impacts to soils are anticipated as a result of preparation for fireworks activities for the 4th of July celebration. Launch equipment and the fireworks will be airlifted into and out of position, and no excavation activities will be required for launch preparation. Shortly after the July 4th Holiday, memorial staff and, if possible, volunteer groups would traverse the fallout area to pick up litter from exploding firework shells. These activities are not anticipated to have any effects on soil resources.

Firework induced wildfires and activities associated with their control are the primary source of potential impacts to soils under this alternative. Since 1988, the 4th of July holiday fireworks program has resulted in 18 small wildfires. All of these wildfires were actively suppressed and, in sum, have burned less than 2 acres of the National Monument lands. One major reason for fire suppression success from these activities has been that ignition sites occurred within a limited distance of the firework launch site providing for efficient deployment of suppression equipment and personnel. For example, of the 17 fireworks related ignitions that occurred in 2000 and 2001, 16 occurred within 1000 feet of the launch site (the 17th occurred within approximately 1100 feet). Weather constraints under the "Go/No go" policy of the firework

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program are designed to ensure that any potential ignitions are generally within this range of the launch area.

Ignition frequency and suppression efforts are further aided by characteristics of the site itself, as greater than $1/3^{rd}$ of the area within 1000 feet of the fireworks launch site consists of granite rock outcrops with little to no organic soil and no burnable fuel for wildfire ignition. This characteristic, in combination with fire prevention measures (See Appendix A), allows for the high probability of containing the small wildfires caused by the fireworks program, and reduces the potential for wildfire related impacts to soils.

Nationally, the initial attack success rate for all wildfire suppression operations is 97 - 98% (Bahr 2002), and in the Black Hills this rate increases to 99%. Arguably, most of the fires that have escaped suppression occur during high-risk conditions such as drought. For this reason, fireworks would only be launched under low risk environmental conditions, and fire suppression equipment and personnel would be in place prior to firework launch.

Very minor and localized soil compaction would occur from wildfire suppression activities, and vehicle use would be restricted to existing roads. Fire line construction during wildfire suppression and prescribed fire would result in soil disturbance and could lead to increased erosion, especially in steeply sloped areas within the memorial. To avoid these potential impacts, fire lines would be located outside of highly erosive areas, steep slopes, and other sensitive areas. Following fire suppression activities, fire lines would be re-contoured, water barred, and possibly seeded (with native plant species).

Based on the small amount of total burned acreage that has occurred over the last 14 years, strategic placement of fire suppression equipment and personnel prior to firework launch (Appendix A), and climate and environmental restrictions outlined in the "Go/No-go" implementation of the fireworks program, it is not reasonably foreseeable that significant adverse effects to soil resources from wildfire would occur under this alternative.

Although unintentional, some minor benefits to soil resources may occur in those sites where small spot fires occur from fallout ignition. Under restricted climatic conditions, spot fires that occur from fallout would not be anticipated to result in high intensity or "hot" fires. Instead, spot fires would more likely resemble that of the low intensity burns that occur under prescribed burning operations. As a result, in these small spots, fire would release nutrients into the soil and the fertilization effects of ash would provide some nutrients for vegetation in the area. In addition to increasing nitrification of the soils and increasing minerals and salt concentrations in the soil, the ash and charcoal residue resulting from incomplete combustion aids in soil buildup and soil enrichment by being added as organic matter to the soil profile. The added material works in combination with dead and dying root systems to make the soil more porous, better able to retain water, and less compact while increasing needed sites and surface areas for essential microorganisms, mycorrhizae, and roots (Vogl, 1979; Wright and Bailey, 1980).

3.1.2.3 <u>Alternative 3 – July 4th Holiday Celebrations to Include a Laser Light Show</u>

Under Alternative 3, a laser light show would replace the fireworks display for the July 4th celebration and would not be anticipated to have any impact on soil resources at the Memorial.

3.2 WATER RESOURCES (INCLUDING WETLANDS)

3.2.1 Affected Environment

The Memorial contains several intermittent streams that flow after storms, heavy snowmelt, and/or high precipitation seasons, as well as a series of springs. Approximately 34 acres of wetlands occur in the southwest part of the Memorial within Starling Basin. No floodplains exist within the Memorial.

3.2.2 Environmental Consequences

3.2.2.1 Alternative 1 – No Action

Under the No Action alternative, the July 4th celebration event at the Memorial would continue in a manner similar to celebrations prior to initiation of the fireworks program in 1998, without a marquee event such as fireworks or laser light show. The celebration would include educational and entertainment programs that would not impact water resources at the Memorial.

3.2.2.2 <u>Alternative 2 – Proposed Action</u>

Under Alternative 2, activities with the potential to impact water resources include fire suppression (i.e., fire line construction and fire retardant and foam suppression) that may result from the fireworks program. However, in light of the mitigation measures employed during fire suppression activities and the location of past ignitions, there would not be any direct impacts on surface water resources on the Memorial as a result of fireworks. Stream crossings would be limited to set and existing locations; fire line construction and fire retardant and foam use would not be permitted in wetlands; and fire lines would be located outside highly erosive areas, steep slopes, and other sensitive areas. In addition, fire lines would be re-contoured, water barred, and seeded following fire suppression activities to minimize potential erosion and protect water quality.

The use of fire retardants or foams could potentially cause short and long-term impacts to water resources if misapplied or mishandled. Retardants contain ammonia and phosphate or sulfate ions, which can change the chemistry of a water body, thus making it lethal to fish and other aquatic organisms. Foams contain detergents that can interfere with the ability of fish gills to absorb oxygen. The degree of impact would depend on the volume of retardant/foam dropped into the water body, the size of the water body, and the volume of flow in the stream or river. For example, if a 800-gallon drop is made into a fast flowing river, it is likely that the lethal effects to aquatic resources will be short-lived as dilution below the toxic level is quickly achieved. On the other hand, a 3,000-gallon drop in a stagnant pond would likely cause toxic levels to persist for some time (USDA, 2001).

3.2.2.3 Alternative 3 – July 4th Holiday Celebrations to Include a Laser Light Show

Under Alternative 3, a laser light show would replace the fireworks display for the July 4th celebration and would not impact water resources at the Memorial.

3.3 VEGETATION

3.3.1 Affected Environment

Ponderosa pine (*Pinus ponderosa*) of varying age is the dominant vegetation type in the memorial. Starling Basin in the southwest corner of the memorial contains one of the largest stands of old growth ponderosa pine in the Black Hills. The stands in this basin are considered an example of a habitat that is rare in the Black Hills, and worth protecting. Additional intermingled trees include Black Hills spruce (*Picea glauca*), quaking aspen (*Populus tremuloides*), paper birch (*Betula papyrifera*), burr oak (*Quercus macrocarpa*), and Rocky Mountain Juniper (*Juniperus scopulorum*). Shrubs and groundcover on the memorial consist primarily of chokecherry (*Prunus virginiana*), pin cherry (*Prunus pensylvanica*), kinnikinnick (*Arctostaphylos uva-ursi*), grasses and sedges.

Many of the ponderosa pine stands in the memorial and surrounding areas contain high densities of trees. These stands are currently a fire hazard for the National Park (USDA, 2002), and a fire management program, including activities such as thinning and prescribed burning, is being implemented (USDA, 2002)

Noxious weeds in the memorial are found in several areas, especially former construction zones, and the memorial has a program in place to control their spread. Some of the more prevalent plant species include Canada thistle (*Cirsium arvense*), field bindweed (*Convolvulus arvensis*), common mullein (*Verbascum thapsus*), and hound's tongue (*Cynoglossum officinale*).

Mount Rushmore National Memorial does not contain any plant species that are protected under the Endangered Species Act.

3.3.2 Environmental Consequences

3.3.2.1 Alternative 1 – No Action

Under the No Action alternative, the July 4th celebration event at the Memorial would continue in a manner similar to celebrations prior to initiation of the fireworks program in 1998, without a marquee event such as fireworks or laser light show. The celebration would include educational and entertainment programs that would not be anticipated to effect vegetation at the Memorial.

3.3.2.2 Alternative 2 – Proposed Action

No impacts to vegetation are anticipated as a result of preparation for fireworks activities for the 4th of July celebration. Launch equipment and the fireworks will be airlifted into and out of position, and no vegetation clearing activities will be required for launch preparation.

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Firework induced wildfires and activities associated with their control are the primary source of potential impacts to vegetation under this alternative. As described above, hazardous fuels loading in the areas surrounding Mount Rushmore are a current concern for the planning and implementation of operations during the 4th of July celebration. As with any fire adapted forest community, small low intensity fires do not adversely affect vegetation health and viability. Indeed, the effects of these small-scale, low intensity fires are most often beneficial, and can improve the growth and health of a naturally fire-adapted forest community. The exception to this would be in the event that a wildfire burns the crowns of the trees in a stand. Under these conditions, significant damage and mortality of a forest stand may occur. For this reason, the planning and implementation proposal for the 4th of July celebration has been developed to take into account the effects of 4th of July activities of the past, and implement mitigation measures and procedures that respond to and prevent the possibility of large scale crown fires.

As described in Section 3.1.1.2 (Soils, Alternative 2), the 4th of July events have lead to several small spot fires at Mount Rushmore since 1988. All of these fires have been successfully extinguished, and in total, have not burned more than 2 acres of forest. This high success rate can be attributed to: the predictable and localized nature of the ignition sites, presence of low fire risk areas within the zone that most spent fireworks fall (bedrock outcrops with little or no vegetative fuel), pre-firework placement of fire suppression equipment and personnel, and close adherence to the "Go/No-Go" criteria for fireworks show implementation. Based on these factors, the possibility of large-scale crown fires from the Fireworks display is not reasonably foreseeable.

In the event that small spot fires do occur, some limited mortality to shrubs, seedlings, and small trees is possible. Larger trees will not likely be adversely effected, and grasses and forbs will resprout from roots and rhizomes soon after the fire, since the majority of these species are fire adapted at the memorial.

Starling Basin in the southwest corner of the memorial is of specific concern for fire protection since it contains one of the largest stands of old growth ponderosa pine in the Black Hills. This stand is approximately 2,600 feet to the south-southwest of the fireworks launch site. At this distance, it is not anticipated that spot ignitions from fireworks fallout will occur since wind speed restrictions in the "Go/No-Go" fireworks implementation plan would be designed to keep fallout within 900 feet of the launch site. The possibility that this site may burn as a result of wildfire spreading from an ignition near the launch site is not reasonably foreseeable due to the presence of a fire lookout post (Riordan's Rock), two fire engines, and fire crew in the immediate vicinity (less than ¾ of a mile) of the basin which allows for the rapid location and suppression of any spot ignitions. In addition, the majority of the area over which ignition fallout is most likely (within 900 feet) is on the opposite side of a major highway which would used as a control line for preventing the spread of any wildfire into the south and southwestern portions of the monument. However, as described above and in Section 3.1.1.2 (Soils, Alternative 2), the potential for a spreading wildfire is not reasonably foreseeable.

Suppression activities that resulted in soil disturbance (fire lines) would make those disturbed areas more susceptible to noxious weed infestation. Disturbed areas would be seeded with native

grasses to reduce the possibility of invasive species development or further encroachment at the sites.

3.3.2.3 Alternative 3 – July 4th Holiday Celebrations to Include a Laser Light Show

Under Alternative 3, a laser light show would replace the fireworks display for the July 4th celebration and would not be anticipated to have any impact on vegetation resources at the Memorial.

3.4 WILDLIFE

3.4.1 Affected Environment

A variety of wildlife resources inhabit the forests and grasslands of Mount Rushmore National Memorial including ungulates, small mammals, birds, reptiles, amphibians, and invertebrates. Some common species include mountain lion (*Felis concolor*), mule deer (*Odocoileus hemionus*), elk (*Cervus elaphus*), porcupine (*Erethizon dorsatum*), white-tailed jackrabbit (*Lepus townsendii*), mountain goat (*Oreamnos americanus*) and yellow-bellied marmot (*Marmota flaviventrus*). The memorial is currently conducting an inventory of all wildlife species on the memorial. There are no known federally listed wildlife species that reside within the memorial. No critical habitat is known to exist within the memorial.

NPS Management Policies state, "the National Park Service will inventory, monitor, and manage state and locally listed species in a manner similar to its treatment of federally listed species, to the greatest extent possible." There are 13 species of animals that are listed by the State of South Dakota as endangered. They are peregrine falcon (Falco peregrinus), whooping crane, eskimo curlew (Numenius borealis), bald eagle (Haliaeetus leucocephalus), interior least tern (Sterna antillarum), black-footed ferret (Mustela nigripes), lined snake (Tropidoclonion lineatum), Blanding's turtle (Emydoidea blandingii), pallid sturgeon (Scaphirhynchus albus), finescale dace (Phoxinus eos), central mudminnow (Umbra limi), blacknose shiner (Notropis heterolepis), and banded killifish (Fundulus diaphanus). Of these species, the peregrine falcon is the most likely to be sighted within the memorial during migration (Ode, 2002).

At the present time, there are 15 species of animals that are listed by the State of South Dakota as threatened. They are: American dipper (*Cinclus mexicanus*), osprey (*Pandion haliaetus*), piping plover (*Charadrius melodus*), black bear (*Ursus americanus*), mountain lion (*Felis concolor*), swift fox (*Vulpes velox*), river otter (*Lutra canadensis*), false map turtle (*Graptemys pseeudogeographica*), Eastern hognose snake (*Heterodon platirhinos*), trout-perch (*Percopsis omiscomaycus*), sturgeon chub (*Machrhybopsis gelida*), sicklefin chub (*Machrhybopsis meeki*), northern redbelly dace (*Phoxinus eos*), pearl dace (*Semotilus margarita*), and longnose sucker (*Catostomus catostomus*). Of these species, only the mountain lion is known to frequent the memorial, however, a sighting of black bear was recently reported in the Black Hills region (Ode, 2002).

3.4.2 Environmental Consequences

3.4.2.1 Alternative 1 – No Action

Under the No Action alternative, the July 4th celebration event at the Memorial would continue in a manner similar to celebrations prior to initiation of the fireworks program in 1998, without a marquee event such as fireworks or laser light show. The celebration would include educational and entertainment programs that would have negligible impacts to wildlife at the Memorial. The noise associated with the celebration would cause a temporary disturbance to wildlife at the Memorial. Road kill incidents may increase due to increased traffic volumes associated with the celebration.

3.4.2.2 Alternative 2 – Proposed Action

Under Alternative 2, proposed activities with the potential to impact wildlife include fireworks and fire suppression. Indirectly, wildfire resulting from fireworks ignition would also have the potential to impact wildlife.

Concussion blasts from the fireworks could temporarily displace wildlife within hearing range over a 24 to 27 minute period. Other noises associated with the celebration would also disturb wildlife. Fire suppression activities could also result in the temporary displacement of wildlife.

The impacts to wildlife from both fire and smoke as a result of a wildfire would depend on fire severity. The small wildfires that have occurred in the past as a result of fireworks would have minimal affects on wildlife species in the vicinity of the Memorial. Large animals would not be expected to suffer mortality since they would avoid fires. Some small animals such as field mice may be caught by fire but mortality is not expected to be substantial. The exception would be during a catastrophic fire where large and small mammals are generally more affected by fire and could suffer individual mortality. However the risk of a catastrophic fire is minimal based on the fire suppression measures in place during the fireworks program (Appendix A), initial attack success rates, and other factors influencing fire as described under Section 3.1.2.2 Soils. The loss of individuals of a non-threatened or endangered species, would not jeopardize the viability of the populations on and adjacent to the memorial.

There would be no impacts to federally or state listed species from fireworks or fire suppression activities under this alternative.

$3.4.2.3 \; \underline{\text{Alternative 3} - \text{July 4}^{\text{th}} \, \text{Holiday Celebrations to Include a Laser Light Show}}$

General wildlife impacts under Alternative 3 would be similar to those described under the No Action alternative.

3.5 AIR QUALITY

3.5.1 Affected Environment

Under the terms of the 1990 Clean Air Act amendments, the memorial is designated as a Class II quality area. By definition, Class II areas of the country are set aside under the Clean Air Act, but identified for somewhat less stringent protection from air pollution damage than Class I areas. The primary means by which the protection and enhancement of air quality is accomplished is through implementation of National Ambient Air Quality Standards (NAAQS). These standards address six pollutants known to harm human health including ozone, carbon monoxide, particulate matter, sulfur dioxide, lead, and nitrogen oxides (USDA, 2000a).

Historically, the memorial's air quality has been considered excellent. Several major sources of air pollution (sources that emit more than 100 tons/year of one or more regulated pollutants) are nearby the memorial. These include coal-fired power plants in Rapid City and Lead, South Dakota, and Osage, Wyoming; three cement plants in Rapid City; and a refinery and a natural gas pipeline compressor station in Newcastle, Wyoming. A number of minor sources are also located in the vicinity of the memorial, including sawmills in the areas of Pringle and Custer, South Dakota, and Newcastle, Wyoming and a feldspar mill in Custer.

Air quality and visibility monitoring have been conducted in the Black Hills for many years. There are several monitors in Rapid City, approximately 40 air miles northeast of the memorial, which measure total suspended particulates (TSP), fine particles, sulfur dioxide and nitrogen dioxide. Air quality monitoring stations for particulate matter 2.5 and 10 microns (PM2.5 and PM10) are located at Badlands National Park and Wind Cave National Park. Monitoring of particulate matter at Wind Cave National Park reveals that air quality is excellent, with PM2.5 and PM10 registering at background levels (Schultz, 2002).

3.5.2 Environmental Consequences

3.5.2.1 Alternative 1 – No Action

Under the No Action alternative, the July 4th celebration event at the Memorial would continue in a manner similar to celebrations prior to initiation of the fireworks program in 1998, without a marquee event such as fireworks or laser light show. The celebration would include educational and entertainment programs that would not impact air quality concerns beyond that produced by the increase in traffic to and from the Memorial. Based on current excellent air quality conditions in the memorial's airshed, and the anticipated traffic increase, it is not likely that any air quality standards would be exceeded as a result of activities under this alternative.

3.5.2.2 <u>Alternative 2 – Proposed Action</u>

No impacts to air quality are anticipated as a result of preparation for fireworks activities for the 4th of July celebration, or as a result of the temporary increase in traffic as a result of the program activities. Although firework displays can increase particulate matter quantity in the air, these

impacts are normally considered minor and temporary, and are generally not considered a significant contributor to this type of air pollution (USEPA, 1997).

The potential for firework induced wildfires (See Section 3.1.1.2 Alternative 2), and more specifically, the smoke generated from these wildfires would be the primary source of potential impacts to air quality under this alternative. Smoke consists of dispersed airborne solids and liquid particles, called particulates, which could remain suspended in the atmosphere for a few days to several months in the event of a fire. Particulates can reduce visibility and contribute to respiratory problems. Very small particulates can travel great distances and add to regional haze problems. Regional haze can sometimes result from larger wildfires.

As described previously, all fires associated with the 4th of July fireworks program have been successfully extinguished, and in total, have not burned more than 2 acres of forest. In the event that small spot fires at this scale occur, some temporary localized increases in particulate concentrations would likely be observed. However, it is not reasonably foreseeable that wildfires at this scale would have adverse effects on overall air quality within the monument's airshed. In the unlikely event that these fires escape suppression and become large-scale wildfires, air quality impacts such as increases in regional haze, increased particulate matter, and associated health risks would be observed.

3.5.2.3 <u>Alternative 3 – July 4th Holiday Celebrations to Include</u> a Laser Light Show

Under Alternative 3, a laser light show would replace the fireworks display for the July 4th celebration and would not be anticipated to have any additional impacts above and beyond that describe under the No Action alternative.

3.6 Noise

The loudest sounds that can be detected comfortably by the human ear have intensities that are 1 trillion (1,000,000,000,000) times larger than those of sounds that can just be detected. Because of this vast range, any attempt to represent the intensity of sound using a linear scale becomes very unwieldy. As a result, a logarithmic unit known as the decibel (dB) is used to represent the intensity of a sound. Such a representation is called a sound level.

Although the dB scale accurately reflects the sound pressure level of a given sound, it does not accurately reflect the sound exposure levels heard by a human observer. The human ear is progressively reduced in sensitivity to sounds in the lower and upper ranges of our audible frequency spectrum. To more accurately assess the loudness of sounds as heard by the human ear, sound levels are measured on the A-weighted decibel (dBA) scale. This sound level scale is progressively reduced in sensitivity to very low and very high-pitched sounds. This method of sound measurement mimics our own sense of hearing, and therefore more accurately assesses the effects of different sound levels on a human observer.

Normal speech has a sound level of approximately 60 dBA. Sound levels above about 120 dBA begin to be felt inside the human ear as discomfort and eventually pain at still higher levels (DOD, 1978). Sound level examples can be found in Table 3-1.

Table 3-1 Cor	Table 3-1 Common Noise Levels and Their Effects on the Human Ear									
Source	Decibel Level (dBA)	Exposure Concern								
Soft Whisper	30									
Quiet Office	40	Normal safe levels.								
Average Home	50	Normal safe levels.								
Conversational Speech	60									
Busy Traffic	75	May affect begins in some individuals depending								
Noisy Restaurant	80	May affect hearing in some individuals depending on sensitivity, exposure length, etc.								
Average Factory	80-90	on sensitivity, exposure length, etc.								
Pneumatic Drill	100	Continued exposure to noise over 90 dBA may								
Automobile Horn	120	eventually cause hearing impairment								

(DOD, 1978)

To accurately assess the impacts of noise exposure on an entire community, dBA sound levels are commonly expressed with a measure that describes the cumulative effects of noise levels over time. The most commonly employed cumulative noise measure for environmental analysis is the Day-Night Sound Level (Ldn). This measure (expressed in dBA) describes the cumulative noise exposure expected from all major noise sources over a 24-hour period. Using the Ldn system, 10 dB is added to the assessment of sound produced by activities occurring between 10 PM and 7 AM. This addition places greater weight on the noise produced by nighttime activities due to the higher sensitivity of communities to noise during these hours.

Certain facilities, communities, and land uses are more sensitive to a given level of noise than others. Such "sensitive receptors" include schools, churches, hospitals, retirement homes, campgrounds, wilderness areas, hiking trails, and species of threatened or endangered wildlife. Impacts from noise production are generally assessed with respect to changes in noise levels experienced at sensitive receptors. Different types of sensitive receptors vary in their acceptance of noise disturbance. As a result, noise impacts for different receptors are often assessed using different noise level standards. Recommended land use and associated noise levels are illustrated in Table 3-2.

Table 3-2 Recommended Land Use Noise Levels								
	Noise Levels (Ldn)							
Land Use Category	Clearly Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable				
Residential	< 60	60-65	65-75	> 75				
Commercial, Retail	< 65	65-75	75-80	> 85				
Commercial, Wholesale	< 70	70-80	80-85	> 85				
Manufacturing	< 55	55-70	70-80	> 80				
Agricultural, Animal Breeding	< 60	60-75	75-80	> 80				
Natural Recreation Areas	< 60	60-75	65-75	> 75				
Hospitals	< 60	60-65	65-75	> 75				
Schools	< 60	60-65	65-75	> 75				
Libraries	< 60	60-65	65-75	> 75				
Churches	< 60	60-65	65-75	> 75				
Nursing Homes	< 60	60-65	65-75	> 75				
Playgrounds	< 55	55-65	65-75	> 75				

(HUD, 1991)

3.6.1 Affected Environment

In general, noise levels at Mount Rushmore National Memorial are typical for a natural recreation area (50-60 dB), with normal noise production occurring as a result of visitor use and vehicle traffic along transecting highways.

While Mount Rushmore National Memorial does not contain proposed or designated wilderness, the Black Elk Wilderness Area, a sensitive receptor, lies on the western border of the memorial. The Norbeck Wildlife Preserve is also an area of special concern.

3.6.2 Environmental Consequences

Noise levels were quantitatively determined using the Inverse-Square Law, the law by which the mean-square sound pressure level varies inversely as the square of the distance from the source (Traux, 1999). All noise level calculations were performed assuming that obstructions that may impede the propagation of sound (buildings, vegetation, etc.) were not present, and that the land between the source of the sound and the receiver was flat. Thus the noise level calculations should be considered a "worst case" measure. Noise impacts were then assessed with respect to the location of sensitive receptors.

3.6.2.1 Alternative 1 – No Action

Under the No Action alternative, the July 4th celebration event at the Memorial would continue in a manner similar to celebrations prior to initiation of the fireworks program in 1998, without a marquee event such as fireworks or laser light show. The celebration would include educational and entertainment programs that would result in an increase in noise levels and noise produced by increased visitor use. However, these effects would be temporary, lasting only as long as the 4th of July celebration activities. Based on the types of activities normally planned, it is not anticipated that noise levels would exceed that considered normally acceptable in a natural recreation area.

3.6.2.2 <u>Alternative 2 – Proposed Action</u>

Potential noise sources associated with the fireworks program are related to the fireworks launch, high volume of visitors, and noise generated by the fire crews during fire suppression activities of potential spot fires.

Noise levels experienced at the memorial during the fireworks program will most certainly exceed the normally accepted levels for natural recreation areas. However, unlike nuisance noise, this noise source is anticipated as part of the 4th of July celebration itself. To ensure the protection of human health and prevent damage to visitor hearing, fireworks planners follow the National Fire Protection Agency's guidance on the construction, handling, and use of fireworks intended for outdoor fireworks displays and the general conduct and operation of the display (*NFPA Guidance 1123*). Following these guidelines, it is not likely that any adverse effects to the public would occur as a result of the fireworks program itself. Moreover, if disturbance were

to occur to some members of the public in the nearby area, this disturbance would be transient, lasting no more than the anticipated 25 to 27 minutes of the fireworks program. Noise from the fireworks may degrade the wilderness experience of people recreating in the Black Elk Wilderness Area. However, the disturbance would be temporary.

Noise generated from fireworks would temporarily disturb and/or startle wildlife within and adjacent to the memorial, and could cause the temporary displacement of these species. However, since the fireworks display would only last for a short duration, any displaced wildlife would be expected to return to the area upon completion of the program.

The potential for firework induced wildfires (See Section 3.1.1.2 Alternative 2), and more specifically, the noise generated from their suppression, may result in additional noise in and around the fireworks launch site. As described previously, these spot fires would be highly localized, and thus noise sources as a result of fire suppression would largely be confined to the immediate vicinity of the launch site (primarily within 900 feet) and along the roads approaching the launch site. Noise generated from the use of heavy equipment would temporarily disturb and/or startle wildlife within and adjacent to the area where ignition from fallout would likely occur. The Black Elk Wilderness Area and Norbeck Wildlife Preserve are outside of the range at which fire suppression operations would have a noticeable effect.

3.6.2.3 Alternative 3 – July 4th Holiday Celebrations to Include a Laser Light Show

General noise impacts under Alternative 3 would be similar to those described under the No Action Alternative.

3.7 VISITOR USE AND EXPERIENCE (INCLUDING PARK OPERATIONS)

3.7.1 Affected Environment

Most visitors spend short-day periods at Mount Rushmore. Visitor use is highest during the months of May through September, with July as the most popular month. The July 4th holiday fireworks show has become widely popular. This nationally televised event attracts an attendance of over 30,000 people on site and reaches millions of people throughout the nation.

The Memorial offers a variety of interpretive programs, musical performance, guided walks, afternoon children's activities, studio talks, and lighting ceremony held nightly from May to September in the park's amphitheater.

Visitor use and experience is overwhelmingly dominated by the sculpture of the busts of four U.S. Presidents: George Washington, Thomas Jefferson, Abraham Lincoln, and Theodore Roosevelt. In addition, visitors have access to a visitor's center and dining hall, as well as several other attractions such as the Sculptor's Studio. The memorial contains a viewing platform and nature trail that offer views of the sculpture and scenery of the Memorial.

3.7.2 Environmental Consequences

3.7.2.1 Alternative 1 – No Action

Under the No Action alternative, the July 4th celebration event at the Memorial would continue in a manner similar to celebrations prior to initiation of the fireworks program in 1998, without a marquee event such as fireworks or laser light show. Although visitors would continue to experience educational and entertainment programs, their experience would be diminished by the lack of a fireworks display or laser light show. Fireworks provide a powerful emotional experience for visitors that symbolize American patriotism and independence.

Visitor use would most likely decrease to levels similar to those experienced in 1997 or prior years before the inception of the fireworks program as discussed in Section 3.8.1.1 Socioeconomics. It is also reasonable to assume that long-term visitor use throughout the year may decrease due to the absence of free advertisement on a local, national, and international scale provided by media coverage of the fireworks program.

Park operations would benefit from a decrease in costs and labor associated with preparing and organizing for the event.

3.7.2.2 Alternative 2 – Proposed Action

Throughout its history, Mount Rushmore National Memorial has celebrated the national history and spirit of democracy during the July 4th Holiday. The addition of the fireworks program in 1998 resulted in a substantial increase in the number of visitors to the Memorial and surrounding area. The fireworks program is a patriotic event that celebrates the best of America and provides an emotional experience for all those who attend or view it through the media. The program has a beneficial effect not only on the Memorial, but also on the image of South Dakota and the Black Hills. The fireworks program attracts out of state visitors who might not otherwise consider the Black Hills area for celebrating July 4th. Visitation to the Black Hills region benefits from valuable free advertising from local, national, and international news coverage of the fireworks event.

The fireworks program requires intensive labor effort of park personnel, long-term planning, and considerable financial resources that could be invested in other, more pressing park operations. However, the fireworks program meets the Mount Rushmore National Memorial's mission to "preserve and protect [the Memorial] while providing for the education and enjoyment of the public." Park operations could also be impacted by damage to facilities including utilities. In the past, fireworks caused damage to electrical cables that hampered park operations.

In the unlikely event of a severe wildfire as a result of the fireworks, park operations could be impacted by damage or destruction of facilities followed by short or long-term park closure. However, as described in Section 3.1.2.2 Soils this scenario is not reasonably foreseeable.

3.7.2.3 <u>Alternative 3 – July 4th Holiday Celebrations to include a Laser Light Show</u>

Under Alternative 3, a laser light show would replace the fireworks display for the July 4th celebration. This alternative would also be used as a fallback event under Alternative 2 if the fire conditions would prevent a fireworks display. Although the laser light show, choreographed to music would approach the same entertainment value as a fireworks display, it would not provide the same traditional patriotic experience associated with fireworks on the 4th of July.

As evidenced by attendance estimates for the year 2002, when the laser show was substituted for fireworks, the program would attract substantially larger numbers of visitors to the memorial and surrounding area than if no marquee event was staged. However, the number of visitors would be slightly less than are drawn by the fireworks display.

It is expected that the laser light show would require similar labor efforts and would incur similar costs as the fireworks program for planning and implementation. However, fire prevention measures and personnel would not be necessary resulting in a savings of labor and financial resources.

3.8 SOCIOECONOMICS

The analysis of socioeconomic impacts identifies those elements of the affected social community that are susceptible to changes that may result from the proposed program or any of its alternatives. Specifically, the assessment considers how these alternatives might affect individuals, institutions, neighborhoods, and the larger social and economic systems of the potentially affected community.

The intent of the analysis is to develop a meaningful characterization of the neighborhood, or communities within, adjacent, or immediately surrounding the site of the proposed program in order to identify those aspects that are sensitive to the actions under consideration and that may be altered as a consequence of the proposed action. This characterization provides the basis for the description of the affected environment against which, any changes resulting from the proposed action may be evaluated. The magnitude and extent of any potential consequences to the social environment resulting from the project can then be described.

3.8.1 Affected Environment

The description of the affected environment for socioeconomic resources incorporates statistical and other descriptive data to provide an overview of the relevant conditions of the study area. The study area for this assessment is defined geographically by the residential settlements, smaller communities and urbanized areas located within a fifty mile radius of the site of the proposed Mount Rushmore July 4th Holiday Celebration.

For purposes of this assessment, this geographic area will be represented by entire counties that are contained, either in whole or in part, within the artificial boundary created by the 50-mile radius. Included is the South Dakota County of Pennington, where the Mount Rushmore National Memorial is located, as well as the counties of Custer, Lawrence, Meade, and Fall

River, in South Dakota and Weston County in the State of Wyoming. These six counties constitute the affected environment for the assessment of socioeconomic resources.

In order to more completely identify any effects that may be experienced in the immediate area of the proposed program site, a sub-level of analysis has been defined to include those populated areas that border the actual program site or lie along the access roads that would be used by program attendees and participants to gain access to the site. These would be the most likely areas to experience any direct physical effects associated with the program. This sublevel of analysis is represented geographically by 37 census tracts within the six county-affected environment that contain a resident population.

Demographic and Community Characteristics

The site of the proposed July 4th program is located in southwestern South Dakota, in Pennington County. This hilly region lies in the Black Hills, a heavily forested area covering approximately 2 million acres of southwestern South Dakota and northern Wyoming. The area is sparsely populated, with an approximate density of 9.9 people per square mile (South Dakota), and is essentially rural in character. More than 40 percent of its population are living outside urbanized communities (Census, 2000). Major communities in the defined study area include Rapid City, located 23 miles to northeast of the Mount Rushmore National Memorial, Keystone, bordering the northeast corner of the memorial, Hill City, Rockerville, Custer, Hermosa, and Hot Springs.

The affected environment includes portions of two States, South Dakota and Wyoming. For both states, minority populations constitute a substantially smaller percentage of total population than the 24.9 percent that is characteristic of the nation as a whole. Similarly, both states show a level of poverty is below the national level of 12.4 percent in 1999 (Census, 2000). Total Gross State Product (GSP) for South Dakota was \$23,192 million in 2000. By comparison with the year 1998 this is an increase of \$2,622 million. The Wyoming GSP for 2000 was \$19,294 million in 2000, an increase of 2,874 million dollars since over the 1998 figure (BEA, 2002). Table 3-3 presents states selected population characteristics for South Dakota and Wyoming.

Table 3-3 Population Characteristics by State									
		Population	n	Poverty of	GSP				
		ropulatio.	11	individuals %	(Millions of \$)				
	Total	Rural %	Minority %						
South Dakota	754, 844	48.14 11.3		9.4	23,192				
Wyoming	493,782	34.92	7.92	11.4	19,294				

Source: Census, 2000; BEA, 2002

The potentially affected environment includes six counties with a combined total population of 155,992. For the regional population as a whole, an estimated 11.36 percent were living at or below poverty level. This is slightly lower than the poverty average rate for the State of South Dakota, which has an estimated 11.4 percent of its population living at or below the poverty level. Within the region, Pennington County represents the largest county by population with a total of 88,565 residents, of which 13.3 percent are represented as minority. This is slightly higher than State minority population percentage of 11.3.

In 2000, the population of the study area was living in a total of 61,048 households, with an average household size of 2.41 persons. More than half of all households in the six county affected environment are located in Pennington County. For the year 2000 Meade County had the highest median household income in the region, \$39,992. Per capita income is highest in Pennington County, \$18,938; followed by Custer County, \$17,945 and Meade County \$7,680 dollars (Census, 2000). Thee socioeconomic characteristics of the region are summarized in Tables 3-4 and 3-5.

Ta	ble 3-4 Popu	lation Cha	racteristics b	y County	
	Population	on Percent Percent		Total	Household-
	Total	Minority	Poverty	Household	Avg. Size
Custer County, SD	7,275	5.8	9.4	2,970	2.35
Fall River County, SD	3 / /		13.16	3,127	2.23
Lawrence County, SD	21,802	4.2	14.8	8,881	2.33
Meade County, SD	24,253	7.3	9.4	8,805	2.66
Pennington County, SD	88,565	13.3	11.5	34,641	2.49
Weston County, WY	6,644	4.1	9.9	2,624	2.42
Total Counties	155,992	7.4	11.36	61,048	2.41

Source: Census, 2000

Table 3-5 Income Characteristics by County							
	Median Household	Per capita					
	Income (dollars)	income (dollars)					
Custer County, SD	39,303	17,945					
Fall River County, SD	29,631	17,048					
Lawrence County, SD	31,755	17,048					
Meade County, SD	39,992	17,680					
Pennington County, SD	37,485	18,938					
Weston County, WY	32,348	17,366					

Source: Census, 2000

The portion of the affected environment that would experience the most direct effect of the program is represented by an aggregate of 37 census tracts that represent the immediate site level. This area contains a total population of 155,992. The actual site of the proposed program is located within the boundaries of census tract 011003, which contains a total population 7,107 people. These residents would be expected to be the most susceptible to any changes in the physical environment resulting from the temporary increase in the number of visitors to the memorial, or from traffic, noise, congestion, or alterations of the visual landscape resulting from the proposed program.

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The estimated minority population within the area immediately affected by the program is 19,500, which represents approximately 12.5 percent of the total population of the immediate site level. For census tract 011003, minority populations account for 5.43 percent of the population. In 1999, the total number of individuals living at or below the poverty level in the area bordered by the 37 census tracts was 11.57 percent; a figure slightly lower than national average of 12.4 percent. For census tract 011003, where the proposed action is taking place, poverty populations account for approximately 4.2 percent of the population (Census, 2000).

In 2000 there were total of 61,048 households with an average 2.41 persons per household. Within the boundaries of census tract 011003 there were 2,569 households with an average household size of 2.74 persons.

Economic Characteristics

The primary industries within the affected environment include retail trade, which contributes \$125,286,000 to personal income in the six counties, and accommodation and food service, which contributes \$21,357,000 (Census, 1997). Education, health, and social services are the leading industries in terms of total employment, accounting for approximately 13.94 percent of the employed civilian population 16 years and over in 2002. The art, entertainment, recreation, accommodation and food service sectors of the economy employed approximately 7.21 percent of the total workforce during the same period.

Aggregate income for all six counties in the affected environment for the population 15 years of age and over was \$2,853,898,700 in 1999 (Census, 2000). Pennington County leads the region with an aggregate income of \$1,677,226,300, approximately 14 times greater than that for Weston County in Wyoming, which has the lowest aggregate income of the six counties in the region, approximately \$115,377,700.

Visitor spending for lodging, food and beverages, attractions, and miscellaneous retail items accounted for a substantial portion of gross sales in the Black Hills region of south Dakota and in the six counties that comprise the affected environment for this analysis. In 2001, visitor spending in the Black Hills Badlands & Lakes region of the State accounted for \$326,512,090 or 54.3 percent of the total visitor spending in the State of South Dakota (Madden, 2002). This represents a 7.2 percent decline from the prior year's total of \$351,672,278.

For the five South Dakota counties included as part of the affected environment, visitor expenditures in 2001 declined 8.8 percent, dropping from \$325,645,781 in 2000 to 300,401,226 in 2001. Only Fall River County experienced an increase (2.7 percent) over this period. For Pennington County, the actual site location of the monument, visitor expenditures declined 9.1 percent from \$166,883,452 in 2000 to \$151,685,199 in 2001.

The six counties that make up the affected environment had a total workforce of 120,622 in 2000. The highest rates of unemployment, 6.0 percent, occurred in Lawrence County. This is almost twice as much as the national rate of 3.7 percent and the state rate of 3.0 percent for the same period (see Table 3-6).

Table 3-6 Employment Characteristics by County									
	Workforce size Employed % Unemploy								
Custer County, SD	5,929	57.5	2.0						
Fall River County, SD	5,988	52.9	3.9						
Lawrence County, SD	17,551	59.8	6.0						
Meade County, SD	18,138	61.6	2.5						
Pennington County, SD	67,712	65.5	3.1						
Weston County, WY	5,304	56.6	3.3						
	120,622								

Source: Census, 2000

Estimates for the year 2000 indicate that for South Dakota approximately 30,860 jobs were directly or indirectly generated by the State's travel and tourism industries. (Madden, 2002). About 75 percent of these jobs are created in employment sectors directly affected by visitor spending, such as retail trade, food and beverage service, and lodging and amusements. Estimates for 2001 employment reflect a loss of approximately 2000 jobs, a 2 percent decline.

The Mount Rushmore National Memorial

The Mount Rushmore National Monument includes an area of approximately 1,238 acres in Pennington County. The memorial is located on land owned by the Federal government and managed by the U.S. National Park Service. The site of the memorial is bordered to the northeast by the town of Keystone (population 311), in Pennington County. Other major landholdings in the area of the memorial are primarily Federal lands managed by the National Park Service, the Forest Service, and the Fish and Wildlife Service. State lands include Custer State Park. Interspersed between these Federal holdings are small



pockets of private land ownership. Major concentrations of population in the nearby area include Custer -population 1,860, Rapid City - population 59, 607, Hot Springs - population 4,129, Hermosa - population 315, and Hill City - population 780 (Census, 2002). All are within the State of South Dakota.

The memorial offers a variety of interpretive programs, exhibits guided walks, afternoon children's activities, studio talks and an evening lighting ceremony, held nightly from May through September in the park's amphitheater. Throughout 1998, Mount Rushmore National Memorial celebrated the completion of improved visitor facilities at the memorial. As part of this celebration, a Fireworks program was added to the July 4th celebration. Subsequent displays were presented over the next three years, but were cancelled in 2002 due to dry weather conditions. A laser light show was substituted during that year.

In addition to providing an educational, patriotic and recreational experience for visitors, the memorial also contributes directly to the economies of the county, region and the State of South Dakota. Estimates prepared for an economic impact study of the Mount Rushmore Memorial prepared by the National Park Service (DOI, No Date) indicate that the memorial contributes as

much as \$219,890,000 in direct income to the state economy through sales by local vendors of such items as lodging, food, gifts, film, gasoline, car services, etc. In addition, approximately \$329,830,000 in secondary income is generated through vendor sales to the local businesses that provide products or services to visitors. Mount Rushmore visitors also contribute as much as \$19,789,862 to the overall tax base and account for approximately 10,520 jobs in the state economy (DOI, No Date).

3.8.2 Environmental Consequences

The socioeconomic characteristics and resources of a community can be impacted through a variety of activities that may temporarily alter the structure and patterns of social life in the community or change the income, revenue, or business base of the local or the larger regional and State economies. The purpose of this section is to identify potential sources of any impact resulting from the proposed alternatives, isolate those elements of the social environment that may be affected, and describe the magnitude and extent of any potential changes

Socioeconomic effects are evaluated through the use of a comparative method (Burdge, 1995; ICGPSA, 1995). The potential for impact is based on the comparison of existing social conditions with those that are reasonably expected to occur following implementation of each alternative. That is, the likely changes that may be caused by the proposed action, or alternatives, are compared with the social setting as it currently exists, prior to the onset of any project-related activity. An impact is defined as a change (either quantitative or qualitative) in some aspect or characteristic of the socioeconomic environment. Any resulting impacts identified are then evaluated as to whether they may have a significant adverse or beneficial consequence for the local community.

The primary sources of impact associated with the proposed July 4^{th} Holiday celebration at the Mount Rushmore National Memorial include changes in:

- Enhanced recreational experience for both outside visitors and local residents of the area;
- Temporary increases in visitor populations to the memorial and surrounding region;
- Increased spending in the local community and corresponding increases in employment, business income and tax revenue; and
- Potential for alteration of the physical character and setting of natural and community resources.

The public perception of the beneficial and adverse qualities of the proposed program with respect to lifestyle factors is addressed on the basis of public comments during the scoping process.

3.8.2.1 <u>Alternative 1 – No Action</u>

Under the No Action alternative, the July 4th holiday event at the Mount Rushmore National Monument would continue in a manner similar to celebrations that occurred prior to 1998, without the additional attraction of a highlight such as a fireworks or other special evening display. Visitors to the memorial during the holiday period would continue to experience

educational and other entertainment programs, as well as the regularly performed lighting ceremony. Fireworks displays would be available in communities surrounding the Memorial, specifically in the communities of Rapid City (three separate events), Custer and Lead (Popovich, 2002).

Community Impacts

In general, the overall impact to the affected communities from discontinuation of the program would be generally mixed. The program has been very popular, as evidenced by participation in past years and comments received during the public scoping period (see scoping report). However, the program has also been controversial (Daly, 2002), especially with respect to the potential fire hazard and the local residents perception that the program and its associated temporary influx of visitors to the memorial have the potential to alter or damage the memorial or its natural setting.

In the absence of the program enhancement feature represented by either a fireworks display or a laser light show, the holiday experience for both outside visitors to the memorial and for local residents would be substantially diminished. Statistics for visitation to the memorial indicate that since 1998 when the first fireworks display was presented, attendance at the event has fluctuated somewhat, but continued a general and substantial increase, from 34,462 in 1998 to 37,772 in 2001 (Popovich, 2002a). This represents an increase in visitors that is almost double the 1997 figure for the July 3rd date and an 80 percent increase over the day immediately prior to presentation of the program. (See Table 3-7 below for more detailed information on visitor attendance during the Fourth of July celebration).

	Table 3-7 Visitor Statistics for the Mount Rushmore National Memorial (July 2-5)							
	July 2	July 3	July 4	July 5				
1997	20,303	18,824	25,078	24,362				
1998	19,125	34,462	29842	33,012				
1999	19,408	32,050	30,554	33,925				
2000	31,129	37,992	29,437	22,920				
2001	30,415	37,722	28,653	25,914				
2002	30,011	31,482	27,271	30,627				

Source: Popovich, 2002a

Increased visitation figures for the years in which the program has been presented indicate the popularity of the program as well as the ability of the program to influence memorial visitation on the days immediately preceding and following the July 4th celebration.

In addition to the immediate loss of a valued recreational experience, the community would also be expected to experience a minor and indirect impact from the loss of an organizing event around which various community groups participate as volunteers. Participation in the Fourth of July Celebration contributes to a sense of cohesion among the members of these groups and also, through contributions of portions of the proceeds from the event, helps to fund other group activities. As noted in the scoping comments received, the program also helps to promote

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partnerships between the NPS, the Mount Rushmore Society and numerous independent tourism groups in the area. The absence of the program could be considered to have a potentially adverse impact on these relationships.

If the fireworks or laser light show were discontinued, it could reasonably be assumed that the number of visitors to the memorial would return to levels similar to those experienced in 1997 or prior years before the inception of the Fireworks program. The corresponding reduction of the impact resulting from increased traffic and visitation to the memorial would potentially be reduced. Although this effect is normally temporary and confined to the evening of the program, some traffic congestion and disruption to local resident's routine activity could be expected. Also reduced would be the potential for damage to areas along access roads to the memorial where overflow attendees normally park.

Because the program is somewhat controversial, elimination of the program would reduce local resident's concerns for the potential fire hazard or other objections to the program. The program has also been cited as a source of rift or cleavage in the community between individuals and groups that support or oppose its continuation.

However, during the five years in which the program has been presented, the local community has benefited from an enhanced visibility as the result of increased publicity and higher levels of visitation to the memorial and the surrounding area. Additionally, a number of residents have indicated the positive and beneficial "patriotic nature" of the program. If the program were now to be discontinued, it is questionable whether the current level of controversy would diminish.

Economic Impacts

Direct spending by vacation travelers or other visitors to the Mount Rushmore National Memorial not only benefits the local community through increases in the demand for goods and services in most sectors of the economy, but also has the potential to increase local employment, income and tax revenue. Although the increases in memorial attendance and associated visitor spending are temporary, the potential beneficial effects of the increase would be expected to ripple through the local economy as income, wages, and profits earned during the holiday celebration are spent and respent in the local economy. Repeated cycles of spending and respending produce a "multiplier effect" in which the potential effect of the initial tourist dollar spent is magnified through multiple, successive rounds of spending.

The discontinuation of the fireworks or other special program associated with the July 4th celebration could potentially be expected to have an impact on both the local economy, and to a lesser extent, the regional and State economy. As noted in Table 3-7 above visitation levels for the memorial almost doubled during the July 4th holiday celebration when the Fireworks show was presented.

Diminished levels of visitor spending could be expected to directly affect income and employment in the food and beverage service, lodging and accommodation and other recreation based sectors of the economy, as well as in certain retail trade outlets. Also lost would be the potential increase in revenues acquired from sales and other taxes. To the extent that local

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tourism and associated business enterprises benefit from enhanced awareness and image of the region through advertising associated with the event, these benefits would also be lost if the fireworks or other special program were discontinued.

The potential for lost income and revenue could be partially compensated by decreases in costs associated with presentation of the program; although to some these expenses may be funded from federal rather than local sources. Discontinuation of the program would also be expected to have some relatively minor economic benefit associated with the reduction in risk to economic or other resources that may result from a catastrophic fire.

3.8.2.2 <u>Alternative 2 – Proposed Action</u>

Since 1998, the presentation of a fireworks program, or other light show, as a part of the Mount Rushmore July 4th holiday celebration has resulted in a substantial increase in the number of visitors to the memorial, and subsequently to other locations in the Black Hills region of South Dakota. In addition to media reports and letters of support from public officials, a number of public comments received during the scoping period cited both the value of the program as an emotional, patriotic event for visitors and local residents, as well as its beneficial role in enhancing the region's image, economy, and local tourism. Because the proposed action would continue the current fireworks program these perceived benefits to the local community would be expected to continue. However, continuation of the program has the potential to increase the level of controversy in the community between proponents of the event and its detractors. Some potential for a growing rift or cleavage within the community has been cited, particularly with respect to the potential for conflict between program participating agencies such as the NPS, the Mount Rushmore Society and local civic and other groups.

Community Impacts

The Mount Rushmore National Monument has historically celebrated the July 4th holiday with a special program intended to provide an enjoyable, inspirational and educational experience for memorial visitors during the holiday period. Since 1998, this program has been enhanced with the addition of an evening fireworks display. The popularity of the display, initially a one-time event to celebrate the opening of new visitor facilities, has led to the continuation of the program in subsequent years.

The program has provided substantial benefit to the local community, despite its relatively short life span. Both visitors and participants cite the program as a beneficial contribution to the local community and as an emotional experience that enhances the sense of community and patriotism experienced by program attendees. In this sense, the program represents a unifying event for the local community.

In general, the program has had a beneficial effect on the local community. Along with providing a meaningful experience for local residents, the program serves to attract visitors to the area who might not otherwise consider the Black Hills region. The program is perceived to have a beneficial effect through the enhancement of the overall image and attractiveness of the region.

Although other fireworks displays are presented in the region on July 4th, attendance at the Memorial display on July 3rd would not be expected to influence participation at these events.

Participation in the program also has had a beneficial and longer-term effect in building a sense of community and participation for local residents and volunteer community groups, as well. These groups organize throughout the year to provide support and services to the program. Several also use the July 4th celebration as a venue for group activities, such as annual picnics or other functions. As a result, the program contributes to a general sense of cohesion among community groups. Participating community groups also receive financial support by volunteering to run food booths at the event, and receive donations of up to 20 percent of the gross receipts in return. The memorial's contract vendor also donates an additional \$10,000 to \$20,000 to the memorial society each year (Jobman, 2002).

Because the fireworks program is essentially a one-day event, most of the direct physical effects experienced by populations living near the site or along access roads are temporary and relatively minor. On the day of the program an estimated 15,000 vehicles will travel access roads to the memorial site. Although visitor arrivals at the memorial will be distributed throughout the day, departures will be concentrated in the hours immediately following the conclusion of the program. Some degree of traffic congestion and disruption of the normal activity of local residents using these roads may be anticipated. The populations most directly affected would be those located in the immediate vicinity of the site of the fireworks display and along nearby access roads.

Based on the resident population of the Census tract 011003, the tract which actually contains the site of the fireworks, an estimated 7.107 individuals living in 2,569 households would be susceptible to at least some temporary disruption as a the result of traffic and increased visitor populations (see Section 3.11). It should be noted, however that only a small portion of this population actually live in the immediate vicinity of the fireworks site or along the access roads. The potential for impact would be substantially reduced for other residents of this area.

Public safety and volunteer personnel are employed to assist with the movement of traffic and vehicle parking at the site, thereby minimizing any potential traffic disruptions. Parking for approximately 11,000 vehicles is available at the memorial grounds. An additional 4,000 vehicles will be expected to park along access roads near the memorial entrance just prior on the evening for the event.

Although a potential for a minor adverse impact may be anticipated along the access routes to the memorial, traffic is normally cleared from the site within a few hours following the fireworks event and flows return to normal. Some minor damage may occur to roadside areas where overflow parking has occurred. Otherwise, any potential for adverse impacts to the local community setting and character associated with increase visitor populations and associated traffic would be considered minor and temporary.

The potential for controversy and therefore potential conflict and cleavage associated with the program is primarily concerned with the risk of damage to the natural setting and environment of the memorial from an escaped or catastrophic fire. Based on the current fire management plan,

the risk of an escaped fire causing sufficient damage to alter the user experience is less than 1 percent (see Section 3.1.2.2 Soils). The potential for adverse impacts from a catastrophic fire are minimal and substantially less than one percent. However, some continuing effect on the local community as a result of differences over the value and safety of the program may be anticipated. Such conflicts are not expected to have more than a minor effect on the overall life of the community and would not be expected to significantly alter the patterns of community life in the region.

Economic Effects

Presentation of the fireworks display as a part of the July 4th celebration at the Mount Rushmore has had a generally beneficial impact on the local and regional economies of the Black Hills region and has indirectly contributed revenue to both local and State government budgets. Average July 3rd visitor attendance at the memorial for the four year period (1998-2001) during which the display has been presented indicate an increase of approximately 95 percent, or approximately 17,300 additional visitors each year. Attendance figures have been rising steadily for each year in which the program has been presented. Visitor attendance on the days immediately preceding and following the July 3 fireworks display also show higher attendance at the memorial for the 1998 to 2001 period (see Table 3-5).

For 2001 the last year the fireworks were presented, attendance estimates reached 37,722 (Popovich, 2002a) or approximately 19,524 individuals more than attended in 1997, the year immediately prior to the first fireworks display. Assuming that 97 percent of the additional visitors to the memorial are non-local (DOI, No Date) and based on an estimated average daily spending per party of \$220.72 and an average visitor party size of 4.2 (Madden, 2002a), additional visitor attendance at the memorial on July 3rd made a direct contribution to the local economy of \$996,153. Successive rounds of spending based on a multiplier of 2.5 (Madden, 2002) indicate a total direct, indirect and induced stimulus to the local economy of \$2,490,038.

Direct expenditures by visitors to the memorial include on-site concessions, as well as off-site food and beverage, lodging and accommodation, and retail spending during the course of an average stay. Statistics provided by Xanterra Parks and Resorts, the memorial's concession operator (Jobman, 2002), show sales figures for concessions at the memorial have steadily increased over the 1997 base for each year in which the fireworks display was presented (see Table 3-8 below). Only the 2001 celebration showed a decline from the previous year and this figure was still more than double the 1997 sales total for the same day. On average, total sales for the memorial concessions increased \$ 62,793, or approximately 96 percent per year for the four-year period during which the fireworks were presented. Sales for the following day also show substantial increases over the base year of 1997, the last year before the fireworks presentation was added to the celebration.

Table 3-8 Xanterra Parks and Resorts July 3 rd and 4 th Sales								
	1997	1998	1999	2000	2001	2002		
July 3	\$65,417	\$96,436	\$111,734	\$159,235	\$145,433	\$134,430		
July 4	\$79,030	\$82,495	\$108,816	\$118,103	\$109,373	\$109,437		

Source: Jobman, 2002

In addition to direct sales at the memorial itself, the economies of the surrounding region also benefit from spending by visitors to the July 4th memorial celebration. Lodging occupancy surveys indicate that for the years 1999 and 2000, hotels and motels in the region showed full occupancy (3492 rooms) on July 3rd (RCHA, No Date). Occupancy status for the days immediately preceding or following the 3rd also show substantially higher occupancy rates.

The region also benefits indirectly from the attention and free advertising provided by the fireworks display. In 1999, the State Department of tourism established the first nationwide satellite feed of the fireworks event. Subsequent tracking of the number of outlets across the country accepting the program and the number of media outlets served showed that in 2000, 115 outlets in 23 markets took the program. For 2001, a total of 180 outlets with an estimated audience of 10.2 million was estimated. The estimated value of the associated free advertising for the local region was \$47,790 (Gerpen, 2002).

Expenditures by visitors, especially those traveling from outside the region also contribute to the State revenue base. Most spending by visitors would be subject to state sales taxes; exceptions would be spending for state licenses, user fees and gasoline purchases (Madden, 2002). Using the estimated total direct spending by the additional visitors attracted to the memorial on July 3rd as a high end estimate, visitor spending associated with the fireworks display could potentially generate as much as \$39,846 in sales tax revenue, based on the 4 percent rate for the Sate of South Dakota. However, this figure does not consider the portion of the total direct expenditures that would go to non-taxed sectors noted above. The final estimate of the beneficial impact to State revenues from sales taxes would actually be somewhat less than this high-end estimate.

By comparison with the income generated in the local economy by the fireworks presentation, the total costs to stage the event each year have also increased, from \$60,129 in 1999 to \$84,427 in 2001 (BHAG, 1999; BHAG, 2000;BHAG 2001). These costs included personal services, travel and the purchase of supplies and other services such as a helicopter and safety equipment, shuttle buses, public safety and sanitation necessary to stage the event.

During the course of the four years in which the fireworks event was presented (1998 thru 2001), eighteen wildfires have been started on the Memorial grounds as a result of the fireworks program. Each of the fires was quickly suppressed and the total acreage burned by all eighteen fires was less than two acres. One example is presented by the 2000 "I" campfire, which resulted in a total expense of \$21,064 (BHAG, 2000). The costs of fire personnel to suppress these fires represent a minor, but potentially adverse expense associated with the fireworks event. With an average of 4.5 fires per year for each of the four years of the fireworks event, these costs must be considered on balance when evaluation the overall beneficial impact to the local economy associated with the July 4th fireworks event.

3.8.2.3 Alternative 3 – Laser Light Show

Under Alternative 3, a laser light show would replace the fireworks display as a part of the annual Mount Rushmore Memorial July 4th holiday celebration. This option would also be considered as a fall back event under Alternative 2 in any year (such as was the case in

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2002) that fire conditions in the Black Hills region would prevent a fireworks display. The entertainment value of the laser light show, choreographed to music, has the potential to approach the drama normally associated with a fireworks display. However, it lacks the traditional values normally associated with 'Fireworks on the Fourth' celebrations. Other fireworks displays normally staged in the region on July 4th, the day after the memorial event would potentially substitute for this missing element, however.

Community Impacts

The potential benefits to the local community associated with this alternative would be similar to those identified for the staging of a fireworks event. Both local and non-local visitors to the memorial would benefit from the presentation of an inspirational and educational program. Preparation and organization of the event would also continue to serve as a unifying and organizing event for local residents. As evidenced by attendance estimates for the year 2002, when the laser show was substituted for fireworks, the program would attract substantially larger numbers of visitors to the memorial and surrounding area. Although based on 2002 statistics, a slightly smaller number than are drawn by the fireworks display, 2002 attendance figures remained almost 73 percent higher than for 1997 base year when no 'Marquee' event was staged.

The direct physical effects of the presentation of the program would also be similar to that indicated under Alternative 2. Based on 2002 statistics, however, the total number of visitors and the total vehicles involved would be reduced by approximately 17 percent or about 6000 attendees. The potential changes in the overall effect are considered to be minor and would in all likelihood not be perceptible to most residents of the immediately surrounding area. As with Alternative 2, any associated physical impacts would be temporary in nature and therefore would not become significant for consideration in this analysis.

However, this estimate is based on only a single year. As noted earlier, attendance at the memorial during the July 4th holiday has been steadily increasing over the base year 1997, the year immediately preceding the first fireworks display. Although attendance levels for 2002 were slightly lower that for the proceeding year, in which a fireworks display was staged, this does not necessarily indicate that the trend toward higher visitation levels of the past four years has been reversed. As the laser light show becomes established as a traditional part of the Mount Rushmore holiday celebration and visitors come to expect the performance, attendance at the event could be expected to continue at levels substantially higher than those experienced in 1997 and prior years.

With the elimination of the fireworks display, the potential fire hazard and correspondingly the local controversies surrounding the fireworks display could be eliminated. Although this controversy is not considered to have the potential for more than a minor impact on the local community, its elimination could be considered as a beneficial effect of the introduction of the laser light show. The potential for rifts between local organizations and individuals and the creation of serious cleavages within the community is essentially eliminated.

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Economic Effects

Because Alternative 3 would essentially contain the same elements as Alternative 2, with the single exception that a laser light show is substituted for the fireworks display as the 'Marquee' event for the holiday celebration, economic effects associated with implementation of alternative 3 would be essentially similar to those identified for alternative 2. On the basis of attendance estimated for the 2002 celebration, some reduction in visitor attendance and therefore in visitor spending levels could be anticipated. The overall impact of this change is expected to be relatively minor.

As noted above, visitor attendance for 2002 was approximately 17 percent lower than for 2001. In addition to the substitution of the laser light show for the fireworks display in this year, several other factors may have contributed to a reduced attendance in 2002. Among these is a general reduction in travel by American tourists following the September 11, 2001 attack on the World Trade Center. Conversely, a number of attendees in 2002 may have originally planned their trip to South Dakota and the Mount Rushmore memorial anticipating a fireworks display and simply did not alter those plans when the laser light display was substituted. These individuals may in future years plan other activities in the event that the laser light show becomes a permanent part of the Mount Rushmore celebration.

As a result, it is difficult to calculate, based on figures from the single year, 2002, what the potential change in attendance and subsequent visitor spending would be if the laser light show were continued. However, using 2002 as the only base year available for comparison, visitor spending attributable to the event could be reduced by as much as 17 percent or approximately \$170,000. Other contributions to the local economy would be similarly reduced. No estimates of the cost of a laser light show as compared with fireworks display were available for this analysis. However, it can be assumed that costs associated with fire safety and suppression would be substantially reduced under this alternative.

3.9 HUMAN HEALTH AND SAFETY

3.9.1 Affected Environment

Mount Rushmore National Memorial is dedicated to ensuring the safety of all visitors, residents and employees within the Memorial. There is an added responsibility to protect property and people adjacent to the Memorial boundary. Assuring this safety takes priority over all other activities occurring within the Memorial.

Limited access to and through the Memorial coupled with the heavy visitation (25,000-30,000 visitors daily in the summer) creates a potential safety problem in the event of an emergency. All the necessary means will be used to evacuate and warn visitors and employees when public safety is at risk. Adjacent landowners will also be warned and if necessary provided assistance to evacuate the area.

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3.9.2 Environmental Consequences

3.9.2.1 Alternative 1 – No Action

Under the No Action alternative, the July 4th celebration event at the Memorial would continue in a manner similar to celebrations prior to initiation of the fireworks program in 1998, without a marquee event such as fireworks or laser light show. Exclusion of the fireworks program would eliminate the possibility of a potential wildfire ignition as a result of the fireworks decreasing potential public safety problems. The number of visitors would likely return to years prior to the fireworks or laser light show programs alleviating traffic congestion and concentrations of people at the Memorial. These factors would decrease potential safety problems in the event of an emergency.

Potential impacts to human health and safety would most likely be associated with traffic accidents and possible incidents along the access road to the Memorial where visitors park.

3.9.2.2 Alternative 2 – Proposed Action

The potential impacts to human health and safety under the proposed action are associated with the preparation, setting, and launching of fireworks and potential wildfire. During the fireworks program, memorial staff and visitors would not be allowed within 1,000 feet of the launch site as a majority of the fallout from the display would land within this buffer. Eighteen wildfires have started on the Memorial as a result of the fireworks program, however all of the fires were quickly suppressed and, in total, burned no more than 2 acres. Wildfires pose a risk to human health and safety particularly in extreme cases where wildfire escapes suppression and causes a catastrophic fire. In order to reduce potential risk from catastrophic wildfire, the Memorial recently approved its revised and updated Fire Management Plan (December 2002). This plan calls for suppression of all naturally ignited and man-made wildfires, and allows for proactive efforts to help reduce the fire risk to the Memorial and surrounding communities. As discussed in Appendix A, fire protection measures would be in place during the fireworks program. Months prior to July 4th, Memorial staff would prepare management plans for traffic, visitor services, security, fire protection in case of fire danger, and visitor and employee safety as part of the Memorial's "Incident Plan" prepared for the fireworks program. On the scheduled day of the July 4th celebration, the Memorial superintendent will make the decision whether or not to proceed with the fireworks program. The decision will depend on whether fireworks launch criteria (Go - No/Go criteria) are met and that all variable fire-related criteria are acceptable for the event. In addition to the above criteria, the Memorial would also consider fire management criteria such as, fire prescription parameters and fire behavior.

Factors most likely to adversely impact firefighter health and safety include activities associated with wildland fire suppression efforts (accidental spills, injuries from the use of fire-fighting equipment, smoke inhalation, and, in severe cases, injuries from wildland fires). Impacts to the public could include smoke inhalation, in severe cases injuries from wildland fires, and drain of law enforcement and firefighters personnel from adjacent communities.

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Accidental spills of fire retardants and foams are the most likely to adversely impact human health and safety. Fire retardants used in controlling or extinguishing fires contain about 85% water, 10% fertilizer, and 5% minor ingredients such as corrosion inhibitors and bactericides. Fire suppressant foams are more than 99% water. The remaining 1% contains surfactants, foaming agents, corrosion inhibitors, and dispersants. These qualified and approved wildland fire chemicals have been tested and meet specific requirements with regard to mammalian toxicity as determined by acute oral and dermal toxicity testing as well as skin and eye irritation tests (USDA, 2001). However, they are strong detergents, and can be extremely drying to skin. All currently approved foam concentrates are irritating to the eyes as well. Application of a topical cream or lotion can alleviate the effects of a retardant, and protective goggles can prevent any injury to the eyes when using foams.

Fuel break construction can pose safety risks to firefighters. Injuries can occur from the use of equipment as well as from traveling overland to targeted areas for firefighting efforts during suppression efforts. Potential for injuries is even higher because of the fact that the suppression activities would take place at night in extremely steep and rocky terrain. Two injuries to firefighters were reported during the fireworks program as a result of fire suppression. While each of the crew is trained in the use of firefighting equipment, accidental injuries may occur from time to time. Strict adherence to guidelines concerning firefighter accreditation, and equipment and procedure safety guidelines would minimize accidents.

Smoke inhalation can also pose a threat to human health and safety. Smoke from wildland fires is composed of hundreds of chemicals in gaseous, liquid, and solid forms. The chief inhalation hazard appears to be carbon monoxide (CO), aldehydes, respirable particulate matter with a median diameter of 2.5 micrometers (PM2.5), and total suspended particulate (TSP). Adverse health effects of smoke exposure begin with acute, instantaneous eye and respiratory irritation and shortness of breath, but can develop into headaches, dizziness, and nausea lasting up to several hours. Based on a recent study of firefighter smoke exposure, most smoke exposures were not considered hazardous, but a small percentage routinely exceeded recommended exposure limits for carbon monoxide and respiratory irritants (USDA, 2000b).

Statistics for visitation to the memorial indicate that on July 3rd more than 30,000 visitors will be present to watch the fireworks. Because of the high concentration of general public, very limited access, and congested traffic condition there is an increase potential impact to human health and safety. In order to safely manage traffic and protect human health and safety during the event, the Memorial would work cooperatively with local, state, and other federal law enforcement and fire management personnel, and would temporarily supplement its own staff with National Park Service personnel from nearby park units. Management plans for traffic, visitor services, security, fire protection, and visitor and employee safety will be addressed in the "Incident Plan" prepared by the Memorial for the fireworks program.

There is a finite number of fire management and law enforcement personnel in the Black Hills region. Since most, if not all of these personnel are required at the Mount Rushmore fireworks program, other parts of the region are temporarily at greater risk should an emergency occur that requires the attention of these same personnel.

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There is a very small potential of catastrophic fire as described in Section 3.1.2.2 Soils. In case of catastrophic fire, nearby towns, such as Keystone and private property are in jeopardy. However, firefighting crews are on-site during the fireworks program and initiate suppression actions as soon as fire ignitions are detected.

3.9.2.3 Alternative 3 – July 4th Holiday Celebrations to Include a Laser Light Show

The general impacts to human health and safety under Alternative 3 would be similar to those described under the No Action alternative. Potential impacts will depend on the number of visitors attending the laser light show, which is expected to be 73 percent higher than under No Action alternative (for detail analysis on visitation statistics refer to Section 3.8.2 Socioeconomics). The higher number of visitors would result in higher risk associated with traffic congestion and incidents along the access road.

3.10 CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effects of their proposals on historic properties, and to provide state historic preservation officers, tribal historic preservation officers, and, as necessary, the Advisory Council on Historic Preservation a reasonable opportunity to review and comment on these actions.

3.10.1 Affected Environment

Mount Rushmore National Memorial is listed on the National Register of Historic Places. In 1966 it was registered on the basis of the carving of the faces; recognizing that the carving itself was an event of historical significance. The Memorial has engineering, historical and architectural importance. The remainder of the land within Rushmore's boundaries is used for scenic protection and administrative facilities.

Numerous designations for additional historic protection of individual sights within the memorial have been made. These include the establishment of the historic sub-zone for the Visitor Services Area for management purposes, and creation of a historic district for an area including the sculpture, the uncompleted Hall of Records, the Sculptors Studio, the residence, the Borglum View Terrace, and other affiliated facilities from the time of the creation of the sculpture, including the lift platform, the compressor, the water reservoir, a stairway, and remnants of railroad tracks, winches and pulleys. There are no known archeological sites in the memorial.

Protection measures for sites are keyed to determinations of each site's eligibility for inclusion in the National Register of Historic Places. In accordance with section 110 of NHP, NPS is conducting a thorough inventory of historic properties in the Memorial. Several structures are currently listed as classified structures. These include: the Historic Residence, the Sculptor's Studio, the Hall of Records, the Water Reservoir, the Historic Compressor,

Cultural Landscape

A geographic area (including both cultural and natural resources and the wildlife or domestic animals therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.

Source: NPS, 2002

the Shrine of Democracy Sculpture, the Historic Stairway, and the Lift Platform. Several other features have been deemed ineligible for listing, but are managed as a resource by the Memorial. These include: the Borglum Memorial View Terrace, the Doane Mountain Commemorative Plaque, the Historic Culverts, and the Historic Retaining Walls.

An important feature of the Memorial is the sculpture's historic natural setting. While there has not been any individual cultural landscapes officially identified outside of the sculpture itself, it is reasonable to state that the natural characteristics of the landscape is integral to the historical context of the Memorial.

Officially listed cultural resource sites and sites determined eligible or with an undetermined eligibility are of concern. Ineligible sites are dropped from management concerns unless otherwise noted, and determinations of effect on these properties are not addressed in this analysis.

3.10.2 Environmental Consequences

Cultural resource impacts were qualitatively assessed through a presence/absence determination of significant cultural resources and mitigation measures to be employed.

3.10.2.1 Alternative 1 – No Action

Under the No Action alternative, the July 4th celebration event at the Memorial would continue in a manner similar to celebrations prior to initiation of the fireworks program in 1998, without a marquee event such as fireworks or laser light show. The celebration would include educational and entertainment programs that would have no impacts to cultural resources at the Memorial.

3.10.2.2 Alternative 2 – Proposed Action

Under Alternative 2, proposed activities with the potential to impact cultural resources include fireworks and fire suppression. Indirectly, wildfire resulting from fireworks ignition would also have the potential to impact known cultural resources.

The fireworks staging area and launch site would be located behind the sculptures in the Hall of Records valley. There would not be any excavation in the valley in association with this activity. Shortly after the event, litter from the used fireworks shells would be picked up from the debris zone resulting in a minimal and temporary impact on the cultural landscape.

The impacts to cultural resources and the cultural landscape from both fire and smoke as a result of a wildfire would depend on fire severity. Fire engines strategically located near structures, including the Sculptor's Studio minimize fire risk. If a wildfire were to occur, Minimum Impact Suppression Tactics (MIST) guidelines would be followed. Under these guidelines, cultural resources are avoided during fire line construction when possible. If fire line construction is necessary in the proximity of cultural/historic locations, a minimal amount of ground disturbance is directed. MIST guidelines are discussed in detail in Section 2.4 Mitigation Measures. The risk of a catastrophic fire is minimal based on the fire suppression measures in place during the

fireworks program (Appendix A), initial attack success rates, and other factors influencing fire as described under Section 3.1.2.2 Soils.

The sculpture itself has shown no indications of instabilities over the last 33 months (RESPEC July 2002). NPS has monitored the sculpture for any movement as part of its maintenance procedures. Data will continue to be gathered and analyzed in order to measure and predict firework impacts over time.

3.10.2.3 <u>Alternative 3 – July 4th Holiday Celebrations to Include a Laser Light Show</u>

Similar to the No Action Alternative, no impacts to cultural resources are anticipated as a result of Alternative 3.

Conclusion

The implementation of any of the alternatives would not impair cultural resources or values that are (1) necessary to fulfill specific purposes identified in the enabling legislation of the memorial, (2) key to the natural or cultural integrity of the memorial or opportunities for enjoyment of the memorial, and (3) identified as a goal in the memorial's general management plan or other Park Service planning documents.

3.11 TRANSPORTATION

3.11.1 Affected Environment

Mount Rushmore National Memorial is located 25 miles southwest of Rapid City and 3 miles from Keystone. The primary access to the Memorial is from Keystone via US Highway 16A and South Dakota Highway 244 and from Highway 385 connecting to South Dakota Highway 244. Parking for approximately 11,000 is available at the Memorial grounds. Highway 244 is the only road leading directly to the Memorial. During the July 4th celebration, vehicles will be allowed to park along Highway 244, leaving only one lane open for one-way traffic.

3.11.2 Environmental Consequences

3.11.2.1 Alternative 1 – No Action

General transportation impacts under Alternative 1 would be similar to those described under Alternative 2. Impacts would be reduced by a decrease in the number of visitors expected to attend and total vehicles involved.

3.11.2.2 <u>Alternative 2 – Proposed Action</u>

On the day of the fireworks program, an estimated 15,000 vehicles will travel access roads to the Memorial site. Four thousand vehicles will be expected to park along the access road near the Memorial entrance just prior to the evening for the event. Although visitor arrivals at the Memorial will be distributed throughout the day, departures will be concentrated in the hours

immediately following the conclusion of the program. Some degree of traffic congestion and disruption of the normal activity of local residents using these roads may be expected.

Public safety and volunteer personnel are employed to assist with the movement of traffic and vehicle parking at the site, thereby minimizing any potential traffic disruptions. Traffic is normally cleared from the site within a few hours following the fireworks event and flows return to normal. Because the fireworks program is a one-day event, most of the traffic impacts are temporary and relatively minor.

3.11.2.3 Alternative 3 – July 4th Holiday Celebrations to include a Laser Light Show

General transportation impacts under Alternative 3 would be similar to those described under Alternative 2. Impacts would be reduced by a decrease in the number of visitors expected to attend and total vehicles involved.

3.12 WILDERNESS

3.12.1 Affected Environment

While Mount Rushmore National Memorial does not contain proposed or designated wilderness, the Black Elk Wilderness Area, lies on the western border of the memorial.

The Wilderness Act of 1964 established a National Wilderness Preservation System to be composed of federally owned areas designated by Congress as "wilderness areas". By law, these wilderness areas "shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness" (16 USC 1131).

The Wilderness Act defined and described a wilderness area as area:

- where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain
- of undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation
- which generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable
- which is protected and managed so as to preserve its natural conditions
- which has outstanding opportunities for solitude or a primitive and unconfined type of recreation
- which has at least five thousand acres of land or is of sufficient size to make practicable its preservation and use in an unimpaired condition
- which may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Environmental Assessment
July 4th Holiday Fireworks Program

These attributes serve both as standards for studying areas and evaluating their suitability for inclusion in the national wilderness preservation system and as objectives to guide National Park Service actions pertaining to the preservation and use of wilderness areas (DOI, 1999; DOI, 2001b).

3.12.2 Environmental Consequences

3.12.2.1 Alternative 1 – No Action

No impacts to wilderness are anticipated as a result of the No Action alternative.

3.12.2.2 Alternative 2 – Proposed Action

Temporary impacts to the wilderness are anticipated as a result of the Proposed Action. Noise from the concussion blasts of the fireworks may degrade the wilderness experience of people recreating in the Black Elk Wilderness Area. However, the noise would be temporary lasting 24 to 27 minutes during one day of the year.

The Black Elk Wilderness Area is potentially at risk from catastrophic fire as a result of accidental fire ignitions resulting from the fireworks program. A catastrophic fire that spread to the wilderness area would cause significant tree mortality impairing the wilderness over the short and long-term. However the risk of a catastrophic fire is minimal based on the fire suppression measures in place during the fireworks program (Appendix A), initial attack success rates, and other factors influencing fire as described under Section 3.1.2.2 Soils.

3.12.2.3 Alternative 3 – July 4th Holiday Celebrations to include a Laser Light Show

No impacts to wilderness are anticipated as a result of Alternative 3.

3.13 CUMULATIVE EFFECTS

The cumulative effects analysis for the July 4th Holiday Fireworks Program environmental assessment considers the past, present, and reasonably foreseeable future actions on land uses that could add to (intensify) or offset (compensate for) the effects on the resources and that may be affected by the alternatives. Cumulative effects vary by resource and the geographic areas considered here are generally the memorial and areas adjacent to the memorial. In some instances, activities may result in both negative and positive impacts when considering the short and long-terms. As a result, some resource categories in Table 3-9 show both positive and negative impacts resulting from a particular activity. The information provided in Table 3-9 is the basis for the cumulative effects described in Table 3-10.

Tal	Table 3-9 Positive and negative impacts resulting from activities at Mount Rushmore National Memorial										Memorial	
	Soils	Water Resources	Vegetation	Wildlife	Air Quality	Noise	Visitor Use & Experience	Health	Socio- economics	Cultural Resources	Transportation	Wilderness
Past July 4 th Fireworks Programs	+-	-	-	-	-	-	+	-	+	-	-	-
Past prescribed fires and thinning on the memorial	+-	-	+-	+-	-	ı	+ -	+ -		+ -	+-	+-
Future fire management operations (prescribed fires and thinning on the memorial)	+-	-	+-	+-	-	-	+-	+-		+-	+-	+-
Lightning & human- caused wildfires	+ -	-	+-	+ -	-		+-	+ -		-	+	+-
Wildfire suppression past, present, future	-		-	+-	+	-	+-	+		+	+-	+-
Effluent Irrigation implementation	+ -	+	+ -	+ -		-	+-	+ -		-	-	+-
Visitation on the memorial	-	-	-	-	-	-	+	+ -	+	+-	+-	-
Improvements to memorial visitor center complex	-	-	-	-	-	-	+	+	+	-	+	-
Development outside the memorial boundary	-	-	-	-	-	-	+-	+-	+	-	+-	-
Designation of Black Elk Wilderness and Norbeck Wildlife Preserve	+	+	+	+	+	+	+			+		+

DIRECT/INDIRECT EFFECTS KEY: (+) Positive/beneficial; (-) Negative/detrimental; (Blank) Neutral/no effect

	Table 3-10 Cumulative Effects by Resource Area									
Resource	Past and Present Actions	Proposed Actions	Future Actions	Cumulative Effects						
Soils	Adverse soil impacts (soil erosion or loss) from past roads, memorial buildings and improvements, wildland fires and suppression efforts, and prescribed burns; Beneficial soil impacts from past fires (nutrification of soils).	Fireworks (fireworks induced wildland fires) could have temporary and minor adverse effects on soils (soil erosion and compaction) in a limited area, but also potential localized beneficial effects (soil development and soil nutrification)	Increased development in areas adjacent to the memorial will impact soils; Wildland fires and suppression could adversely impact soils (compaction, erosion from firebreaks, etc.)	Soils inside of the memorial would improve over time with soil development and nutrification from prescribed fires; The fireworks program would not result in significant cumulative impacts; the Proposed Action Alternatives would contribute the most to soil cumulative impacts, while the No Action Alternative and Alternative 3 would contribute the least						
Water Resources	Minimal impacts to water resources from past wildfires and suppression efforts; designation of wilderness and preserve helps protect water resources from development (timber, roads, mineral extraction, etc.)	Fireworks program would have no direct impacts on water resources	Increased development in areas adjacent to the memorial would likely indirectly impact water resources, depending on its location; designation of wilderness and preserve helps protect water resources from development (timber, roads, mineral extraction, etc.)	Minor effect on water resources; Fireworks program would not result in cumulative impacts; all alternatives would result in similar water resources impacts						
Vegetation	Natural fuel loading increased in absence of historic low-severity, high frequency fire regime; native plant habitat and diversity declined; increased infestation of noxious weeds	The fireworks program would have minimal temporary impacts on vegetation in those areas where spot fires occurred, however, vegetation at these sites would quickly replenish; some minimal vegetation impacts would also be observed as a result of suppression activities; localized increases in grass and forb production at spot fire sites may be observed	Thinning and prescribed fire efforts in the Black Hills National Forest would reduce fuel loadings and help restore historic fire regime to ponderosa pine stands; Potential for irrigation system development would improve wildland fire control	Ponderosa pine habitat and diversity would continue to improve; noxious weeds would continue to decline; decreased fuel loadings would reduce fire danger; Fireworks program would not result in significant cumulative impacts; potential for irrigation system development may improve vegetative growth near the memorial; the Proposed Action Alternatives would contribute the most to vegetation cumulative impacts, while the No Action Alternative and Alternative 3 would contribute the least						

	Table 3-10 Cumulative Effects by Resource Area							
Resource	Past and Present Actions	Proposed Actions	Future Actions	Cumulative Effects				
Wildlife	Fire suppression efforts within the memorial degraded wildlife habitat and diversity; memorial building and improvements temporarily affect wildlife species	Concussion blasts and potential fire suppression activities from the fireworks would result in minor, short-term disturbance and displacement of wildlife	Thinning and prescribed fire efforts in the Black Hills National Forest would help restore historic fire regime to ponderosa pine stands and benefit habitat and species diversity; increased development in adjacent areas would fragment habitat	Wildlife habitat and diversity increases; Fireworks program does not result in significant cumulative impacts; the Proposed Action Alternatives would contribute the most to wildlife cumulative impacts while No Action Alternative and Alternative 3 would contribute the least				
Air Quality		Fireworks and emissions from increased traffic would result in very minor, short-term air quality impacts	Future wildland fires, prescribed fires, and fireworks programs would contribute to temporary deterioration in air quality and visibility	Class II air quality standards would not be violated; Fireworks program would not result in significant cumulative impacts; the Proposed Action Alternative would contribute the most to air quality cumulative impacts, while No Action Alternative and Alternative 3 would contribute the least				
Noise	Past development and improvements resulted in short-term noise impacts; traffic associated with visitation of the memorial continues to produce sustained and long-term source of noise; past fireworks program results in temporary noise impacts	Fireworks program and potential fire suppression activities would result in temporary increased noise levels; some short-term disturbance and displacement of wildlife will likely occur; No significant impacts would be observed at sensitive receptors	produce sustained and iono-term	Noise sources and levels in the memorial would be increased during the Fireworks program, however, cumulative noise levels would not be effected; Fireworks program would not result in significant cumulative impacts; the Proposed Action would contribute the most to cumulative noise impacts, while No Action Alternative and Alternative 3 would contribute the least				
Visitor Use and Experience (including Park Operations) Establishment of the memorial, improved roads trails provided access for recreation opportunities; increased population grown resulted in increased recreational use; scenic integrity compromised in the short-term as a result of improvements of the sculpring results		Beneficial long-term and short term effects on visitor use and experience resulting from fireworks celebration	Increased recreation use as population grows; Thinning, prescribed fire, and potential development of an irrigation system would temporarily reduce visitor use and experience, Fireworks program continues to be key recreation event	Long-term enhancement of recreation resources and opportunities offsets short-term recreation inconveniences from fire management activities; Fireworks program continues to attract visitors providing long term cumulative benefits; the Proposed Action Alternative would contribute the most to cumulative impacts, while				

Table 3-10 Cumulative Effects by Resource Area							
Resource	Past and Present Actions	Proposed Actions	Future Actions	Cumulative Effects			
	fireworks program established as a key recreation event			No Action Alternative and Alternative 3 would contribute the least			
Human Health & Safety	protected memorial staff and visitors; fireworks program increased safety risks to general public observing	Fireworks program would increase safety risk to general public observing the fireworks and firefighters in case of wildland fire; short-term impacts on human health & safety	Similar effects as described in Past and Present Actions	Human health and safety would improve over time with thinning and prescribed fire activities, and with the development of an irrigation system; fireworks program risks would decline; fireworks would not result in significant cumulative impacts; the Proposed Action would contribute the most to human health and safety cumulative impacts, while No Action Alternative and Alternative 3 would contribute the least			
Socio – economics		Community would continue to experience beneficial effects of increased visitor levels during the holiday weekend; Proposed program supports local participating organizations and enhances regional visibility; Local controversy over potential fire risk and effects of large tourist influx is unresolved	Effects similar to those described under the proposed actions; Program would be expected to continue to benefit local community and the regional economy; controversial nature of program continues for some local residents.	The proposed program provides enhanced visibility for the region and other available recreational opportunities. Increased visitor spending has a substantial immediate benefit on local employment and income as well as longer-term benefit through induced spending in a region that accounts for approximately 54 percent of the total visitor spending in the state; The proposed program would not be expected to conflict with other, similar holiday programs in the region; The potential economic benefit to the region is strongest under the proposed action; with similar but slightly diminished benefits anticipated for Alternative 3; The No Action alternative would reduce the potential for controversy over the program, but also eliminate the economic and social benefits associated with the other			

Table 3-10 Cumulative Effects by Resource Area						
Resource	Past and Present Actions	Proposed Actions	Future Actions	Cumulative Effects		
				alternatives.		
Cultural Resources	Establishment of the memorial helped protect cultural resources	Concussion blasts from fireworks could result in impacts to the sculptures; fire suppression activities could result in impacts to recorded cultural resources	Similar effects as described in Past and Present Actions	Cultural resources continue to be protected; fireworks program could contribute to the cumulative impact on cultural resources; the Proposed Action would contribute the most to cultural resources cumulative impacts, while No Action and Alternative 3 would contribute the least		
Transportation	Past fireworks, memorial and fire management activities resulted in minor and temporary impact on transportation	Fireworks program would result in temporary minor impact to transportation resulting from traffic congestion	Similar effects as described in Past and Present Actions	Traffic flow and transportation would remain relatively instant; fireworks program would not result in significant cumulative impacts on transportation; the Proposed Action Alternative and Alternative 3 would contribute the most to transportation cumulative impacts, while No Action3 would contribute the least		
Wilderness	Fire suppression efforts, past fireworks, and noise from memorial operations have potentially affected the current wilderness area	Temporary minor impacts to the wilderness as a result of the noise from the concussion blasts of the fireworks and fireworks related activities	Similar effects as described in Past and Present Actions	Wilderness will continue to be managed as such. Fireworks program would not result in significant cumulative impacts; the Proposed Action Alternatives would contribute the most to air quality cumulative impacts, while No Action Alternative and Alternative 3 would contribute the least		

4.0 REFERENCES

Bahr, 2002). United States Department of the Interior, National Park Service. 12 December 2002. Fireworks program comment letter from Dick Bahr, National Fire Use Specialist.

(BEA, 2002). Bureau of Economic Analysis. Press release date: 10 June 2002. Regional Accounts Data, Gross State Product Data. Accessed at: http://www.Bea.gov/bea/regional/gsp/action.cfm.

(BHAG, 1999). Black Hills Administrative Group. 1999. Costs Incurred for 1999 Fireworks Event. Memorandum to the Superintendent, Mount Rushmore National Memorial from the Administrative Officer, 29 September 1999.

(BHAG, 2000). Black Hills Administrative Group. 2000.

(BHAG, 2001). Black Hills Administrative Group. 10 September 2001. Costs Incurred for 1999 Fireworks Event. Memorandum to the Superintendent, Mount Rushmore National Memorial from the Administrative Officer/Budget Analyst.

(Burdge, 1995). Burdge 1995. A Community Guide to Social Impact Assessment. Middleton, Wisconsin: Social Ecology Press.

(Census, 1997). United States Census Bureau. 1997. Economic Census for Custer County, SD. Accessed at: http://factfinder.census.gov/servlet/GQRTable?_ts=62086460580

(Census, 2002). United States Census Bureau. Accessed on 9 January 2003. Census 2000 Summary File 1 (SF-1) 100-Percent Data. Accessed at: http://www.census.gov.

(Daly, 2002). Daly, D. 7 December 2002. Feds to Study Rushmore Fireworks. Rapid City Journal, Page C-1.

(DOI, No Date). United States Department of the Interior, National Park Service. No Date. Mount Rushmore Economic Impact Study.

(DOI, 1999). United States Department of the Interior, National Park Service. August 1999. Director's Order #41 Wilderness Preservation and Management.

(DOI, 2001a). United States Department of the Interior, National Park Service. 08 January 2001. Conservation Planning, Environmental Impact Analysis, and Decision Making. Director's Order #12 and Handbook.

(DOI, 2001b). United States Department of the Interior, National Park Service. 27 December 2000. 2001 Management Policies.

(Gerpen, 2002). South Dakota Department of Tourism. 14 November 2002. Personal communication with Patricia Van Gerben, Cabinet Secretary.

(ICGPSA, 1995). Inter-organizational Committee on Guidelines and Principles for Social Impact Assessment. 1995. *Guidelines and Principles for Social Impact Assessment*. Environmental Impact Assessment Review, vol. 15, pp. 11-43.

(Jobman, 2002). Xanterra Parks and Resorts, Mount Rushmore National Memorial. 31 October 2002. Personal communication from Russ R. Jobman, General Manager, Xanterra Parks and Resorts.

(Madden, 2002). Madden, M.K. January 2002. *Economic And Fiscal Impacts Associated With the Vacation Travel Industry In South Dakota*, *November 2000 Through October 2001*. Rapid City, SD: The South Dakota Department of Tourism. Accessed at: http://www.sdvisitind.com/report/index.htm

(Madden, 2002a). South Dakota Department of Tourism. 18 December 2002. Personal communication with Dr. Michael K. Madden.

(Popovich, 2002). United States Department of Interior, National Park Service. 17 December 2002. Personal communication with Jim Popovich, Chief of Interpretations.

(Popovich, 2002a). United States Department of Interior, National Park Service. 12 December 2002. Personal communication with Jim Popovich, Chief of Interpretations.

(RCHA, No Date). Rapid City Area Hospitality Association. No date. *Occupancy Stats Beginning with First of July thru July 7 by Year*.

(RESPEC, 2002).RESPEC. July 2002. Semiannual Report on the Mount Rushmore Rock Block Monitoring System: Year 2002 Topical Report RSI-1646. By Skaug, Nils T. and Blankenship, Douglas A.

(Ode, 2002). South Dakota Department of Game, Fish and Parks. 28 January 2002. Personal communication with David Ode.

(Schultz, 2002). South Dakota Department of Natural Resources. 05 August 2002. Personal communication with Brad Schultz.

(South Dakota, No Date). State of South Dakota, Governor's Office of Economic Development. No date. Pennington County Profile. Accessed at: http://www.sdgreatprofits.com/cp/RequestSummaryReport.asp

(Traux, 1999). Traux, Barry. Handbook for Acoustic Ecology Second Edition. Simon Fraser University, 1999.

(USDA, 2000a). United States Department of Agriculture, Forest Service. April 2000. Incorporating Air Quality Effects of Wildland Fire Management into Forest Plan Revisions – A Desk Guide (Draft).

(USDA, 2000b). United States Department of Agriculture, Forest Service, Pacific Northwest Research Station. July 2000. Smoke Exposure at Western Wildfires. Research Paper. PNW-RP-525.

(USDA, 2001). United States Department of Agriculture, Forest Service. Wildland Fire Suppression Chemicals Toxicity and Environmental Issues and Concerns. Web page. Date accessed: 06 June 2001. Accessed at: http://www.fs.fed.us/rm/fire/The_Environment.html

(USEPA, 1997). United States Environmental Protection Agency. September 1997. EPA's Updated Clean Air Standards: A Common Sense Primer. Accessed at: http://www.epa.gov/air/primer/common.htm

(Vogl, 1979). Vogl, R.J. Some basic principles of grassland fire management. *Environmental Management* 3(1):51-57, 1979.

(Wright and Bailey, 1980). Wright, H.A. and A.W. Bailey. 1980. Fire ecology and prescribed burning in the Great Plains – A research review. United States Department of Agriculture, Forest Service, Intermountain Forest Range Experiment Station, Ogden, Utah. General Technical Report. INT-77.

EXHIBIT B





MEMORANDUM OF AGREEMENT

BETWEEN

THE DEPARTMENT OF THE INTERIOR OF THE UNITED STATES OF AMERICA

AND

THE STATE OF SOUTH DAKOTA

WHEREAS, Independence Day is the annual commemoration of the birth of the United States of America and the ideals on which the Nation was founded, including life, liberty, and the pursuit of happiness;

WHEREAS, in 1776, President John Adams said that Independence Day "ought to be solemnized with Pomp and Parade...Bonfires and Illuminations from one End of this Continent to the other from this Time forward forever more;"

WHEREAS, there is a long history of celebrations of American independence at Mount Rushmore National Memorial, including fireworks displays from 1998 to 2009, through cooperation among local agencies, Mount Rushmore Society, State of South Dakota, Department of the Interior, and other Federal Agencies;

WHEREAS, these events provide opportunities to celebrate the Nation's founding fathers, the spirit of democracy, and provide an iconic backdrop for the enjoyment and education of a diverse local, national, and international audience;

WHEREAS, the significance of Independence Day holds special meaning at Mount Rushmore National Memorial, where sculpted into granite are the colossal faces of the father of the Nation, the author of the Declaration of Independence, the President who saved the Union, and the President who led that Union into the 20th century and championed conservation; and

WHEREAS, the State of South Dakota and the Department of the Interior have committed to an agreement to exercise their full authorities under State and Federal law to work to return fireworks to Mount Rushmore National Memorial in a safe and responsible manner on July 3, July 4, or July 5, beginning in the year 2020.

THEREFORE, in partnership between the Department of the Interior and the State of South Dakota, the Parties agree to pursue the attested by their signatures:

Secretary

Department of the Interior

Date:

MAY 0 6 2019

Governor

State of South Dakota

Date:

MAY 0 6 2019

EXHIBIT C

PROJECT AGREEMENT

Independence Day Holiday Fireworks Event 2020

Mount Rushmore National Memorial, South Dakota

This is an agreement between the State of South Dakota, Mount Rushmore National Memorial (MORU), the National Park Service (NPS) Regional Office for DOI Unified Region 5; and the Department of the Interior (DOI), describing requirements and duties to be performed by all parties to enable a fireworks event at Mount Rushmore National Memorial in 2020.

This document tiers off an agreement signed by the Secretary of the U.S. Department of the Interior and the Governor of South Dakota on May 6, 2019. It establishes objectives for the undertaking, the work needed to accomplish the display in a safe and enjoyable manner, and documents the mutual agreements and commitments among the parties involved. The State's event will be hosted at the Memorial, subject to appropriate permitting and compliance.

Future documents providing greater detail on various elements of the event may also be presented for approval by the signatories to this agreement.

Agreed:	7/
The self self	12/20
Governor, State of South Dakota	Date
Agreed:	
Deputy Secretary, U.S. Department of the Interior	Date
Agreed:	
NPS Regional Director, DOI Regions 3, 4, and 5	Date
Agreed:	
Superintendent, Mount Rushmore National Memorial	Date

PROJECT AGREEMENT

Independence Day Holiday Fireworks Event 2020 Mount Rushmore National Memorial, South Dakota

This is an agreement between the State of South Dakota, Mount Rushmore National Memorial (MORU), the National Park Service (NPS) Regional Office for DOI Unified Region 5; and the Department of the Interior (DOI), describing requirements and duties to be performed by all parties to enable a fireworks event at Mount Rushmore National Memorial in 2020.

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Future documents providing greater detail on various elements of the event may also be presented for approval by the signatories to this agreement.

A amond.

Governor, State of South Dakota	Date
Agreed: Deputy Secretary, U.S. Department of the Interior	ply 12.
Agreed:	Date
NPS Regional Director, DOI Regions 3, 4, and 5	Date
Agreed:	

PROJECT AGREEMENT

Independence Day Holiday Fireworks Event 2020Mount Rushmore National Memorial, South Dakota

This is an agreement between the State of South Dakota, Mount Rushmore National Memorial (MORU), the National Park Service (NPS) Regional Office for DOI Unified Region 5; and the Department of the Interior (DOI), describing requirements and duties to be performed by all parties to enable a fireworks event at Mount Rushmore National Memorial in 2020.

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Future documents providing greater detail on various elements of the event may also be presented for approval by the signatories to this agreement.

Agreed:

Governor, State of South Dakota	Date
Deputy Secretary, U.S. Department of the Interior	Date Date
agreed:/ H Shit	7/2 (2020)
PS Regional Director, DOI Regions 3, 4, and 5	Date
greed: Jahicia S. Trap	7.2.2020
uperintendent, Mount Rushmore National Memorial	7.2.2020

Project Background

MORU hosted fireworks events around Independence Day from 1998-2009, excepting one year with elevated fire risk (2002). The practice was halted due to safety concerns with widespread drought, fuels accumulation, visitor capacity and experiences, and launch site safety. DOI and the State signed a Memorandum of Agreement (MOA) on May 6, 2019, indicating they would work together to return fireworks to the park in 2020.

The project involves a permit request from the State of South Dakota to hold an event at MORU on July 3, 2020. The event is expected to include fireworks, possible light and sound displays, music, and other related activities. The primary event will be conducted by the State, and the implementation collaboratively undertaken with the NPS and other stakeholders. This Project Agreement (PA) defines key task responsibilities, core project team members, proposed schedule, and budget responsibilities needed to hold the fireworks event (event) at the park.

The NPS has evaluated the event through a National Environmental Policy Act (NEPA) process. The Environmental Assessment and Finding of No Significant Impact are complete. Implementation level documents, such as operations and incident management plans to ensure a safe and efficient Independence Day event, are being finalized. A special use permit (SUP; permit) has been signed and lays out specific requirements and conditions. Nothing in this agreement modifies the conditions of the permit.

Key Issues

The following is a list of key issues addressed by the parties to the agreement in advance of the event:

- Visitor capacity, ticketing, circulation and safety
- Developing a safe launch site and viewing areas
- Environmental considerations and monitoring
- Wildfire management activities and fuels reduction
- Staffing and emergency services needs
- Incident command and decision making for the event
- Cost sharing for planning and executing the event
- Regulation and mitigation for COVID-19

Related and Concurrent Activities

There are ongoing projects at MORU that will impact this project. They include:

- Fire Management Plan and beetle response plan. These plans guide fuels reduction strategies for 2019-2020. As of May 8, 2020, all high priority fuel reduction efforts have been completed and no conflicts with the event are anticipated.
- Entrance Area Paver Project. This large construction project is ongoing and will disrupt some visitor services through 2021. The NPS and contractors have developed a schedule that will allow minimal disruption to visitors over the Independence Day weekend while maximizing event participation.

Event Concerns and Risks

The initial schedule for this project was ambitious. Potential risks affecting the project's scope, schedule, or budget, and which have been addressed, include:

- Delays or complications related to interagency cooperation, consultation, and reviews.
- Fuels conditions and weather conditions.
- The novel coronavirus outbreak and resulting COVID-19 response measures.

Civic Engagement and Agency Involvement

Civic engagement and agency involvement activities occur throughout the project timeline. The State is primarily responsible for initiating most civic engagement activities, while the NPS focuses on required agency consultations.

All communication activities are coordinated between the State and the NPS for consistency in messaging. The methods to engage the public or agencies include at a minimum the list below:

- 1. MORU used existing park programs and activities to engage the public, partners, and stakeholders regarding the fireworks event.
- 2. MORU has conducted consultations with Tribal governments, the South Dakota State Historic Preservation Office, the U.S. Fish and Wildlife Service, and other agencies requesting or requiring consultation.
- 3. MORU updated their public website with information about the process and event; the MORU webpage will be maintained by MORU staff. The general link is www.nps.gov/moru/planyourvisit/independence-day-events.htm
- 4. MORU and Regional staff posted the NEPA document for public review and comment on the NPS planning site: https://parkplanning.nps.gov/morufireworks.
- 5. The State developed and maintains a public website related to the event: https://www.travelsouthdakota.com/mount-rushmore-fireworks

Event Planning and Coordination

In close coordination with State and local partners, the NPS is leading development of an Incident Action Plan to guide activities leading up to, and on the day of, the event. This document describes the staff and resources needed to safely and securely manage the event and prepare for contingencies.

The NPS coordinated the development of a Go/No-Go checklist to guide visitor safety, fire conditions, and other considerations on the day of the event. The checklist is included as Appendix A, and will be used to develop a recommendation to the Secretary for the event.

Project Budget

The NPS shall identify actions or resources typical for Independence Day activities, and for senior official and distinguished visitor visitation, for which it will be financially responsible. The State shall be financially responsible for actions or resources that are associated with their permitted fireworks event not otherwise covered by the NPS, including the cost of the fireworks themselves. Some actions or resources may be acquired or provided by the NPS and remitted by the State through cost recovery authorities included in their permit.

A detailed project budget has been developed and jointly discussed among the NPS, DOI, and the State (see Appendix B). The parties will continue to refine the budget jointly as the event details are finalized.

Costs that the State may be responsible for include:

• **NPS supplemental staffing** expenses: this includes travel and overtime for the Incident Management Team and Law Enforcement staff, plus supplemental park staff labor to ready the park for July 4th. It does not include typical NPS staffing for the holiday weekend.

- **Supplies and equipment**, including contracts or purchases not limited to: portable toilets and hand washing stations, extra seating, barricades and traffic directing materials, tents, lighting, generators, etc.
- **Services,** including but not limited to: Security screening, credential production, on-call towing, supplemental vehicles, any excess water and trash charges, etc.

The permit for the event will be the official documentation of cost responsibilities and cost recovery. A final cost recovery document will be issued following the event.

- The approximate budget for the project, as of June 24, 2020, not including the fireworks contract issued by the State or other resources directly provided by the State, costs incurred by the NPS incidental to the day of the event, and not including any costs associated with a White House visit related to the event, is approximately \$787,000, and is expected to reach \$800,000.
- The NPS has identified \$350,000 of available funding to cover some operations for the event.
- The State has provided \$300,000 in advance payments for the event (6/19/2020).
- The remaining costs eligible to be remitted to the State through permit cost-recovery are currently estimated at \$137,000, are expected to reach \$150,000, and in any case are not-to-exceed \$200,000, for a total charge to the State not-to-exceed \$500,000.

Project Schedule

A timeline was developed to guide the project and has been updated regularly.

Schedule and Major Milestones

- Summer 2019 = NPS supported the State in developing the event proposal
 - o Determined appropriate launch locations, clear zones, fallout areas, etc
 - Developed traffic estimates and strategies for visitation management/egress/etc
 - o Gathered info on perchlorate and other contaminants to be addressed
 - Worked with USDA and USFWS on potential impacts to forest wilderness and wildlife resources
- Summer 2019 = NPS completed Section 106 informal contacts with State and Tribes
- Summer 2019 = NPS completed Endangered Species Act informal contact with USFWS
- Winter 2019/2020 = NPS burned slash piles and other standing fuels
- Winter 2020 = NPS completed formal consultations with USFWS, SHPO, and Tribes
- February 28, 2020 = NPS released the Environmental Assessment for public review
- Spring 2020 = State released request for proposals for fireworks contract
- April 24, 2020 = NPS signed NEPA decision document (FONSI)
- April 29, 2020 = NPS and partners completed prescribed burn for priority areas of the park
- May-June 2020 = final lottery/ticketing/attendance procedures agreed upon by NPS and State
- June 5, 2020 = ticketing/lottery processes implemented by Recreation.gov, State, and NPS
- June, 2020 = operational plans finalized among partners
- July 3, 2020 = event

Project Deliverables

These materials have been produced in support of the event:

- Special use permit request and supporting materials (State)
- Environmental Assessment (NPS)

- NEPA decision document (NPS)
- NHPA Section 106 determination and documentation (NPS)
- Endangered Species Act determination and documentation (NPS)
- Final Permit, Conditions, and cost recovery determination (NPS)
- Incident Action Plan (Joint)
- Credentialing Plan (Joint)
- Communications Plan (Joint)

Roles and Responsibilities

The NPS, DOI, and the State of South Dakota have and will continue to work collaboratively on this effort. The following section outlines more specific roles and responsibilities of each party.

State of South Dakota

- Develop and submit a special use permit application with proposed details of the event
- Provide subject matter expertise in the form of the State Fire Marshall, State Historic
 Preservation Officer, Highway Patrol, Department of Transportation, and others as needed
 to support operations planning, incident management teams, and activities leading up to
 and on the day of the event
- Direct COVID-19 measures for the event, to ensure compliance with all Center for Disease Control and Prevention guidelines
- Coordinate all communication for the event with NPS and DOI Communications contacts
- Fund the event, including fireworks themselves, and potential cost recovery of NPS staffing and logistical needs. Specific direct contributions are expected to include:
 - Fireworks contract
 - Shuttle services for ticketed visitors
 - o Supplemental audio/visual equipment as needed
 - o Provision of fencing to create a secure area
 - Technical assistance for traffic management, ticketing, fire suppression support, and other areas as needed and feasible
 - Staff support from Department of Tourism, Highway Patrol, DOT, and other agencies

National Park Service Regional Office for DOI Unified Regions 3, 4, and 5

- Project management for the overall effort
- Ensure quality of deliverables and adherence to project scope and schedule
- Facilitate internal and external meetings and workshops for the NPS project team, as well as cooperating agencies that become engaged during the planning process
- Assist the park in developing public materials and communications strategy
- Provide oversight and guidance relative to NPS planning and compliance requirements
- Maintain a project website and Administrative Record for the project
- Seek assistance for all technical requirements of NEPA, ESA, NHPA, code compliance, etc.
- Fund NEPA, NHPA, ESA, NFPA, and other compliance needs related to the event
- Provide supplemental funding to support the project
- Direct COVID-19 measures for the event, to ensure compliance with all Center for Disease Control and Prevention guidelines
- Lead all fuels reduction efforts prior to the event
- Coordinate the Regional Director's approval of key decisions (range of alternatives, NPS preferred alternative, EA for release, FONSI, permit, and closures)

National Park Service, Mount Rushmore National Memorial (MORU)

- Assign park staff to participate on the planning team throughout the duration of the effort, including all internal workshops and meetings
- Project assistance: ensure compliance with project scope, schedule, budget, etc.
- Review all project deliverables to ensure quality of deliverables and adherence to project scope, budget and schedule
- Review and provide comments on all draft and final deliverables
- With the State, design and implement a communications strategy to ensure adequate public and stakeholder involvement
- Maintain park Administrative Record
- Manage park website
- Primary liaison and coordination with interagency partners, consultations, and other entities that may become engaged in the plan development
- Conduct outreach related to scoping and release of the draft planning documents
- Coordinate, conduct, and document any necessary Tribal Government, USFWS, and SHPO consultation
- Direct COVID-19 measures for the event, to ensure compliance with all Center for Disease Control and Prevention guidelines
- Coordinate and commit staff availability for operations planning, incident management teams, and activities leading up to and on the day of the event
- Track staff time and funding for preparations and day of the event.

National Park Service, Environmental Quality Division (EQD)

- Provide technical expertise (i.e. landscape architecture, geology, visitor use and capacity)
- Contract and fund the development of and quality control for the environmental assessment
- Contract and fund assistance with public comment analysis and response
- Prepare and submit FONSI for park and region review
- Provide graphics, technical editing, layout, and publication support

Department of the Interior

- Provide appropriate supplemental resources and support for the event
- Direct COVID-19 measures for the event, to ensure compliance with all Centers for Disease Control and Prevention guidelines
- Coordinate with any White House involvement for the event

Project Team and Contact Information

Core project team members, primary role, and contact info is provided below. Other staff will be consulted as needed.

NPS project team members:

Washington Office:

- Susan Farinelli, Acting Chief of Staff, susan_farinelli@nps.gov
- Chuck Laudner, Legislative Affairs Liaison, <u>charles laudner@nps.gov</u>
- Shawn Benge, Acting Deputy Director, shawn-benge@nps.gov

Regional Office, DOI Regions 3, 4, and 5:

- Bert Frost, Regional Director, bert frost@nps.gov
- Alex Picavet, Chief of Communications and Legislative Affairs, alex picavet@nps.gov

- Tokey Boswell, Chief of Planning and Compliance, tokey boswell@nps.gov
- Don Boucher, Structural Fire Manager, don boucher@nps.gov
- Patrick Pearson, Chief of Fire and Aviation, (Incident Commander), patrick pearson@nps.gov

Mount Rushmore National Memorial:

- Patricia Trap, Acting Superintendent, patty trap@nps.gov
- Brad Eggers, Chief Ranger, brad eggers@nps.gov
- Kelly Mansfield, Administrative Officer, kelly mansfield@nps.gov
- Rene Ohms, Integrated Resources Program Manager, rene ohms@nps.gov

Technical Assistance:

- Mark Husbands, Environmental Protection Specialist, Environmental Quality Division, mark husbands@nps.gov
- Maggie Tyler, Special Park Uses/Permitting, maggie tyler@nps.gov

DOI team members

- Margaret Everson, Counselor to the Secretary, <u>margaret everson@ios.doi.gov</u>
- Ryan Hambleton, Deputy Assistant Secretary for Fish, Wildlife, and Parks, ryan hambleton@ios.doi.gov
- Karen Budd-Falen, Deputy Solicitor, Fish, Wildlife, and Parks, karen.budd-falen@sol.doi.gov
- Dana Jacobsen, Assistant Regional Solicitor, <u>Dana.Jacobsen@sol.doi.gov</u>
- Kim Fondren, Law Enforcement Team Lead, Division of Parks and Wildlife, <u>Kim.Fondren@sol.doi.gov</u>

State of South Dakota project team members

- Kennedy Noem, Policy Analyst and Washington Representative, Governor's Office, Kennedy.Noem@state.sd.us
- Tony Venhuizen, Chief of Staff, <u>Tony.Venhuizen@state.sd.us</u>
- Bailey Carlsen, Deputy Policy Advisor (Tourism), Bailey.Carlsen@state.sd.us
- Jason Simmons, Senior Policy Advisor (Game, Fish & Parks/SDDA), <u>Jason.Simmons@state.sd.us</u>
- Jim Hagen, Secretary, South Dakota Department of Tourism, James. Hagen@travelsouthdakota.com
- Wanda Goodman, Deputy Secretary, South Dakota Department of Tourism, Wanda.Goodman@travelsouthdakota.com
- Kelly Hepler, Secretary, South Dakota Department of Game, Fish and Parks, Kelly.Hepler@state.sd.us
- Paul Merriman, State Fire Marshal, Department of Public Safety, Paul.Merriman@state.sd.us
- Jay Esperance, Wildland Fire Dispatch Center, Department of Agriculture, Jay.Esperance@state.sd.us
- Jason Ketterling, Captain, South Dakota Highway Patrol, Jason.Ketterling@state.sd.us
- Mark Mayer, Administrator, Drinking Water Program South Dakota Department of Environment & Natural Resources, <u>Mark.Mayer@state.sd.us</u>

Appendix A: GO/NO-GO Decision Tool

A GO/NO-GO checklist is used to inform decisionmakers of the conditions that could modify the
prior determination to proceed with the July 3, 2020 fireworks.

Mount Rushmore July 3rd Fireworks GO/NO-GO Checklist

Instructions: This GO/NO-GO Checklist represents the last decision-making tool prior to the ignition of fireworks. The window for launch if all conditions identified are a GO, would be from approximately 9:00 to 11:00 pm on the day of the event. The window for approving the document is approximately 8:00 pm to 11:00pm.

The Incident Commander will communicate with all security and other partners, complete the checklist and inform the Superintendent, Governor (or representative) and Secretary (or representative) of the current conditions and his recommendation for the event.

Security Conditions and Resources

GOOD	CONCERN	
		Fallout zone is clear of people.
		Secure area physical perimeter is intact as determined by law enforcement partners.
		Threat levels are acceptable to USSS/FBI/DHS/other law enforcement partners
		Emergency medical and fire response resources are available on site and have not been depleted throughout the day.
<u>Contra</u>	ctor Status	
GOOD	CONCERN	Fireworks contractor has determined that wind speeds are acceptable for launch.

Fire Conditions and Resources

The Remote Automated Weather Station at MORU will be used to collect weather related data. The data collected from RAWS is analyzed through the National Fire Danger Rating System (NFDRS) that will be installed on site prior to the event to collect data.

Past events have shown that ignitions are likely to occur; the goal is to contain them quickly. This and the following measures indicate potential for wildfire to ignite and to spread to surrounding areas, and the ability to respond to any fires that do start.

GOOD	CONCERN	Current Creat Plains Dianatch Zone Fire Proposedness Level
Ш		Current Great Plains Dispatch Zone Fire Preparedness Level: Preferred is not at Level V. Fire Preparedness indicates the availability of staff and equipment resources to fight unexpected fires within this zone.
		Fire Danger Rating current status: Preferred is to not be at the Extreme rating. This rating indicates how severe any ignitions could become.
		Wind speed at the RAWS Station, current reading: Preferred is less than 10mph for a 10-minute average; above 10mph fires become increasingly complex and less predictable, and harder to fight.
		Has the National Weather Service predicted red flag warnings for this or the following day? Preferred no red flag warnings issued; red flag warnings indicate the potential for wildfires to spread uncontrollably.
The Mo		ore Fireworks GO/NO-GO Checklist has been reviewed and all conditions are
GO	NO-GO	Recommendation to Secretary of the Interior, by the Incident Commander
GO	NO-GO	FINAL DETERMINATION

Appendix B: Estimated Budget

These charts document estimated expenses for the State's event at Mount Rushmore. They are to be used for planning purposes only; more detailed records will be kept for bookkeeping and cost recovery purposes.

Expenses by Category (see pages 3-6 for details)

Pre-event Planning	\$ 55,000
Travel costs for Incident Mgmt Team	
and Law Enforcement	\$ 230,744
Overtime costs	\$ 228,850
Supplies	\$ 56,384
Equipment	\$ 59,692
Contracts	\$ 156,943
Estimated Event Total	\$ 787,613

Funding Available

NPS Commitment	\$ 350,000
State Advance Payment	\$ 300,000
Other support	\$ -
Total Available	\$ 650,000
Total Estimated Expenses	\$ 787,613
Remaining Costs (eligible for Cost	\$ (137,613)
Recovery charge to the State)	\$ (137,013)

Expense Allocation by Category

Expense Category		TOTALS	Co	NPS ommitment		te Advance Payment	(Remaining Costs, Cost Recovery Potential
Pre-event Planning	\$	55,000	\$	-	\$	55,000	\$	-
Travel costs for IMT								
and LE	\$	230,744	\$	1,200	\$	120,550	\$	108,994
Overtime cost	\$	228,850	\$	147,120	\$	78,850	\$	2,880
Supplies	\$	56,384	\$	30,284	\$	3,100	\$	23,000
Equipment	\$	59,692	\$	53,006	\$	4,300	\$	2,386
Contracts	\$	156,943	\$	118,293	\$	38,650	\$	-
Total	\$	787,613	\$	349,903	\$	300,450	\$	137,260
			Act	tual is \$350k	Actu	al was \$300k		Accurate
							(estimate is
								\$137,613
							No	ot to exceed
								\$200,000

Other Expenses

Many expenses related to the event are not subject to cost recovery through the permit issued to the State. These expenses are documented below.

State of South Dakota Other Direct Expenses

The State is directly funding many event expenses, including:

- the cost of the fireworks contractor and fireworks themselves, estimated at \$350,000
- approximately 45 shuttle buses and drivers to serve ticketed visitors, estimated at \$20,000
- staff time for Tourism, Highway Patrol, DOT, and other departments supporting the event, which are not calculated
- the table below reflects costs the State is incurring directly to support fire suppression efforts the day of the event.

SD DIRECT PAYMENTS	Amo	ount	
Staff Resources	\$	46,731	These costs are not
Fire Engines	\$	9,228	part of the overall total;
Fire Engine Staff	\$	4,451	they will be paid directly
			by the State and not be
Total	\$	60,409	processed through NPS.

NPS Other Direct Expenses

The NPS is incurring costs for actions related to the event but not part of the permit or cost recovery elements. These costs will be covered by agency funding.

NPS Other Expenses	Am	ount	
Water/soil monitoring project,			
through USGS interagency			
agreement (funded by NPS Water			
Resources Division)	\$	75,000	
Development of Environmental			
Assessment (funded by NPS			
Environmental Quality Division)	\$	181,000	
Programming, July 3 and July 4			
(Paid through Bookstore's "Aid to			
the Park" fund source)	\$	15,000	These costs are not
Dry debris and runoff sampling,			part of the overall total;
post-event. (Fund source			they will be paid directly
undetermined)	\$	5,000	by NPS using agency
Total	\$	276,000	funds.

EXHIBIT D

National Park Service





APPLICATION FOR SPECIAL USE PERMIT SHORT FORM

Mount Rushmore National Memorial 13000 HWY 244, Building 31 Suite 1 Keystone, South Dakota 57751 (605) 574-3101

Please supply the information requested below. Attach additional sheets, if necessary, to provide required information. A nonrefundable processing fee of \$50.00 must accompany this application unless the requested use is an exercise of a First Amendment right. You must allow sufficient time for the park to process your request; check with the park for guidelines. You will be notified of the status of the application and the necessary steps to secure your final permit. Your permit may require the payment of cost recovery charges and proof of liability insurance naming the United States of America an additional insured.

			1 —						
Applicant Name			Telephone Number						
Wanda Goodman			605-773-5328						
Organization			Cell Phone Number						
South Dakota Department of Tourism			605-280-1262						
Social Security Number or Tax ID number			Fax Number						
46-6000364			605-773-5977						
Email Address									
wanda.goodman@travelsouthdakota	a.com								
Street Address									
711 E. Wells Ave.									
City					State	Zip Code	Country		
Pierre					SD	57501	USA		
Proposed Activity					•				
The State of South Dakota requests	a special u	se perm	it for the dates of Ju	ine 1	5-July 15,	2021 to in	clude the		
setup, event, and takedown for an In	ndependenc	e Day c	elebration. This eve	nt w	ould occur	· in			
conjunction with the Memorandum o	f Agreemer	nt signed	between the Secre	etary	of the U.S	. Dept. of	the		
Interior and the Governor of the State	e of South I	Dakota.	Additional information	on a	nd request	s will be fo	orthcoming		
once the fireworks vendor is chosen				1					
Preferred Date	Preferred Location			Preferred Time					
June 15-July 15, 2021	Any land and location within the boundaries of Mt. Rushmore National Memorial and common associated properties.			All day on the preferred dates					
Alternate Date(s)*	Alternate Location(s)*		Alternate Time(s)*						
* Alternatives will be considered if first ch	oice is not av	ailable.							
Maximum Number of Participants			Maximum Number of Vehicles						
10,000			1,200						
List of Equipment			1 '						
TBD depending on forthcoming e	vent detail	S.							
Individual in charge of activity onsite who			decisions related to	Cell	I Phone Nun	nber			
the permitted activity: Wanda Goodn									
vvalida Goodii	IIUII			605	-280-1262				
Have you visited the requested area?		Is this a	n exercise of a First An	nendr	ment rights?				
☑ Yes□ No	☑ No								
L The applicant by his or her signature certifies	s that all the i	nformatio	n given is complete an	d cor	rect, and tha	at no false o	r		
nisleading information or false statements h			J 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		,				
			10.10	200	20				
gnature: Wanda Goodman Date: 10-19-2020									

Si

NPS Form 10-930s (Rev. 07/2016) National Park Service

Expiration Date 03/31/2020

NOTICES

This is an application *only*, and does not serve as permission to conduct any special activity in the park. The information provided will be used to determine whether a permit will be issued. Send the completed application along with the application fee in the form of a credit card payment (please go here: https://www.pay.gov/public/form/start/49676799), cashier's check, money order or personal check made payable to the National Memorial at the park address found on the first page of this application. If your request is approved, a permit containing applicable terms and conditions will be sent you. The permit must be signed by the responsible person and returned to the park for final approval by the Park Superintendent before the permitted activity may begin.

Customers Making Payment by Personal Check

When you provide a check as payment, you authorize us either to use information from your check to make a one-time electronic fund transfer from your account or to process the payment as a check transaction. When we use information from your check to make an electronic fund transfer, funds may be withdrawn from your account as soon as the same day we receive your payment, and you will not receive your check back from your financial institution.

Privacy Act Statement

Authority: 16 U.S.C. 1, National Park Service Organic Act; 16 U.S.C. 3, Rules and regulations of national parks, reservations, and monuments; timber; leases, 16 U.S.C. 3a, Recovery of costs associated with special use permits; and 16 U.S.C. 460i–6d, Commercial Filming.

Purpose: The purposes of the system are (1) to provide a park superintendent with information to approve or deny requests for activities that provide a benefit to an individual, group or organization, rather than the public at large; and (2) to assist park staff to manage the activity to ensure that the permitted activity does not interfere with the enjoyment of the park by visitors and that the natural and cultural resources of the park are protected.

Routine Uses: In addition to those disclosures generally permitted under 5 U.S.C.552a(b) of the Privacy Act, records or information contained in this system may be disclosed outside the National Park Service as a routine use pursuant to 5 U.S.C. 552a(b)(3) to other Federal, State, territorial, local, tribal, or foreign agencies and other authorized organizations and individuals based on an authorized routine use when the disclosure is compatible with the purpose for which the records were compiled as described under the system of records notice for this system.

Disclosure: Voluntary, however, failure to provide the requested information may impede individual from obtaining a permit from the National Park Service.

Information Regarding Disclosure of Your Social Security Number Under Public Law 93-579 Section 7(b): Your Social Security Number (SSN) is needed to identify records unique to you. Applicants are required to provide their social security or taxpayer identification number for activities subject to collection of fees and charges by the National Park Service. Failure to disclose your SSN may prevent or delay the processing of your application. The authority for soliciting your SSN is 31 U.S.C. 7701. The information gathered through the use of the SSN will be used only as necessary for processing this application and collecting and reporting any delinquent financial obligations. Use of the social security number will be carried out in accordance with established regulations and published notices of system of records.

Paperwork Reduction Act Statement

We are collecting this information subject to the Paperwork Reduction Act (44 U.S.C. 3501) to provide the park managers the information needed to decide whether or not to allow the requested use. All applicable parts of the form must be completed in order for your request to be considered. You are not required to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

Estimated Burden Statement

Public reporting burden for this form is estimated to average 15 minutes per response including the time it takes to read, gather and maintain data, review instructions and complete the form. Direct comments regarding this burden estimate, or any aspects of this form, to the Information Collection Clearance Officer, National Park Service, 12201 Sunrise Valley Drive, Mail Stop 242, Reston, VA 20192. Please do not send your form to this address.

EXHIBIT E

From: Eggers, Bradley J. Brad_Eggers@nps.gov @

Subject: RE: [EXT] [EXTERNAL] FW: 2021 fireworks event permit

Date: January 7, 2021 at 5:12 PM

To: Goodman, Wanda Wanda.Goodman@travelsouthdakota.com, McGee-Ballinger, Maureen Maureen_McGee-Ballinger@nps.gov,

Davis, David B Brooks_Davis@nps.gov

Cc: Hagen, James James.Hagen@travelsouthdakota.com, Boswell, Tokey Tokey_Boswell@nps.gov, Riggins, Jill R.

Jill_Riggins@nps.gov

Good afternoon Wanda,

We will go ahead and adjust the end date for your permit request to July 10. Please be aware that the dates needed for the permit may change, due to the scope and complexity of the event.

For the time being, I will be the point of contact at Mount Rushmore for this permit request.

What is a good contact telephone number for you?

Hope all is well in Pierre.

Thanks.

Brad

Brad Eggers

Chief Ranger

Mount Rushmore National Memorial

605-574-3125

From: Goodman, Wanda < Wanda. Goodman@travelsouthdakota.com >

Sent: Monday, January 4, 2021 12:36 PM

To: Eggers, Bradley J. <Brad_Eggers@nps.gov>; McGee-Ballinger, Maureen

<Maureen McGee-Ballinger@nps.gov>; Davis, David B <Brooks Davis@nps.gov>

Cc: Jim Hagen <James.Hagen@travelsouthdakota.com>; Boswell, Tokey

<Tokey_Boswell@nps.gov>; Riggins, Jill R. <Jill_Riggins@nps.gov>

Subject: RE: [EXTERNAL] FW: 2021 fireworks event permit

Hey there,

That's excellent, thank you for the confirmation! If there's anything else you need from us leading up to your meeting with Bert, just let me know.

I hope you had a wonderful holiday with family and friends!

My best,



Wanda Goodman

Department of Tourism Phone: 605-773-3301 <u>TravelSouthDakota.com</u>

From: Eggers, Bradley J. < Brad Eggers@nps.gov>

Sent: Monday, January 4, 2021 1:25 PM

To: Goodman, Wanda < Wanda. Goodman@travelsouthdakota.com >; McGee-Ballinger,

Maureen <Maureen McGee-Ballinger@nps.gov>; Davis, David B

<Brooks Davis@nps.gov>

Cc: Hagen, James <James. Hagen@travelsouthdakota.com>; Boswell, Tokey

<<u>Tokey_Boswell@nps.gov</u>>; Riggins, Jill R. <<u>Jill_Riggins@nps.gov</u>>

Subject: RE: [EXT] [EXTERNAL] FW: 2021 fireworks event permit

Good morning Wanda,

Hope you all had a happy and healthy Holiday Season! I apologize for the delay in response, as I was on leave the last 2 weeks.

We have received your request to reduce the length of the permit to July 10, 2021. We have a call with Bert Frost later this week to discuss the event.

Thanks,

Brad

المارك

From: Goodman, Wanda < Wanda. Goodman@travelsouthdakota.com >

Sent: Monday, January 4, 2021 10:19 AM

To: Eggers, Bradley J. <<u>Brad_Eggers@nps.gov</u>>; McGee-Ballinger, Maureen <<u>Maureen_McGee-Ballinger@nps.gov</u>>; Davis, David B <<u>Dave_Davis@nps.gov</u>>

Cc: Jim Hagen <<u>James.Hagen@travelsouthdakota.com</u>>; Boswell, Tokey <Tokey Boswell@nps.gov>; Riggins, Jill R. <Jill Riggins@nps.gov>

Subject: RE: [EXTERNAL] FW: 2021 fireworks event permit

Good morning, all, and Happy New Year!

Just bringing the below email to the top of your inboxes again. Will you please let me know if the dates on our permit have been changed to June 15-July 10, 2021? Thank you!

Wanda



Wanda Goodman

Department of Tourism Phone: 605-773-3301 TravelSouthDakota.com

From: Goodman, Wanda

Sent: Tuesday, December 22, 2020 8:55 AM

To: Eggers, Bradley J. <<u>Brad_Eggers@nps.gov</u>>; McGee-Ballinger, Maureen <<u>Maureen_McGee-Ballinger@nps.gov</u>>; dave_davis <<u>dave_davis@nps.gov</u>> **Cc:** Hagen, James <<u>James.Hagen@travelsouthdakota.com</u>>; Boswell, Tokey

<a href="mailto: Tokey Boswell@nps.gov">Boswell@nps.gov; Riggins, Jill R. Jill Riggins@nps.gov
<a href="mailto:Subject: RE: [EXT] [EXTERNAL] FW: 2021 fireworks event permit

Good morning, NPS friends!

I have a quick request regarding our permit for June 15-July 15, 2021. We'd like to adjust our permit dates to June 15-July 10. Jill, would you please let me know if that's possible, and when that change has been made?

Thank you! Wanda



Wanda Goodman

Department of Tourism Phone: 605-773-3301 TravelSouthDakota.com

From: Eggers, Bradley J. <Brad Eggers@nps.gov>

Sent: Friday, December 11, 2020 11:00 AM

To: Goodman, Wanda <<u>Wanda.Goodman@travelsouthdakota.com</u>>; McGee-Ballinger, Maureen <<u>Maureen_McGee-Ballinger@nps.gov</u>>; dave_davis <<u>dave_davis@nps.gov</u>>

Cc: Hagen, James < <u>James. Hagen@travelsouthdakota.com</u>>; Boswell, Tokey

<<u>Tokey_Boswell@nps.gov</u>>; Riggins, Jill R. <<u>Jill_Riggins@nps.gov</u>>

Subject: RE: [EXT] [EXTERNAL] FW: 2021 fireworks event permit

Hi Wanda,

I am forwarding this to our permit coordinator, Jill Riggins. We will be waiting for guidance as to what the next steps will be.

Thanks Brad

From: Goodman, Wanda < Wanda. Goodman@travelsouthdakota.com >

Sent: Friday, December 11, 2020 7:16 AM

To: Eggers, Bradley J. <<u>Brad_Eggers@nps.gov</u>>; McGee-Ballinger, Maureen <<u>Maureen_McGee-Ballinger@nps.gov</u>>; Davis, David B <<u>Dave_Davis@nps.gov</u>>

Cc: Jim Hagen < James. Hagen@travelsouthdakota.com>: Boswell, Tokey

<Tokey Boswell@nps.gov>

Subject: [EXTERNAL] FW: 2021 fireworks event permit

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Good morning!

I'm just bringing the below and attached to the top of your inbox to make sure it was received, and to check in and see if you had any questions, or if I missed anything. I also wanted to touch base and wish you all a Merry Christmas and a blessed holiday season. This year was certainly an interesting ride, but one of the highlights was the opportunity to work with all of you on one spectacular event! I hope you're all doing well, and staying safe and healthy.

All my best, Wanda



Wanda Goodman

Department of Tourism Phone: 605-773-3301 TravelSouthDakota.com

From: Goodman, Wanda

Sent: Tuesday, October 20, 2020 7:52 AM

To: Eggers, Bradley J. <<u>Brad_Eggers@nps.gov</u>>; McGee-Ballinger, Maureen <<u>Maureen_McGee-Ballinger@nps.gov</u>>; Davis, David B <<u>Dave_Davis@nps.gov</u>> **Cc:** Hagen, James <<u>James.Hagen@travelsouthdakota.com</u>>; <u>tokey_boswell@nps.gov</u>

Subject: 2021 fireworks event permit

Good morning!

I hope this email finds you all doing well and staying healthy. As we head into winter, it doesn't seem like fireworks planning should be top of mind, but we all know how fast time flies! While we're not yet 100% sure what July, 2021, holds, we were reminded that we should get a permit application in to you so we're ready to roll once we know more. Attached is our permit application for a 2021 fireworks event – please let me know if it's missing anything, and/or if you need anything else from us at this point. As we move forward over the next couple of months and we start to formulate a clearer vision of a 2021 event, we'll be in touch with any questions or thoughts that we have. Please let us know if you have any questions or thoughts as well.

Stay warm out there, and have a great week!

Wanda

Wanda Goodman | Deputy Secretary Department of Tourism Phone: 605-773-3301

TravelSouthDakota.com | SDVisit.com



COVID-19 | Learn more at SDVisit.com

EXHIBIT F



United States Department of the Interior NATIONAL PARK SERVICE Interior Regions 3,4,5 601 Riverfront Drive Omaha, NE 68102

10.C (MWR-RDO)

March 11, 2021

Jim Hagen Secretary of Tourism South Dakota Department of Tourism 711 E. Wells Ave. Pierre, South Dakota 57501

Dear Mr. Hagan,

This letter is in response to the permit request you submitted on behalf of the State of South Dakota Tourism, to conduct a firework display at Mount Rushmore National Memorial in July of 2021. We appreciate your interest in the park and recognize the importance of the Memorial to the State of South Dakota and the nation.

After careful consideration, the National Park Service has determined that we are unable to grant a request to have fireworks at the Memorial. The 2019 Memorandum of Agreement between the State of South Dakota and the Department of the Interior commits us to work together to bring fireworks back to the Memorial in a safe and responsible manner. Potential risks to the park itself and to the health and safety of employees and visitors associated with the fireworks demonstration continue to be a concern and are still being evaluated as a result of the 2020 event. In addition, the park's many tribal partners expressly oppose fireworks at the Memorial. These factors, compiled with the COVID-19 pandemic, do not allow a safe and responsible fireworks display to be held at this site.

The health and safety of the public and our employees remain the highest priority for the National Park Service. While we have recently been seeing encouraging progress in combating the COVID-19 pandemic, the situation remains dynamic and it is only prudent to make plans based on the best available science and public health guidance available today. As the nation continues to respond to the ongoing COVID-19 pandemic, planning an event of this size and magnitude that draws people from across the country raises very serious concerns about the ability to adhere to Center for Disease Control guidance which currently recommends that large gatherings be avoided, particularly those in which physical social distancing cannot be maintained between people who live in different households. With an event this size it would be difficult, if not impossible, to comply with social distancing protocols if they continue to be in place in early July. Also, as we saw last year, most participants were not wearing face coverings, which are now required in all national parks where physical distancing cannot be maintained.

In addition, we are committed to respecting tribal connections with the site and building stronger relationships with associated tribes. The park committed to the 13 affiliated tribes to conduct a Tribal Cultural Sites / Traditional Cultural Properties Survey of the Memorial in 2020; however, due to the pandemic it has been delayed until summer 2021.

The park continues to monitor levels of perchlorates in the water and the potential for wildfire. The 2020 event was limited in attendance due to safety concerns which consequently impacted tens of thousands who were not able to visit the memorial or had their visit cut short. Also, we are in the final phase of a significant construction project in the park. While the work is scheduled to be complete in June 2021, any delay in the project would result in the work not being complete by July. A second demobilization to accommodate an event would be costly to the agency and impact the visiting public further based on the 2020 experience. These factors all weigh into the decision whether to hold a 2021 event.

We value our relationship with the State of Dakota and wish to continue to work with you to commemorate our nation's history at this national icon. The announcement of the new superintendent for the park will be made soon and it will be one of their top priorities to reach out to you to discuss plans for this year's Independence Day celebrations and other ways we can work together in the future.

Sincerely,

Herbert C. Frost Regional Director

EXHIBIT G



OFFICE OF THE GOVERNOR

KRISTI NOEM | GOVERNOR

April 13, 2021

President Joseph R. Biden The White House 1600 Pennsylvania Avenue Northwest Washington, D.C. 20500

Mr. President,

Last month, the National Park Service (NPS) notified us that they would be reneging on our Memorandum of Agreement to return fireworks to Mount Rushmore National Memorial in a safe and responsible manner.

I am raising this issue with you because the letter we received from NPS contradicts statements you made in March that held up Independence Day as a target date for Americans to begin returning to normal:

[B]y July the 4th, there's a good chance you, your families, and friends will be able to get together in your backyard or in your neighborhood and have a cookout and a barbeque and celebrate Independence Day. ... After this long hard year, that will make this Independence Day something truly special, where we not only mark our independence as a nation, but we begin to mark our independence from this virus.

There is a long history of celebrations of American independence at Mount Rushmore National Memorial, including fireworks displays from 1998 to 2009 and again in 2020. This year, as we mark our independence from this virus, Mount Rushmore would be the perfect place for a national celebration and fireworks show.

The NPS sent a letter listing several reasons why they believe a fireworks celebration would not be safe or responsible this year, but the facts and data tell a very different story.

NPS first outlined health and safety concerns for employees and visitors if fireworks returned this year, focusing specifically on the COVID-19 pandemic and current Centers for Disease Control and Prevention (CDC) recommendations. Last year, we hosted

Joseph R. Biden Page 2 April 13, 2021

more than seven thousand people. Contact tracing weeks after the event could not trace a single case of COVID-19 to the event – in South Dakota or in any other state.

Moreover, COVID-19 vaccination efforts are moving much more quickly than anticipated. As of April 9, roughly 20% of the country is fully vaccinated – and over 50% of South Dakotans have received at least their first shot. We believe this was part of the inspiration for your optimistic statements. Given the progress we are making as a nation, wouldn't cancelling an event months in advance due to COVID concerns fail to recognize both the science and the evidence?

NPS also cites potential tribal concerns. In South Dakota, we value the partnerships we have with each of our state's nine tribes. Accordingly, the tribes were consulted before last year's event and invited to attend our planning meetings. South Dakota's Department of Tribal Relations was involved in every step of the process. And attendees of last year's event enjoyed Native American-led programming before the fireworks itself, including a performance by Dakota Hoop Dancer Jasmin Pickner-Bell and a reading by Lakota Storyteller Darrell Red Cloud. We would also consult with tribal leaders for this year's event and again invite them to join us to celebrate America's birthday in 2021.

NPS also cited environmental risks to the park itself, including perchlorate levels in the water at the Memorial and wildfire risks to the Black Hills. But prior to conducting the 2020 celebration, NPS published a Finding of No Significant Impact (FONSI) stating that the event would not harm the natural environment of the Black Hills. In addition, when environmental conditions have not been favorable to the fireworks celebration—as in 2002, for example—we have refrained from holding the event. The same approach would occur this year.

Finally, with regard to the statement that the 2020 event's attendance limitations "impacted tens of thousands who were not able to visit the Memorial or had their visit cut short," NPS is painting a very misleading picture. Long before the pandemic hit, the State of South Dakota agreed to limit attendance for the fireworks due to previous years' poor crowd control and the resulting overcrowding. It is also why we celebrate on July 3, so that everyone can enjoy the Memorial on July 4.

In planning last year's event, we did our due diligence to ensure this event could be held safely and responsibly:

- We worked with the U.S. Department of the Interior on all required environmental reviews.
- We followed every item on the National Environmental Policy Act (NEPA) compliance checklist.

- We held multiple community meetings and public hearings leading up to the event.
- We created a "Go/No-Go Checklist" with conditions that must be met on the day
 of the event, including fire preparedness levels, wind speeds, and burning index.
 This list was reviewed regularly and signed by the Interior Department on the day
 of the event.
- We implemented an incident management team that met every guideline outlined by Ready.gov.
- We had an emergency operations center on site for two weeks—one week leading up to the event and one week after.
- We created and adhered to an emergency response checklist and manual.
- We assigned specific solicitors to handle First Amendment permits and accommodations.
- We coordinated with NPS on all communication activities relating to the event.

We are committed to hosting a Mount Rushmore Fireworks Celebration that is safe and responsible and working closely with NPS to do so. I respectfully ask that you continue the hopeful message you shared earlier this year and uphold our Agreement to host the event this year.

Thank you for your prompt attention to this matter.

Sincerely,

Kristi Noem Governor

EXHIBIT H



National Park Service U.S. Department of the Interior

Mount Rushmore National Memorial South Dakota

FINDING OF NO SIGNIFICANT IMPACT
Mount Rushmore National Memorial
Independence Day Holiday Fireworks Event

Recommended:

PATRICIA TRAP Digitally signed by PATRICIA TRAP Date: 2020.04.24 14:35:47 -06'00'

Patricia S. Trap Date

Acting Superintendent, Mount Rushmore National Memorial

Approved:

HERBERT FROST Digitally signed by HERBERT FROST Date: 2020.04.24 16:47:04 -05'00'

Herbert C. Frost, Ph.D. Date

Regional Director, National Park Service, Interior Regions 3,4,5

FINDING OF NO SIGNIFICANT IMPACT Mount Rushmore National Memorial Independence Day Holiday Fireworks Event

INTRODUCTION

In compliance with the National Environmental Policy Act (NEPA), the National Park Service (NPS) prepared an Environmental Assessment (EA) to examine alternative actions and environmental impacts associated with a proposed fireworks event (project) at Mount Rushmore National Memorial (Memorial).

The development of the EA was prompted by a 2019 Memorandum of Agreement (MOA) between the Secretary of the Interior and the Governor of South Dakota to explore resuming a fireworks event at the Memorial, by issuance of a special use permit by the NPS, for the purpose of celebrating the spirit of Independence Day and to provide for the enjoyment by the public in a manner that ensures safety and resource protection.

Two alternatives were analyzed in the EA. Under Alternative 1, the Memorial would permit and host an Independence Day celebration, including a fireworks display and other performances, on the evening of July 3, 2020, and could permit similar events in subsequent years. Under Alternative 2 (the no action alternative), a fireworks event would not be permitted, and activities similar to those the Memorial hosted from 2010 to 2018 would occur again in 2020. Three additional alternatives were considered, including hosting the event on July 4th, alternative launch sites, and a laser light show, but these alternatives were dismissed from detailed study.

The EA was made available to the public, agencies, and tribes for review and comment during a 30-day period from February 28, 2020 through March 30, 2020. The NPS received 707 separate public correspondences. Substantive comment focused on wildfire risk, environmental contaminants, and public safety, and are addressed in the responses to public comments (Appendix B to this FONSI). As a result of public comments, no substantive changes were made to the EA. Clarifications and minor corrections to the EA are noted in Appendix C to this FONSI.

The statements and conclusions reached in this finding of no significant impact (FONSI) are based on documentation and analysis provided in the EA and associated decision file. To the extent necessary, relevant sections of the EA are incorporated by reference below.

SELECTED ALTERNATIVE

The NPS has selected Alternative 1 – Issue a Special Use Permit (the selected alternative) to implement. Under the selected alternative, the Memorial will permit and host an Independence Day celebration, including a fireworks display and other entertainment, on the evening of July 3, 2020. Similar events could be permitted in subsequent years by the Memorial, assuming conditions and impacts remain as described in the EA.

The event will include 15 to 30 minutes of fireworks and proximate pyrotechnics displays (see page 6 of the EA regarding firework types) that will illuminate the sculpture's carved faces of Presidents Washington, Jefferson, Roosevelt, and Lincoln. Other types of performances will

occur before the fireworks, such as music, speeches, and reenactments. A military flyover, depending on aircraft availability, may also occur. The event may be filmed for viewing audiences and broadcast live or on delay.

Logistics for the event are described in the EA on page 5, and potential launch sites are described in the EA, Section 2.1.1 on pages 6 through 8.

Before the event, the NPS will work with partner agencies, including but not limited to the state of South Dakota, local communities, South Dakota Highway Patrol, as well as the fireworks contractor and staff, to develop the following:

- A plan for event staging, ignition, and demobilization. All launch locations will be closed to public access for a predetermined time before and after the event, as fireworks are staged and cleaned up. Fireworks contractor staff will monitor the event for any unexploded shells, spot fires, and other concerns.
- A wildland fire response plan. The NPS and fire officials will establish a quick response wildland fire team to respond to any unplanned ignitions.
- A plan to address event traffic control, visitor management, and emergency response.
 The Memorial will likely be closed to normal visitation for all or part of the day on July 3rd.
- A Unified Command incident management team and a Go/No-Go checklist. The event will be conditioned on appropriate weather, security and wildland fire conditions prior to the event.

The Memorial will protect fuel storage both from the fireworks displays and from any resulting wildfire by clearing and treating fuels in the immediate vicinity and stationing rapid response teams/assets in these locations (point protection and prepositioning resources). Additional conditions and mitigations may be required through the NPS permit issued for the event.

The NPS is currently working with the United States Geological Survey (USGS) to conduct water quality and soil monitoring at the Memorial, which will be increased under the selected alternative. Baseline data will be collected in spring or early summer 2020, prior to the fireworks event, and monitoring will continue after the event(s) on a schedule determined by USGS and NPS staff. Monitoring, which will supplement the current groundwater and drinking water testing program, will evaluate the event's impacts on levels of potassium perchlorate, and other chemicals or metals in soils and surface water and groundwater, which are typically present in fireworks. If monitoring shows that conditions have changed meaningfully from information presented in the EA, additional analysis may be necessary to evaluate future events.

A tribal cultural survey will be conducted in the future to document any unknown or additional tangible and intangible resources, and measures to protect any newly documented sites will be developed through consultation with tribes (see EA Section 4.2, Tribal Consultation, pages 40 through 42).

BASIS FOR THE DECISION

Alternative 1 was selected because it best meets the project purpose and need to celebrate the spirit of Independence Day by hosting a fireworks event, while providing for the enjoyment of the public in a manner that ensures safety and resource protection.

The NPS also evaluated a No Action Alternative, which would involve an Independence Day celebration without fireworks, but this alternative was not selected for failing to meet the project purpose of resuming Independence Day fireworks. Alternative actions including hosting a laser light show as an alternative to fireworks, using alternative launch sites, and hosting the event on the 4th of July instead of the 3rd of July were considered but dismissed from full analysis. The reasons that these alternative elements were dismissed from full analysis are documented in the EA in Section 2.3.

SIGNIFICANCE CRITERIA REVIEW

The selected action will not have a significant effect on the human environment. This conclusion is based on the following examination of the relevant significance criteria defined in 40 CFR Section 1508.27. The NPS reviewed each of these criteria given the environmental impacts described in the EA.

1. Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

As described in the EA in Chapter 3, the selected alternative has the potential for adverse impacts associated with wildfire, environmental contaminants, and cultural resources. However, no potential for significant adverse impacts were identified.

Wildfire

The EA included an analysis of the potential for an accidental wildfire ignition to occur as a result of the fireworks discharge and the potential for any wildfire to spread. The NPS and a Unified Command incident management team will assess wildfire risk in the days leading up to the July 3rd event. A Go/No-go decision tree will be created and utilized to ensure conditions are appropriate for the event to proceed in terms of wildfire ignition. The analysis in the EA included information from the Wildland Fire Decision Support System (WFDSS), which is designed to predict how a fire will burn (direction, speed, spread, intensity) once ignited, under a set of weather conditions. The analysis simulated an average year and a dry year and found that in an average year any accidental ignitions are likely to be contained as small spot fires with only negligible environmental effects. This has been the experience of the Memorial during previous fireworks events from 1998 through 2009 (with no show happening in 2002 due to elevated fire risk). In a dry year there exists the possibility of a larger wildfire with observable impacts on vegetation, fish, aquatic invertebrates, wildlife, soils, water quality, and the surrounding landscape generally. The Black Hills are a fire adapted ecosystem, and the types of effects that could result in the unlikely event of an escaped wildfire are consistent with the effects associated with naturally occurring wildfire. Such effects, were they to occur, would not constitute a significant adverse effect on these types of environmental resources.

Environmental Contaminants

The EA included an analysis of the effects of environmental contaminants that are commonly contained in fireworks and could be distributed on the landscape during fireworks combustion. These include perchlorates, nitrates, thiocyanate, and various metals. Water quality analysis shows that past fireworks events have not contributed to thiocyanate contamination but have contributed to perchlorate contamination and may have contributed to nitrate contamination. Soil analysis shows that past fireworks events contributed to copper and lead contamination in the immediate area of the previous launch location and may have contributed to elevated levels of 20 additional metals in soils elsewhere in the Memorial. While monitored levels of nitrates in

surface and groundwater remain well below the EPA maximum contaminant level (MCL) for drinking water, and there is currently no enforceable drinking water standard MCL for perchlorate, measured levels of perchlorate have in the past exceeded the EPA Interim Drinking Water Health Advisory¹.

Levels of perchlorate have attenuated over time since fireworks discharges were ceased in 2009. The analysis therefore concludes that future fireworks events are likely to have similar effects, with perchlorate levels gradually increasing in surface and groundwater after each event, then decreasing over time. Perchlorate exposure at sufficient concentrations can impair thyroid function, but these effects occur at concentrations considerably higher than those measured in the Memorial. In addition, perchlorate can be removed from drinking water with reverse osmosis systems, and these systems have been successfully employed at some residences in the Memorial where the water is used as a year-round drinking water source. Similar effects can occur to wildlife from ingestion of sufficient quantities of perchlorate and although some individual animals or plants may be affected, effects at the population level are unlikely. Although levels of copper and lead in soil exceeded the NPS ecological screening values for birds and mammals in previous USGS sampling results, these high levels were found only in a localized area, at the sample site closest to the former fireworks launch site.

Under the selected alternative, a monitoring program would be implemented to analyze water and soil samples before and after fireworks, to ensure that any increase in perchlorate, nitrate, thiocyanate, or metals contamination would be detected as early as possible. Additionally, the fireworks contractor would be required to thoroughly remove fireworks debris and unexploded ordnance, which would greatly reduce the introduction of contaminants in environmental media, and would be encouraged to use cleaner, more completely burning fireworks than those used in the past.

Given the proposed monitoring measures, limited and localized anticipated effects of some contaminants, ongoing and effective reverse osmosis treatment, current EPA drinking water standards, and measures to ensure cleanup and recovery of fireworks debris, human health and population-level ecological effects from perchlorate, nitrate, thiocyanate, and metals are not expected to occur. The effects of environmental contaminants therefore will not have a significant effect on the environment.

Cultural Resources

The selected alternative has the potential to cause both direct and indirect impacts on contributing resources to the historic district, especially combustible resources such as buildings, and the cultural landscape, including vegetation, natural systems, views and vistas, and to traditional values of associated tribes. The few significant known tangible archeological resources within the Memorial would not likely be impacted by fireworks or wildfire directly because of their nature and location but could be affected by wildfire response. These resources would be avoidable using specific response measures (See EA Section 3.3, Wildfire for additional information on the impacts of wildfire).

During consultation, tribes questioned the adequacy and completeness of the existing park-wide archeological survey data (see EA Chapter 4). Tribes have stated that additional resources (both tangible and intangible) may be located in the Memorial that are not yet documented. To address this potential, a tribal cultural sites survey would be conducted in the future to document any unknown or additional tangible and intangible resources, and measures to

¹ No MCL is currently established for perchlorate, although rulemaking to establish an MCL is currently underway.

protect any newly documented sites will be developed through consultation with tribes. Tribes have indicated that they consider fireworks an adverse effect to the traditional cultural property and traditional cultural landscape of the Black Hills, regardless of any survey results, but have not identified how the event would diminish the characteristics of the historic property that qualify it for inclusion in the National Register. Noise and light from fireworks discharge could disrupt individuals engaged in traditional cultural ceremonies at the time of the event. However, potential auditory and visual effects to tribal people conducting ceremonies after dark would be short term (15-30 minutes) and would be similar in duration and impact to other fireworks displays conducted in the local area during the same weekend.

A fireworks malfunction within the Hall of Records area could impact the walls or entrance to the Hall of Records. However, elevating a platform above the Hall of Records, as described in the selected alternative, or using different launch locations or other protective measures, would reduce the potential for these impacts. Additionally, the selected alternative does not allow for launching fireworks from the top of the sculpture itself, or from the Indian Camp cultural site, for protection of cultural resources and values.

Due to the short-term nature of the fireworks display, mitigating measures to protect resources from wildfire and wildfire response activities, efforts to conduct a tribal cultural survey and protect newly-documented sites, and selection of appropriate launch sites, the project will not have a significant effect on the environment.

2. The degree to which the proposed action affects public health or safety.

The NPS, State of South Dakota, and local law enforcement and emergency response officials are developing a traffic and visitor management plan, which will include emergency egress procedures. There will be a Unified Command incident management team established prior to the event to ensure safety and security of visitors, Memorial staff and contractors, and emergency response personnel. Risks to visitors from fireworks themselves are very limited; event management will incorporate all emergency egress considerations.

The Go/No-go checklist will also be used to review and confirm any safety or security concerns on the day of the event. The types of criteria included in the Go/No-go checklist are expected to include:

- Public safety criteria, such as:
 - o adequate egress is available;
 - visitors are in safe locations;
 - o adequate resources are available for emergency response, if needed
- Fire condition criteria, such as:
 - o fire preparedness level;
 - burning index;
 - fuels and moisture conditions:
 - wind and weather conditions
- Fireworks operator systems are functioning properly

A final Go/No-go checklist will be in place prior to the event and will be followed to maintain the security of the event and its attendees

Although there are potential adverse effects on human health and safety, the selected alternative includes mitigation measures to limit the potential and degree of these effects. The NPS, with its partners, will develop the following: a plan for event staging, ignition, and demobilization; a plan to address event traffic control, visitor management, and emergency response; and an incident management team and a Go/No-Go checklist.

Any human exposure to environmental contaminants from fireworks, including perchlorate, nitrate, thiocyanate, and metals, at the Memorial, is expected to be through the drinking water supply. The drinking water at the Memorial is monitored and treated for potential contaminants. Most visitors do not have regular and ongoing exposure to Memorial drinking water. The NPS has installed additional reverse osmosis filters in staff housing to further mitigate any potential exposure for year-round residents. Given the limited potential exposure for visitors, proposed monitoring measures, the absence of a drinking water standard MCL for perchlorate, and current treatment methods utilized at the Memorial, human health effects from environmental contaminants are not expected to occur.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

Mount Rushmore was established as a national memorial to preserve, protect, and interpret the unique mountain sculpture of four presidents: George Washington, Thomas Jefferson, Theodore Roosevelt, and Abraham Lincoln. The entire Memorial (1,278 acres) is listed in the National Register of Historic Places as an Historic District, and several unique cultural features are considered contributing resources of the District. These include the sculpture itself, the Hall of Records, the talus slope beneath the sculpture, and several historic structures in the developed area of the Memorial. The Memorial's natural resources also contribute to its unique character. Its vast pine forest constitutes the second largest old growth ponderosa pine forest in the Black Hills, and the Memorial's wetlands and ephemeral streams create habitat for a variety of species. The Memorial is also surrounded by lands with unique designations, including the Black Elk Wilderness and Norbeck Wildlife Preserve.

Under the selected alternative, the unique characteristics of the Memorial would be protected. Fireworks would not be launched from the top of the sculpture (which could cause direct impacts to this unique resource), and fire-retardant material would be used at launch sites to protect the surfaces beneath. If the fireworks display were to ignite a wildfire, the most likely wildfire scenario (predicted by Wildland Fire Decision Support System modeling) would be small, easily controlled, and confined entirely to the Memorial. Additionally, effects from the release of environmental contaminants would be mitigated through measures to ensure cleanup and recovery of fireworks debris and monitoring to ensure early detection of any contamination. Impacts on unique resources of the Memorial, and on unique lands adjacent to the Memorial, therefore would not be significant.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

In the context of determining significance, "controversial" refers to circumstances where a substantial dispute exists as to the environmental consequences of the proposed action and does not refer to the existence of opposition to a proposed action, the effect of which is relatively undisputed" (43 CFR 46.30). In the case of fireworks discharge in the Memorial, the EA relies on best available data regarding resource impacts augmented by knowledge of the

effects of hosting a similar event in the recent past. Comments received on the EA did not raise substantive objections to the methods of analysis, the data used in the analysis, or the conclusions reached in the analysis (see Appendix B numbers 4.1-7, 10.1-4, and 11.1-3). As such, the impacts of the project are not highly controversial.

5. Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.

The EA relies on best available data regarding resource impacts augmented by knowledge of the effects of hosting a similar event in the recent past. The degree of uncertainty and risk associated with the selected alternative is low, as prior fireworks events have occurred at the park and resulting impacts are known and are not believed to cause significant impacts. The impacts of the selected alternative are anticipated to be similar to prior events.

In terms of the data used to complete the analysis, the EA uses a standardized model (WFDSS) to assess fire risk and examine potential wildfire scenarios. The purpose of the model is to reduce uncertainty surrounding prescribed fire outcomes. The model was used to assess the probability of potential wildfire effects, and the analysis found the risk of larger wildfire events to be both low and avoidable using the same decision framework used for prescribed fire activities.

The impacts of environmental contaminants are also well understood in terms of the nature of the effects, having been the subject of a USGS study (USGS 2016) that concluded that fireworks contributed to elevated perchlorate levels, and several years of monitoring also provide insight into the presence of other contaminants and the attenuation of perchlorate levels. Although some uncertainty exists in terms of the rate at which environmental contaminants will accumulate in environmental media, the nature of the effect is well understood. As such, the effects of the project on the human environment are not highly uncertain and do not involve unique or unknown risks.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

Future fireworks events at the Memorial are anticipated in the EA, the impacts are included in the analysis, and are not expected to have significant effects. Future events are predicated on monitoring data collected as part of this project. If monitoring shows that conditions have changed meaningfully from information presented in the EA, additional analysis may be necessary to evaluate future events. In future years, individual events will be subject to permitting, visitor and traffic management planning, and utilization of a Go/No-go determination to ensure conditions are appropriate for the event and would not result in significant impacts.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The EA analyzed both direct and indirect impacts of the selected alternative in light of past, present and reasonably foreseeable future actions and found that the selected alternative would not contribute additional impacts such that they would lead to significant impacts either individually or cumulatively.

8. The degree to which the action may adversely affect items listed or eligible for listing in the National Register of Historic Places, or other significant scientific, cultural or historic resources.

The Memorial is listed in the National Register of Historic Places as an Historic District, and contributing features include the sculpture itself, the Hall of Records, the talus slope beneath the sculpture, and several historic structures in the developed area of the Memorial. The cultural landscape of the Memorial is significant for its setting and feeling, including the preservation of natural resources, and for its deep significance to associated Northern Great Plains tribes.

The few significant known tangible archeological resources within the Memorial would not likely be impacted by fireworks or wildfire directly because of their nature and location but could be affected by wildfire response. These resources would be avoided using specific response measures (See EA Section 3.3, Wildfire for additional information on the impacts of wildfire). A tribal cultural sites survey would be conducted in the future to document any additional tangible and intangible resources which have not been previously documented, and measures to protect any newly documented sites would be developed through consultation with tribes. Tribes have indicated that they consider fireworks an adverse effect to the traditional cultural property and traditional cultural landscape of the Black Hills, regardless of any survey results, but have not identified how the event would diminish the characteristics of the historic property that qualify it for inclusion in the National Register.

Noise and light from fireworks discharge could disrupt individuals engaged in traditional cultural ceremonies at the time of the event. However, potential auditory and visual effects to tribal people conducting ceremonies after dark would be short term (15-30 minutes) and would be similar in duration and impact to other fireworks displays conducted in the local area during the same weekend. A fireworks malfunction within the Hall of Records area could impact the walls and the entrance to the Hall of Records. However, elevating a platform above the Hall of Records, as described in the selected alternative, would reduce the potential for these impacts. Additionally, the selected alternative does not allow for launching fireworks from the top of the sculpture itself, or from the Indian Camp cultural site, for protection of cultural resources and values.

Due to the limited size and duration of the event, mitigating measures to protect all known resources, the commitment to further consult with tribes, efforts to conduct a tribal cultural survey and protect any newly-documented sites, and selection of appropriate launch sites, the effects to cultural resources will not be significant. The integrity of National Register listed properties and other cultural resources would not be diminished by actions under the selected alternative, and the NPS has determined that the undertaking would have no adverse effect to historic properties under Section 106 of the National Historic Preservation Act. The South Dakota State Historic Preservation Office (SHPO) concurred with this assessment on January 30, 2020. Minor changes to the project proposal and an update on tribal consultation were sent to the SHPO on February 26, 2020 with an affirmation that the NPS's "no adverse effect" determination remains unchanged.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

One federally threatened species, the northern long-eared bat, occurs at the Memorial. The NPS consulted with USFWS and received verification on December 4, 2019 that although the

fireworks event may affect the northern long eared bat, the activity described under the selected alternative is consistent with activities analyzed in the northern long-eared bat Programmatic Biological Opinion (USFWS 2016, 2019), and NPS has no additional Section 7(a)(2) consultation responsibility with respect to the northern long-eared bat. The USFWS response indicated that the event may affect the northern long-eared bat, but that any take that may occur as a result is not prohibited under the northern long-eared bat 4(d) rule (USFWS 2019). The project will be completed in accordance with the final 4(d) rule. Actions completed in accordance with the final 4(d) rule are not likely to jeopardize the continued existence of the species, and therefore the event is not likely to adversely affect the northern long-eared bat.

Four additional ESA-protected species could occur at the Memorial: the least tern (Sterna antillarium), the red knot (Calidris canutus rufa), the whooping crane (Grus americana), and Leedy's roseroot (Rhodiola integrifolia ssp. Leedyi). The Memorial does not contain habitat for these species, and/or they are not known to occur at the Memorial. The NPS has determined that the selected alternative would have no effect on these additional species.

Therefore, effects to threatened or endangered species or their habitat resulting from the selected alternative will not be significant.

10. Whether the action threatens a violation of Federal, State, or local law or requirement imposed for the protection of the environment.

Implementation of the NPS selected alternative would not violate any federal, state, or local environmental protection law. NPS has and continues to consult and coordinate with other federal, state, and local agencies as well as Tribal governments as event details are finalized and as described in other sections of this document.

CONCLUSION

Based on the review of the facts and analysis contained in the EA and associated decision file, the NPS has selected Alternative 1 for implementation. Based on the information in the EA and associated decision file, as discussed above, it is my determination that the selected alternative does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, in accordance with Section 102(2)(c) of NEPA, and the CEQ regulations at 40 CFR Parts 1500-08, an environmental impact statement is not required.

Appendix A: Non-Impairment Determination

Appendix B: Response to Comments

Appendix C: Errata

APPENDIX A NON-IMPAIRMENT DETERMINATION

INTRODUCTION

By enacting the NPS Organic Act of 1916 (Organic Act), Congress directed the U.S. Department of the Interior and the NPS to manage units "to conserve the scenery, natural and historic objects, and wildlife in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wild life in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (54 United States Code 100101). NPS *Management Policies 2006*, Section 1.4.4 explains the prohibition on impairment of park resources and values:

While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the National Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

An action constitutes impairment when its impacts "harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values" (NPS 2006, Section 1.4.5). To make an impairment determination, the NPS must evaluate the following:

An impact on any park resource or value may constitute impairment, but an impact will be more likely to constitute an impairment to the extent that it affects a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified in the park's general management plan or other relevant NPS planning documents as being of significance (NPS 2006, Section 1.4.5).

Resources and values subject to the non-impairment standard include (NPS 2006, Section 1.4.6):

- the park's scenery, natural and historic objects, and wildlife, and the processes and
 conditions that sustain them, including, to the extent present in the park: the
 ecological, biological, and physical processes that created the park and continue to
 act upon it; scenic features; natural visibility, both in daytime and at night; natural
 landscapes; natural soundscapes and smells; water and air resources; soils;
 geological resources; paleontological resources; archeological resources; cultural
 landscapes; ethnographic resources; historic and prehistoric sites, structures, and
 objects; museum collections; and native plants and animals;
- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;

- the park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- any additional attributes encompassed by the specific values and purposes for which the park was established (NPS 2006, Section 1.4.6).

Fundamental resources and values for the Memorial are identified in the Memorial's foundation document (NPS 2015):

- The Sculpture. The sculpture on the face of Mount Rushmore is a unique work of art and impressive engineering achievement that communicates the story of the birth, growth, development, and preservation of our nation. It is a durable symbol of freedom and hope that commemorates the values of the country and the ideals of democracy through the visages of George Washington, Thomas Jefferson, Abraham Lincoln, and Theodore Roosevelt.
- 2. The Natural Setting. The Black Hills of South Dakota provide a dramatic natural setting for the sculpture at Mount Rushmore National Memorial. The pine forest, landscaping, natural soundscape, and night sky that comprise this setting are important not only for their aesthetic appeal, but also represent a place of great spiritual and cultural significance to the American Indian tribes who have connections to the land. The natural setting inspired sculptor Gutzon Borglum to select Mount Rushmore as the location for his monumental memorial to our national history and progress.
- 3. Geology. Mount Rushmore National Memorial is located along the northeast edge of what is known as the Harney Peak Granite Batholith, which is a unique geological feature that is conducive to detailed, durable carving. Harney Peak Granite was critical to the effective development of the sculpture, and the lack of Harney Peak Granite below the faces is the reason that the sculpture was never completed to Gutzon Borglum's original vision. The geology of the mountain also provides recreational opportunities at the Memorial as visitors are able to climb rock formations in designated areas.
- 4. Museum Collection. The museum collection at Mount Rushmore is a source of national and international interest and research. It is part of the natural and cultural heritage of the country and is collected, preserved, and interpreted for public benefit. The collection contains archeological objects, biological specimens, archives, art, and historical objects, including the tools and equipment used in carving the Memorial. The museum collections support production of research papers, articles, and journals that further public understanding and appreciation of the sculpture.
- 5. Views of the Sculpture. The views of the sculpture are critical to the experience at Mount Rushmore National Memorial. A variety of viewing opportunities are provided throughout the site, including the unimpeded views at Grand View Terrace, historic views from the sculptor's studio, and modern views from the Avenue of Flags and points along the highway. Visitors can gain an appreciation of the scale and setting of the sculpture as they move between these viewing opportunities.
- 6. The Sculptor's Studio. The Sculptor's Studio at Mount Rushmore National Memorial was built in 1939 and served as the second on-site studio for sculptor Gutzon Borglum. It was the final studio that Borglum worked in and contains the original plaster model for the sculpture as well as tools related to the sculpting process. The building served as the first museum for the site, as well as the administrative office. Today, it is an essential tool for interpretation and is important to telling the story of the sculpting process.

This determination has been prepared for the selected alternative, as described in the FONSI. While analyzed in detail in the EA, determinations are not necessary for visitor use and experience because impairment findings relate to park resources and values. Visitor use and experience are not generally considered park resources or values according to the Organic Act. The following resources or values were evaluated for the potential for impairment: vegetation, terrestrial wildlife, fish and aquatic invertebrates, water and soil quality, and cultural resources.

VEGETATION

The 1,278-acre Memorial is surrounded by the Black Hills National Forest and is northeast of the USFS Black Elk Wilderness and Norbeck Wildlife Preserve (see Figure 1 in the EA). The Memorial and adjacent lands are in the Black Hills Plateau ecoregion, which consists of a mixture of warm, dry pine forest and mixed grasslands. Ponderosa pine, which dominates the forested area in and adjacent to the Memorial, is a fire-adapted species, meaning it depends on frequent low-intensity fires to control seedlings, reduce forest floor debris, and recycle forest nutrients. It also is highly flammable and burns with great intensity and severity in the summer season in a typical dry year (2000, 2002, 2007, and 2012 were considered to be dry years). General vegetation conditions at the Memorial are described in the EA on pages 13 and 14.

Impacts from a fireworks event on vegetation would be negligible, unless there is an escaped wildfire as a consequence of the event. For this reason, vegetation was dismissed as a standalone impact topic in the EA but was discussed in the wildfire analysis section. Impacts of an escaped fire on July 3rd on both the Memorial and adjacent landscapes, including the Black Elk Wilderness and Norbeck Wildlife Preserve, were evaluated for the selected alternative (EA pages 20, 21, 23, and 24) using a Wildland Fire Decision Support System model (WFDSS, described on EA page 18). The results of the model reveal a low probability of a highconsequence wildfire event and high probability of a low-consequence wildfire event. A fire occurring within the model parameters will have environmental consequences for the Memorial, but flora in general will recover well over several years. Even following a severe fire, the overall impacts will not be expected to cause a major change in vegetation communities, as evidenced following other fires in the Black Hills. The broken nature of the terrain and the resulting discrete islands of trees among the granite formations throughout the Memorial will ensure some continuity for seed sources following a fire. Following the analysis in the EA using the WFDSS models, the most likely wildfire scenario will be confined entirely to the Memorial and impacts on the Black Elk Wilderness and Norbeck Wildlife Preserve from wildfire are unlikely.

The natural setting, including the ponderosa pine community is a fundamental resource of the park. In summary, the selected alternative will not result in an impairment of this resource because even in the worst case scenario of a major high-consequence fire, impacts will not impede the natural function of these communities or result in a permanent loss of this natural setting at the Memorial; vegetation communities will recover and evidence of fire will become less noticeable over time.

WILDLIFE

General information on wildlife species and their habitats in the Memorial are described in the EA on pages 14 and 15. Threatened, endangered, and sensitive species were dismissed from detailed analysis in the EA (see Section A.7 in EA Appendix A).

Impacts on wildlife as a result of wildfire were evaluated for the selected alternative in the EA (see pages 21 through 23). Fires affect wildlife mainly through impacts on their habitat. Fires often cause short-term increases in food (e.g., recovering grasses and forbs and downed wood) that contribute to increases in populations of some animals (e.g., ungulates and woodpeckers). Within forests, stand-replacement fires usually alter the wildlife community more dramatically than understory fires. A stand-replacement fire resulting from the actions in the selected alternative is unlikely.

Fires generally kill or injure a small proportion of wildlife populations. Mortality rates of mammals (small and larger) are low, and direct fire-caused mortality has little influence on populations of these species as a whole. Most small mammals would avoid fire by using underground tunnel systems, whereas large mammals would find a safe location in unburned patches or outside the burn. Fire-caused bird mortality depends on the season, uniformity, and severity of burning. Mortality of adult songbirds is rare, but mortality of nestlings and fledglings could occur. Firecaused injury to herpetofauna would be low, even though many of these animals, particularly amphibians, have limited mobility. The vulnerability of snakes to fire may increase while they are in ecdysis (the process of shedding skin). Fires affect fish mainly through impacts on their habitat. Wildfire affects fish and aquatic invertebrates by altering water chemistry (decreases in dissolved oxygen and pH and elevated turbidity) and flow (increased runoff and increased sedimentation) (see EA page 29 for a discussion of these effects). The vulnerability of insects and other invertebrates to fire depends on their location at the time of the fire. While adults can burrow or fly to escape injury, species with immobile life stages that occur in surface litter or aboveground plants are more vulnerable (Wright and Bailey 1982; Arno 2000; Shepperd and Battaglia 2002; Graham et al. 2016).

In general, fire impacts on wildlife under any of the wildfire model scenarios (described in the EA on page 18) would involve limited changes in wildlife habitat in the analysis area with minimal direct mortality and no population level effects. A low-consequence wildfire (which is the most likely scenario) would have localized impacts on wildlife habitat and would not likely result in a reduction of the species' population at the Memorial despite occasional instances of individual wildlife mortality. A higher consequence fire would have greater habitat effects, but these effects are identical to naturally occurring wildfire effects in the Black Hills ecosystem. After a larger wildfire event, most wildlife species will occupy ample adjacent habitat and repopulate the fire area as plant regrowth occurs. For some species, the patches created by wildfire events improve habitat conditions. In conclusion, the selected alternative will not result in an impairment to wildlife populations and their habitats as a result of wildfire, because large stand-replacing fires and escaped fires are improbable and if they do occur, would likely impact individual organisms but not populations as a whole.

Impacts on wildlife, including mammals, birds, amphibians, fish, and invertebrates, as a result of environmental contaminants associated with fireworks were also evaluated for the selected alternative in the EA (see pages 32 through 35). A firework is the combination of a fuel (typically a metal or metalloid) and an oxidizer (typically perchlorate or nitrate salts) to enhance combustion along with binders, stabilizers, and anticaking agents. Environmental contaminants associated with fireworks include perchlorate, thiocyanate, and nitrate in addition to numerous other compounds that are released to the environment, partially due to the incomplete combustion of the fireworks and partially due to unexploded ordnance. Some contaminants, such as perchlorate and thiocyanate, can affect the metabolism, reproduction, and development of exposed individual organisms (wildlife and aquatic) and inhibit iodide uptake by the thyroid gland. Other contaminants, such as nitrates, can cause toxic algal blooms. Elevated metals exposure can cause reduced growth rate and development abnormalities in birds, and impact

the nervous system, kidneys, and other vital systems in mammals. Contamination from prior fireworks shows has likely caused elevated perchlorate concentrations in the Memorial's soil (Starling Gulch) and water (Grizzly Bear Creek), elevated nitrate levels in water (Lafferty Gulch), and elevated levels of copper and lead in soils sampled closest to the launch site in Lafferty Gulch. Limited sampling at the Memorial did not detect thiocyanate in the Memorial's finished drinking water (site L-7); however, surface water, groundwater, and soil at the Memorial have not been tested for thiocyanate or cyanide in the event thiocyanate is photochemically degraded.

It is assumed that the release of perchlorates, nitrates, thiocyanate, and metals to environmental media within the Memorial as a result of the selected alternative would be comparable to previous fireworks shows, and contamination levels observed in environmental media would gradually increase each year that fireworks events occur (impacts are described in the EA on pages 30 through 35). As discussed in the EA, adverse impacts on individual birds, mammals, amphibians, and invertebrates could result from increased environmental contaminants following future fireworks displays. However, any impacts on individual organisms would be expected to occur after the fireworks display and attenuate over time as contaminant levels dropped in surface water. No population level impacts are expected. Because previously measured levels were the result of 10 years of fireworks events, contaminant levels would not be expected to exceed levels measured previously for several years. A pre- and post-monitoring program of soil and water would also be in place to ensure that any increase in contamination (perchlorate, nitrate, thiocyanate, and metals) would be detected as early as possible (see EA Section 2.1.3 on page 8).

In summary, the selected alternative will not result in an impairment to wildlife populations, including mammals, birds, amphibians, fish, and invertebrates, and their habitats as a result of environmental contaminants because the release of contaminants will be comparable to previous fireworks shows, any impacts will occur to individual organisms, impacts would occur within hours after the fireworks display and attenuate over time, no population level impacts are expected, and monitoring will ensure that any increase in contamination will be detected as early as possible.

WATER AND SOIL QUALITY

The Memorial is in the east-central region of the Black Hills and consists of Precambrian-age bedrock of granite, pegmatite sills and dikes, and schist. Major soils at the Memorial are Marshbrook and Cordeston (NPS 2008). Marshbrook soils are subject to soil compaction and rutting from operation of heavy equipment. The very steep side slopes have a high erosion potential when disturbed. Area soils are dominated by decomposing granite. Hydrophobicity likely follows a wildfire in coarse soils. Soil hydrophobicity causes water to collect on the surface rather than being absorbed into the soil, causing more water runoff (see EA pages 15 and 25 through 27).

Three streams are present within the Memorial: Lafferty Gulch in the north, Starling Gulch in the southwest, and the Unnamed Tributary to Grizzly Bear Creek in the southeast (see EA Figure 8). Groundwater occurs in localized aquifers within the bedrock, and flow is controlled by secondary permeability caused by the fracturing and weathering of the bedrock. This combination of factors, along with surficial deposits of colluvium, can result in the rapid movement of large quantities of recharged groundwater. The groundwater system in the West

Fork Lafferty Gulch is isolated due to the prevention of downgradient movement by an igneous sill, which acts as a dam (see EA page 25).

Impacts on water quality and soils as a result of wildfire were evaluated for the selected alternative in the EA (see page 23). In general, these effects are identical to those associated with naturally occurring wildfire of similar scales. Wildfire can impact water quality through increased erosion from burned areas, which increases sediment delivery to streams and other water bodies. Small escaped wildfires would therefore not likely affect water quality in the drainage basins at the Memorial, or the larger watershed. A larger escaped fire with larger burned areas could increase sediment delivery to local water bodies and could affect the water quality of local water supplies and systems, including streams, local reservoirs, and treatment plants, due to elevated levels of metals and other contaminants, sediment and nutrient loading, debris, and increased turbidity. Short-term localized hydrophobicity in soil would also be expected from a severe wildfire. Long-term soil impacts, however, would be insignificant due to the dominance of the granitic soils and rock formations throughout much of the Memorial. In conclusion, the selected alternative will not result in an impairment of water quality or soils as a result of wildfire because large escaped fires and the resulting environmental effects are improbable, and because these types of effects are similar to naturally occurring wildfire effects in the Black Hills ecosystem.

Impacts on water and soil quality as a result of environmental contaminants associated with fireworks were also evaluated for the selected alternative in the EA (see pages 30 and 31). As described above for terrestrial wildlife, fireworks contain contaminants that are released to the environment when they are detonated or when unexploded ordnance that is not recovered degrades over time. Past fireworks displays are the most probable source of perchlorate contamination in soil, surface water, and groundwater at the Memorial. Additionally, the groundwater system at the Memorial is highly susceptible to contamination due to the hydrogeologic conditions present.

The total amount of environmental contaminants that would be released as a result of the preferred alternative is not quantifiable given its dependency on many different factors, including the number of fireworks launched, the efficiency of combustion, and the composition and quality of the fireworks used. It is assumed that the release of chemicals to water and soil within the Memorial would be comparable to previous fireworks shows, and contamination levels observed in water and soil would gradually increase each year that fireworks events occur. However, the amount of chemicals released per event is not expected to exceed the amount released in previous events. Because previously measured levels were the result of 10 years of fireworks events, contamination levels would not be expected to exceed levels measured previously for several years. A pre- and post-monitoring program of soil and water would also be in place to ensure that any increase in contamination (perchlorate, nitrate, thiocyanate, and metals) would be detected as early as possible (see EA Section 2.1.3 on page 8).

The selected alternative will not result in an impairment to water and soil quality as a result of environmental contaminants because the release of contaminants will be comparable to previous fireworks shows, and monitoring will ensure that any increase in contamination will be detected as early as possible.

CULTURAL RESOURCES

A Cultural Landscape Inventory was conducted by the NPS in 2014, which identified Spatial Organization, Natural Systems and Features, Cultural Traditions, Circulation, Vegetation, Topography, Buildings & Structures, Small Scale Features, and Views & Vistas as contributing characteristics of the landscape (NPS 2014), which preserves natural resources and the natural setting of the Black Hills. The cultural landscape is significant for its association with Northern Great Plains tribes, and the importance of the Black Hills to these tribes cannot be overstated. The ownership of the Black Hills remains disputed by a number of tribes. The Six Grandfathers, a mountain of great significance to the Lakota, was called several different names by white settlers and explorers; the United States Board of Geographic Names officially recognized the name "Mount Rushmore" in 1930. In the early 1900s, the faces of four presidents were carved into the mountain, and this act is regarded by many tribes as a desecration.

The Memorial's historic district is also identified as a significant feature of the cultural landscape and was listed in the National Register of Historic Places on October 15, 1966 (NPS 1966). The historic district was updated in 2013 to encompass the entire Memorial (Historic Resources Group, Inc. 2013).

During consultation with Tribal Historic Preservation Officers, the adequacy and completeness of the existing archeological survey data were questioned (see EA Chapter 4), and additional resources (both tangible and intangible) may be located in the Memorial that are not yet documented. General conditions of the Memorial's historic district and cultural landscape are described in the EA on pages 36 and 37. General conditions of the Memorial's historic district and cultural landscape are described in the EA on pages 36 and 37.

Impacts on the historic district and cultural landscape, as well as to traditional values of associated tribes, were evaluated for the selected alternative in the EA (see page 37-39). The few archeological resources within the Memorial would not likely be impacted by fireworks or wildfire direction because of their nature and location but could be affected by wildfire response. Response measures would be designed to avoid impacting these sites.

All tribes consulted objected to the event and consider it to be an adverse effect to the traditional cultural property and traditional cultural landscape of the Black Hills, but have not identified how the event would diminish the characteristics of the property that qualify it for inclusion in the National Register of Historic Places. Potential auditory and visual impacts that may occur to tribal members conducting ceremonies after dark near the Memorial would be short-term and would be similar in duration and impact to other fireworks displays conducted in the local area during the same time frame. Tribes have stated that additional resources (both tangible and intangible) that are not yet documented may be located in the Memorial. To address this potential, a tribal cultural sites survey would be conducted in the future to document any tangible and intangible resources, and measures to protect any newly documented sites will be developed through consultation with tribes.

The Memorial's Foundation Document (NPS 2015) identified fireworks as a major threat to the sculpture, based on the nature of the fireworks program from 1998 to 2009 and its impacts on the cultural resources of the Memorial. Previous events were not adequately protective of the sculpture; mitigation measures included in 2020 and for any future events will include limitations on launch sites and requirements for protective materials to prevent scorching. If fireworks are launched from the Hall of Records area, short-term impacts would occur there from construction of a platform or other protective surface from which the fireworks mortars would be launched.

Deposition of unexploded ordnance and mortar debris could cause adverse impacts on the historic district and cultural landscape. A fireworks malfunction within the Hall of Records area could cause adverse impacts on the walls and the entrance to the Hall of Records; however, elevating a platform above the Hall of Records or utilizing alternate launch sites would reduce the potential for these impacts. Other potential adverse impacts on the historic district and cultural landscape could occur from unexploded ordnance fallout, the ignition of wildfires, and the subsequent response to contain and extinguish the wildfire, but for the reasons described in this document will be minimized by various measures to be implemented as part of the project.

NPS also considered, but dismissed, the potential for percussive impacts to occur to the sculpture, based on a report (Poluga et al, 2018) that found the rock comprising the sculpture to be stable and the percussion from fireworks discharge to be insufficient to harm the sculpture.

The selected alternative will not result in an impairment to the historic district and cultural landscape because the NPS will take specific actions to ensure the integrity of these fundamental resources are perpetuated for future generations and do not lose their integrity. Specifically, known archeological resources within the Memorial will not be directly affected by fireworks, indirect impacts on documented sites from wildlife responses will be avoidable using specific response measures, an additional tribal cultural sites survey will be conducted to identify other potential sites, site protection measures will be developed through consultation with tribes, any potential auditory and visual effects to tribal ceremonies will be short-term and similar in duration and impact to other fireworks displays, and historical resources will be protected from adverse impacts through avoidance measures, such as site selection and use of protective materials at launch locations. These actions all mitigate any potential for impairment to cultural resources.

CONCLUSION

In conclusion, as guided by this analysis, good science and scholarship, advice from subject matter experts and others who have relevant knowledge and experience, consultation with American Indian tribes, and the results of public review and comment, it is the superintendent's professional judgment that there will be no impairment of park resources and values from implementation of the selected alternative. The NPS has determined that implementation of the selected alternative will not constitute an impairment of the resources or values of Mount Rushmore National Memorial. This conclusion is based on consideration of the Memorial's purpose and significance, a thorough analysis of the environmental impacts described in the EA (including measures to minimize and mitigate potential impacts), comments provided by the public and others, and the professional judgment of the decision maker guided by the direction of NPS *Management Policies 2006* and the NPS's 2011 Guidance for Non-Impairment Determinations and the NPS NEPA Process.

REFERENCES

Arno, S.F. 2000. Chapter 5. Fire in Western Forest Ecosystems. In: J.K. Brown and J.K. Smith (eds.), pp. 97-120, Wildland fire in ecosystems: effects of fire on flora. USDA Forest Service, General Technical Report RMRS-GTR-42-vol 2. https://www.fs.fed.us/rm/pubs/rmrs_gtr042_2.pdf.

Graham, R.T., L.A. Asherin, M.A. Battaglia, T.B. Jain, and S.A. Mata. 2016. Mountain Pine Beetles: A Century of Knowledge, Control Attempts, and Impacts Central to the Black Hills. General

Technical Report RMRS-GTR-353. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 193 pp. https://www.fs.fed.us/rm/pubs/rmrs_gtr353.pdf.

Historic Resources Group, Inc. 2013. National Register of Historic Places Registration Form. Prepared by M.D. Gengler and L. Sargent.

National Park Service (NPS). 1966. Mount Rushmore National Memorial National Register of Historic Places Inventory – Nomination Form. May 14, 1986.

- National Park Service (NPS). 2006. *Management Policies 2006*. https://www.nps.gov/policy/mp2006.pdf.
- National Park Service (NPS). 2008. Series: National Park Service Geodiversity Atlas. https://www.nps.gov/articles/series.htm?id=E6B9E368-1DD8-B71B-0B63AA49B7091501.
- National Park Service (NPS). 2011. Guidance for Non-Impairment Determinations and the NPS NEPA Process. https://www.nps.gov/subjects/nepa/upload/Supplemental-Guidance_Non-Impairment-Determination-2011 accessible.pdf. September.
- National Park Service (NPS). 2014. Cultural Landscapes Inventory. Mount Rushmore National Memorial.
- National Park Service (NPS). 2015. Mount Rushmore National Memorial Foundation Document. September.
- Poluga, S.L., A. Shakoor, and E.L. Bilderback. 2018. Rock Mass Characterization and Stability Evaluation of Mount Rushmore National Memorial, Keystone, South Dakota. Environmental & Engineering Geoscience 24(4):385-412.
- Shepperd, W.D. and M.A. Battaglia. 2002. Ecology, Silviculture, and Management of Black Hills Ponderosa Pine. General Technical Report RMRS-GTR-97. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 112 pp. https://www.fs.fed.us/rm/pubs/rmrs_gtr097.pdf.
- Smith, J.K., ed. 2000. Wildland Fire in Ecosystems: Effects of Fire on Fauna. Gen. Tech. Rep. RMRS-GTR-42-vol. 1. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.
- U.S. Fish and Wildlife Service (USFWS). 2016. Programmatic Biological Opinion on Final 4(d) Rule for the Northern long-eared bat and Activities Excepted from Take Prohibitions, U.S. Fish and Wildlife Service Regions 2, 3, 4, 5 and 6. January.
- U.S. Fish and Wildlife Service (USFWS). 2019. Endangered and Threatened Wildlife and Plants; 4(d) Rule for the Northern Long-Eared Bat. Volume 81. No. 9. 50 CFR Part 17. https://www.fws.gov/midwest/Endangered/mammals/nleb/pdf/FRnlebFinal4dRule14Jan2016.pdf. Last updated December 2, 2019.
- U.S. Geological Survey (USGS). 2016b. Perchlorate and Selected Metals in Water and Soil within Mount Rushmore National Memorial, South Dakota, 2011-15. Scientific Investigations Report 2016–5030.
- Wright, H.A. and A.W. Bailey. 1982. Fire Ecology: United States and Southern Canada. Wiley & Sons. 501 pp.

Appendix B

APPENDIX B RESPONSES TO PUBLIC COMMENTS

INTRODUCTION

The EA was made available for public review, and comments were accepted by the NPS from February 28, 2020 through March 30, 2020.

During the public comment period, the NPS received 707 correspondences through the NPS's PEPC system.

Responses to public comments address substantive comments that were received during the public review period. According to NPS policy, substantive comments are those that (1) question the accuracy of the information in the EA, (2) question the adequacy of the environmental analysis, (3) present reasonable alternatives that were not presented in the EA, or (4) cause changes or revisions in the proposal.

Many comments addressed issues already adequately covered in the EA. No comments warranted development of an additional alternative or reconsideration of alternatives that were considered but dismissed. Therefore, the alternatives remain as described in the EA, and no changes were made in the assessment of environmental consequences.

COMMENTS AND RESPONSES

The NPS grouped substantive public comments into several categories. Substantive comments and the NPS responses are provided in the matrix that follows.

Concern Statement Number	Concern Statement	Response
	NPS Policies	
1.1	The proposal to return a fireworks display to the Memorial is contrary to the mandates of the Organic Act because it threatens the sculpture and surrounding landscape. The Memorial's Foundation Document identified fireworks as "a major threat to the sculpture, based on the nature of the fireworks program from 1998 to 2009"	There is no basis to conclude that the impacts disclosed in the EA would constitute impairment of park resources, which is prohibited under the Organic Act. The fundamental purpose of Mount Rushmore National Memorial is to commemorate the founding, expansion, preservation, and unification of the United States by preserving, protecting, and interpreting the mountain sculpture in its historic, cultural, and natural setting while providing for the education, enjoyment, and inspiration of the public. The Organic Act directs the NPS to promote and regulate the use of the parks by whatever means and measures conform to the fundamental purpose of the parks. These include, among others the NPS Management Policies, which provide guidance for park managers. Previous displays resulted in impacts to the Memorial's natural and cultural resources, and the EA discloses that similar impacts are likely to occur for some resources as a result of future displays. Where feasible, mitigation measures to reduce impacts compared to previous displays will be developed and implemented. Some past fireworks events employed practices that were not adequately protective of resources, such as fireworks placed in a manner that resulted in burn marks on the sculpture. These effects will be avoided under the Preferred Alternative by protective measures such as selecting other launch positions, adequately securing all launch equipment, and using fire-retardant materials to prevent scorching. No information available suggests that past impacts rose to the level of significance, and the 2003 EA also found no potential for significant environmental impacts. The commenter provided no information to support the contention that past effects will impair park resources. The 2006 NPS Management Policies permit fireworks displays if they are conducted in compliance with the National Fire Protection Association Code (NFPA) for the display of fireworks and are approved by the superintendent and safety officer, unless they pose an unacceptable risk of wi

Concern Statement Number	Concern Statement	Response
		 The NPS contracted a review of the Memorial to determine restrictions and parameters to ensure compliance with NFPA codes and will review the fireworks contractor's submittal to ensure the same. The fireworks display, if approved, will be signed off on by the Superintendent and Safety Officer during or prior to the Go/No-Go decision checklist signoff process. The impact analysis in the EA evaluated fire risks and impacts to the Memorial's resources and values and determined that they were acceptable and not significant (see the Finding of No Significant Impact for more details). The NPS has developed a Non-Impairment Determination to accompany the FONSI which details that there will be no impairment of any park resources. The NPS and Unified Command emergency management partners will utilize a Go/No-Go Checklist to evaluate public safety concerns and to ensure conditions are appropriate to proceed at the time of the event.
	Alternatives	Together, these methods will ensure that all applicable requirements will be met.
2.1	The EA does not define the scope of the fireworks event	The EA does discuss the chemical composition of fireworks, as well the types of
	in terms of firework number, type, size, and quality.	fireworks that may be used, the size of fireworks most likely to be used at specific launch sites, and the duration of the event. Additional details would not meaningfully change the overall analysis of potential impacts to resources as identified in the EA. The precise details regarding the number, type, size, and quality of fireworks used under the Preferred Alternative will be further developed in coordination with the State of South Dakota and fireworks contractor; any impacts are expected to fall within the range described in the EA.
2.2	The Project analysis area in the EA is not sufficient and should be expanded.	Commenter provided no substantive information to support an expanded analysis area. The Project analysis area was developed cooperatively among Memorial staff, NPS policy and resource specialists, U.S. Forest Service staff, and contractors. The analysis area accounts for potentially affected watersheds, forests, wilderness areas, wildlife refuges, and cultural resources. NPS believes the analysis area is adequate for the purposes of the NEPA analysis and for decision makers to make an informed decision.

Concern		
Statement	Concern Statement	Pagnanga
Number	Concern Statement	Response
Number	Cultural Resources/Tribal Concerns	
3.1	The EA does not detail how NPS will minimize or	As described in the EA, the known archeological resources within the Memorial
3.1	mitigate potential impacts to cultural resources, as	would not likely be impacted by fireworks or wildfire directly because of their
	expressed by the tribes. The EA also does not indicate	nature and location but could be affected by wildfire response. These resources
	how NPS will address the inadequate consultation	would be avoided using specific response measures, including building fire lines
	process.	away from areas that contain sensitive resources.
		NPS solicited engagement of traditionally associated tribes several times during the development of the EA, as described in Section 4.2, Tribal Consultation, on pages 40-42. This section also describes additional measures that will be taken with tribes to identify resources and develop mitigation and avoidance strategies. Tribes have indicated that they consider fireworks an adverse effect to the traditional cultural property and traditional cultural landscape of the Black Hills but have not identified how the event would diminish the characteristics of the historic property that qualify it for inclusion in the National Register of Historic
		Places.
	Environmental Contaminants	
4.1	The EA does not include adequate baseline data on	All readily available and known information has been consulted in the preparation
	monitored contaminants, within the Memorial, or	of the EA and is included in the description of the affected environment. Project
	provide details on the amounts and types of	area sampling efforts are described in Section 3.4.1, Current General Conditions –
	contaminants produced during previous fireworks displays as a reference.	Environmental Contaminants. The data represents the aggregate effect of all previous fireworks displays including accumulation from all events and attenuation of contaminant levels over time. The specific amounts produced during individual previous displays is unknown due to the timing of sampling and the debris that remained in the project area following these displays. Ignition success, the percentage of fireworks consumed, and other details were not specifically tracked for previous events.
		The Memorial will require the fireworks operator to track ignition success and conduct sweeps for unexploded fireworks and remnant materials. In addition to the monitoring work planned in partnership with USGS (see 4.5a), the NPS will also collect dry debris from several locations immediately after the fireworks event, which will provide additional information about the type of contaminants falling to the ground at several spatially dispersed locations.

Concern Statement Number	Concern Statement	Response
4.1a	Any restrictions on Memorial drinking water should be included in the EA.	There have been no restrictions on drinking water at the Memorial due to groundwater contamination or drinking water contamination from past fireworks events. Arsenic is the only drinking water standard exceedance that the Memorial has had to post (2006-2012) under the Safe Drinking Water Act Public Notification Rule. Arsenic is naturally occurring in the Black Hills, and the arsenic exceedance was not due to past firework events. The EPA lowered the arsenic maximum contaminant level (MCL) from 50 parts per billion (ppb) to 10 ppb in 2006, which triggered the Memorial to post its arsenic levels. In the fall of 2011, a micro filtration and arsenic removal system was installed to remove arsenic from the drinking water at Mount Rushmore.
		There is currently no MCL for perchlorate. As stated in the EA, the NPS monitors water sources at the Memorial, treats it to all required standards, and uses additional treatment systems in residential housing units to remove any remaining perchlorate from the drinking water consumed by year-round residents.
4.2	The EA does not include details on all the possible contaminants that could impact the environment, surface waters, and groundwater in the Memorial from the Preferred Alternative.	Chemical composition of fireworks was researched for the project and the typical compounds were disclosed in the EA. Likely impacts to water resources and organisms are discussed in the EA. See the response to concern statement 4.1 for additional detail.
4.3	The EA does not adequately address the potential adverse impacts to the environment, human health, and biological effects of fireworks debris and the chemicals used in fireworks under the Preferred Alternative.	All known environmental, human health, and biological effects of the proposed event were discussed in the document. Chemical composition of fireworks was researched for the project and the typical compounds were disclosed in the EA. Debris resulting from fireworks was discussed in the EA. Potential impacts to human health and the environment from compounds found in fireworks are addressed in the EA. Planned monitoring efforts will allow for early detection of any contaminants.
4.4	The assumption that expected contaminant levels resulting from the Preferred Alternative and associated adverse impacts would be the same as previous events is incorrect.	Contaminant levels correlate to the size and duration of an event. Under the Preferred Alternative, the size and duration of the fireworks display would be comparable to those previously conducted at the Memorial. In addition, because previously measured levels were the result of 10 years of fireworks events, contamination levels would not be expected to exceed levels measured previously for at least several years. NPS research has found that currently available commercial fireworks are similar in composition to what was used in the past; therefore, it is reasonable to assume similar impacts from events as described in the EA.

Concern Statement Number	Concern Statement	Response
4.5a	The EA should include the monitoring of thiocyanate, nitrates, and all other pollutants commonly associated with fireworks in the environmental contaminant monitoring protocol.	The NPS has developed a water quality and soil monitoring program, which will be implemented under an Interagency Agreement with the USGS. This monitoring program will evaluate levels of pollutants typically present in fireworks, including metals, nitrate, thiocyanate/cyanide, and perchlorate. Samples will be collected prior to and immediately following the fireworks display. Data collected through monitoring would be used to aid in decision making for future fireworks events at the Memorial. The park will develop any actionable criteria based on monitoring data, and the most recent regulatory standards.
4.5b	The EA should include a comprehensive environmental contaminant monitoring protocol that includes the monitoring of all the chemicals to be analyzed, the monitoring schedule, the criteria and the thresholds that will result in the cessation of future fireworks events, require the reassessment of impacts, or require additional drinking water treatment processes at the Memorial. This protocol should also include a list of pollution prevention control measures.	Comment is noted. See response to 4.5a above. The NPS is developing a monitoring program in partnership with USGS, and parameters to be analyzed include perchlorate, thiocyanate/cyanide, nitrate, and metals. These parameters may be adjusted based on the composition of fireworks materials used for the event. Monitoring frequency and locations will also be included in the monitoring program. Monitoring for specific pollutants is discussed in the relevant subsections of Section 3.4.2 of the EA. In addition, the EA identifies numerous pollution prevention measures. The measures evaluated include selection of launch sites, requirements on the size and type of fireworks, the duration of the fireworks event, analysis of minimum separation distance, requirements for the fireworks contractor to monitor the event for any unexploded shells and retrieve unexploded shells and debris, and creation of a Go/No-Go checklist for the event to proceed.
4.6	NPS should perform aerial deposition monitoring to estimate the aerial extent and magnitude of firework particulate deposition under the Preferred Alternative.	The NPS is developing a monitoring plan to evaluate the impacts of fireworks. This includes analysis of dry debris from deposition plates, which will provide data on particulate deposition of fireworks contaminants. Results of initial monitoring will be used to develop monitoring plans for future events. Additional details about dry debris monitoring are included in the response to concern statement 4.1.
4.7	The claim that the reverse osmosis systems in staff residences is effective at removing perchlorate from drinking water is incorrect.	The statement in the EA is correct. The reverse osmosis systems installed at the Memorial have been shown to successfully remove perchlorate from the drinking water consumed by year-round residents. After installation in 2013, the treated water was analyzed and found to contain <0.25 parts per billion (ppb) of perchlorate.

Concern Statement Number	Concern Statement	Response
	Safety and Event Operations	
5.1	The EA does not describe how the Memorial would respond to an emergency or assess the safety and security of visitors, Memorial staff, and emergency personnel under the Preferred Alternative.	The NPS, State of South Dakota, and local law enforcement and emergency response officials are developing a traffic and visitor management plan, which will include emergency egress procedures. There will be a Unified Command incident management team established prior to the event to ensure safety and security of visitors, Memorial staff and contractors, and emergency response personnel. Risks to visitors from fireworks themselves are very limited; event management will incorporate emergency egress considerations. The Go/No-Go checklist will also be used to review and confirm any safety or security concerns on the day of the event. The types of criteria included in the Go/No-Go checklist are expected to include: Public safety criteria, such as: adequate egress is available visitors are in safe locations adequate resources are available for emergency response, if needed Fire condition criteria, such as: fire preparedness level burning index fuels and moisture conditions vind and weather conditions Fireworks operator systems are functioning properly Additional Go/No-Go checklist criteria are not published for security purposes but will be established and followed to maintain the security of the event and safety of attendees.

Concern Statement Number	Concern Statement	Response
	The EA does not address how traffic and visitors would be managed during the fireworks event under the Preferred Alternative.	A discussion on traffic and visitor management was not included in the EA as it would have no bearing on the environmental analysis and no impacts on resources are expected. A typical summer weekend at the Memorial would have more visitor and vehicle traffic than is proposed for the event. Any vegetation trampling by visitors or vehicles would be negligible and impacts to vegetation have been dismissed. Prior to the event, a traffic and visitor management plan will be developed by the
		incident management team, including the State of South Dakota, NPS Memorial staff, and local law enforcement and emergency response personnel. The plan will detail vehicle and pedestrian flow prior to, during, and after the event.
		The traffic and visitor management plan is expected to cover the following operational aspects: • Zones where visitors can be present during the event • The NPS will use the fireworks contractor proposals and National Fire Protection Association code compliance to determine safe locations for visitors
		 The NPS will use capacity figures from the State Fire Marshall in determining appropriate numbers of people in specific locations The NPS and security partners will determine ticketing and security needs for each zone Parking and transportation options for visitors in each zone
		 The NPS will use existing transportation facilities and infrastructure to support parking operations Shuttle systems or other methods of increasing visitation may also be used
		 Vehicle and pedestrian traffic flow patterns and emergency transportation routes The NPS will assure that emergency vehicle traffic is available at all times The NPS will assure that pedestrian traffic is separated from
		vehicle traffic to the greatest extent possible

Concern Statement Number	Concern Statement	Response
5.3	The EA does not address potential issues surrounding the COVID-19 pandemic.	The COVID-19 pandemic has no bearing on the environmental analysis for this project and, as such, was not included in the EA. The NPS will evaluate and assess operations in accordance with guidance from the Centers for Disease Control and Prevention and state and local public health authorities.
5.4	The EA needs to include the specific monitoring protocol to be used by the fireworks contractor to observe the number of unexploded fireworks under the Preferred Alternative and ensure that subsequent searches for unexploded fireworks result in complete recovery and proper disposal.	The Memorial will require the fireworks operator to track ignition success and conduct sweeps for unexploded fireworks and remnant materials. As part of their contracting request for proposals, the State solicited proposals from fireworks contractors for methods to track and recover materials. Once a method is developed and approved by the NPS, it will then be carried out by the contractor on the day of and following the event. The precise details would not alter the likely impacts of the event, which are stated in the EA.
6.1	NEPA A full EIS is required for the Mount Rushmore Fireworks Event due to the risk of adverse environmental impacts to surface water, groundwater, and drinking water, and the corresponding risks to human and aquatic health.	The NPS determined that the Preferred Alternative was not an action that normally requires preparation of an EIS as identified in the agency's NEPA Handbook, and that the anticipated impacts of the event will not rise to a level of significance, as discussed in the Finding of No Significant Impact. For these reasons, the NPS believes an EA is the appropriate level of environmental analysis for this project.
6.2	The Memorandum of Agreement between the Department of the Interior and the State of South Dakota is in itself pre-decisional as it relates to the National Environmental Policy Act (NEPA).	NEPA does not prevent agencies from creating statements of intent before developing concrete proposals for agency action. In fact, NEPA is triggered when an agency advances a proposal. Pre-decision occurs when an agency takes action in advance of completing NEPA or makes a commitment of resources towards a particular alternative in a NEPA analysis. Initiating NEPA on a proposal, such as hosting a holiday fireworks event, is the appropriate course of action and is not-pre-decisional.
6.3	Locals have been given no voice in the conversation. Park officials have silenced local commentary by holding open house-style meetings instead of a town hall meeting, meaning that people show up confused by the format and their comments do not go on public record.	The NPS and State of South Dakota are working with local public officials and agencies to discuss possible event logistics, and several local entities serve on the Unified Command for the event. Three public meetings were held in the local area and comments were accepted on the EA. Over 40% of all comments received were from South Dakota residents. There is no requirement to hold public meetings for an environmental assessment and no format requirements when meetings are held. Open house style meetings are the most common format when NPS elects to host public meetings. The open house meetings provided the public with opportunities to interact one-on-one

Concern		
Statement	Concern Statement	Pasmansa
Number	Concern Statement	Response
Nullibei		with NPS staff and to submit comments on site if requested. All comments that
		are submitted during the formal comment period are entered into the project
		record, which is available to the public upon request.
	Noise / Percussive Impacts	record, which is available to the public upon request.
7.1	Noise and percussive impacts on humans, wildlife, and	Noise impacts on humans and wildlife could occur during implementation of the
7.1	the sculpture as a result of the Preferred Alternative	Preferred Alternative, but these impacts would be of short duration (15 to 30
	were not adequately addressed in the EA.	minutes), occurring only during the fireworks display or military flyover. People
	were not adequately addressed in the EA.	who choose to participate in the event can self-manage noise concerns
		individually and mitigate any impacts by using earplugs or similar equipment.
		Wildlife may be disturbed, but the short duration would lead to negligible
		impacts.
		· ·
		As stated in Appendix A.4, while historic structures are also susceptible to
		percussive effects, there has never been a known instance of effects on historic
		structures from fireworks. Based on this finding, the percussive impact of
		fireworks, and other noise-producing activities, such as a potential military
		overflight, are assumed to have no impact on the sculpture and other historic
		structures; therefore, this topic was dismissed from detailed analysis in the EA.
	Socioeconomics	
8.1	The socioeconomic impacts to concessioners and small	The commenter did not identify substantive flaws in the socioeconomics
	businesses in the surrounding area as well as visitors,	dismissal. This dismissal is discussed in Appendix A.1. The assessment in the
	under the Preferred Alternative were not accurately	dismissal concluded that the impacts on local communities, Memorial visitors, and
	addressed in the EA.	Memorial concessioners were not meaningful in the context of the regional
		economy. The Preferred Alternative is not expected to conflict with the six nearby
		community fireworks celebrations, and the development of a traffic and visitor
		management plan would mitigate the effects of visitor influx on the day of the
		event. The Memorial concessioner will be open during the event and has been
		engaged in potential impact discussions. In addition, local and regional businesses
		were invited to comment on the Preferred Alternative with the general public
		during the public comment period.
		As stated in the EA, the NDS entisinates most visitors will adopt to the sweether
		As stated in the EA, the NPS anticipates most visitors will adapt to the event by
		visiting the Memorial at a different time during their trip to the local area and, therefore the event could increase overall visitor spending at the Memorial in the
		· -
		days surrounding the event as well as increased spending in local communities on

Concern Statement Number	Concern Statement	Response
		the day of the event, leading to a cumulatively minor overall impact. Therefore, concessioner and local business impacts are expected to be minimal.
	Visitor Experience	
9.1	The EA did not accurately address impacts to visitors unable to visit the Memorial on July 3, 2020, under the Preferred Alternative.	As stated in the EA, the NPS anticipates most visitors will adapt to the event by visiting at a different time during their trip to the local area. The NPS would minimize potential adverse impacts on visitor experience by posting any closure in advance and messaging through multiple outlet.
		During implementation of the Preferred Alternative, some visitors may experience crowding and wait times during security screening and while entering and exiting the event, but these effects will be mitigated by the Memorial's efforts to raise awareness about the nature of the event. Overall, these impacts do not constitute a significant impact and the topic is appropriately dismissed from detailed analysis.
9.2	The EA should clearly state the expected visitation for the event, address how those visitors will be chosen to attend, and if by a ticketing system how that process will work and the cost to attend.	Topics such as ticketing methods and costs do not have environmental impacts that need to be addressed in an EA. Total visitation will be determined by the NPS and the State, based on the location of safe zones for visitors during the event and spatial capacity determinations from the State Fire Marshall. The State of South Dakota has developed a website for the event, where they will share information regarding ticketing, attendance, parking, and more details.
		Prior to the event, a traffic and visitor management plan will be developed by the incident management team, including the State of South Dakota, NPS Memorial staff, and local law enforcement and emergency response personnel. See the response to concern statement 5.1 for additional details.
	Wildfire	
10.1	The EA does not adequately describe the existing wildfire potential and fuel conditions.	The EA includes a description of existing conditions for a period over two decades, which adequately characterizes that there is a wildfire concern in the project area. The risk of wildfire will be assessed based on conditions in the days leading up to and the day of the event. The risk of a fire start is most closely related to weather and conditions on the day of the event.
		A Go/No-Go decision tree will be created by the incident management team to ensure conditions are appropriate for the event to proceed.

Composition		
Concern	Company Chalamant	Dannaman
Statement Number	Concern Statement	Response
Number		The material form wildfine start has not should dissift and having 2010 has d
		The potential for a wildfire start has not changed significantly since 2010, based
		on Inventory & Monitoring and Fire Effects plot data collected across 60 spatially
		balanced forest plots at the Memorial. Fuel conditions have changed in the Memorial since 2010 due to field work conducted on site, but the overall fuel load
		(tons of fuel per acre) has not decreased significantly. Fuel loading has both
		increased due to mountain pine beetle mortality and decreased due to natural
		recycling of fine and heavy fuels through the years. The litter and duff fuels have
		not changed significantly over the last 10-20 years. The likelihood of a wildfire
		starting depends more on weather conditions than on fuel loading.
		and and an individual services and the services are services and the services and the services are services and the services and the services are services are services are services and the services are se
		The likelihood of a crown fire is lower at the Memorial than in the past, while the
		likelihood of a surface fire may have increased somewhat. Crown fires are much
		more likely to result in wind-aided high-severity fire events; ground fires burn
		surface fuels but are less likely to result in major fires that spread rapidly. Surface
		fires are considered to be easier to fight and suppress than crown fires.
		Crown fire potential has decreased because MPB-killed trees have now lost their needles and are either standing snags or have fallen and are contributing to the fuel loading on the ground. NPS treatment activities have also decreased crown fire potential. In 2010 the NPS thinned and piled or chipped live trees and downed fuels up to 10" in diameter. These activities have essentially removed small trees in the Memorial, increased the crown base height, and lowered the tree density, decreasing active and passive crown fire potential. The mechanical thinning on the Memorial was designed to significantly reduce the smaller-diameter trees that could act as ladder fuels in the event of a wildfire. Current conditions, characterized by higher base crown height, help prevent surface fires from transitioning to crown fires. More recent work in 2019-2020 has included burning hundreds of piles of stacked fuels throughout the Memorial and preparation for prescribed burns in priority
10.2	The EA does not include an assessment of firefighter	The risks of wildfire will be assessed based on conditions present in the days
10.2	safety and does not adequately assess the potential	leading up to and on the day of the event. A Go/No-Go decision tree will be
	costs of a wildfire event under the Preferred	created by the incident management team to ensure conditions are appropriate
	Alternative.	
	Alternative.	for the event to proceed. The NPS and other federal, state, and local agencies

Concern Statement Number	Concern Statement	Response
		have run simulations for fires in the Black Elk Wilderness area in the past and have created a plan for fighting a fire in the area. The coordinating agencies meet each year to validate the plan. These simulations and other training exercises carried out by fire crews guides safety measures implemented during any emergency response situation. All fire activities will follow standard NPS and NWCG standards and policies, as outlined in the Interagency Standards for Fire and Fire Aviation Operations (the "Red Book").
		A discussion on the costs of a major wildfire event was not included in the EA as it would be speculative and would have no bearing on the environmental analysis. Resources will be made available through NPS, DOI, USFS, State of SD, Rapid City Fire, and other entities to support fire suppression on site. The EA adequately addresses the key components of the wildfire risk through the WFDSS model and assumptions.
10.3	The EA should include details regarding the Wildland Fire Decision Support System (WFDSS) model assumptions.	The EA includes summarized WFDSS model results in the impacts analysis and a reference for the model. The WFDSS model incorporates assumptions on many variables to simulate potential conditions on the day of the event, including historic and average weather conditions and potential fuel characteristics. The model results are summarized in the EA, per direction in the NPS NEPA Handbook Supplemental Guidance (2015) to use "incorporation by reference" techniques and minimize bulk in NEPA documents.
		WFDSS is designed to predict how a fire will burn (direction, speed, spread, intensity) once ignited, under a set of weather conditions (either forecast or climatological probabilities). It is not designed to assess wildfire risk, or the probability that a fire will start.
10.4	The EA does not describe the Preferred Alternative wildfire mitigations such as the Go/No-Go checklist or describe how the Memorial would assess wildfire risk prior to the Preferred Alternative.	A Go/No-Go decision tree will be created by the incident management team to ensure conditions are appropriate for the event to proceed and will be assessed during the days leading up to and on the day of the event. The NPS and other federal, state, and local agencies have developed simulations related to a wildfire incident in the Memorial and surrounding areas and will use this experience to guide development of the decision tree.
		Variables that are typically included in Go/No-Go decision trees for prescribed burn activities, and which may be considered for this event include: fine dead fuel

Concern Statement Number	Concern Statement	Response
		moisture percentages, probability of ignition, wind speed, predicted burning index (a measure of fire danger) for the event and following days, regional fire activity, and resource availability.
		 The types of criteria included in the Go/No-Go checklist are expected to include: Public safety, such as adequate egress is available; visitors are in safe locations; adequate resources are available for emergency response Fire condition, such as those mentioned above and fire preparedness level; burning index; fuels and moisture conditions; wind and weather conditions Fireworks operator systems are functioning properly
		Other Go/No-Go criteria will be developed and carried through for the event.
	Wildlife	
11.1	The EA does not adequately consider impacts to wildlife from the Preferred Alternative, including threatened and endangered species.	The EA does assess impacts to wildlife from implementation of the Preferred Alternative, and the NPS consulted with the USFWS (2019) regarding the threatened northern long eared bat, which is the only ESA-listed species known to occur in the Memorial. The NPS received a letter from the USFWS on December 4, 2019 indicating that the proposed fireworks event is consistent with activities analyzed in the northern long-eared bat Programmatic Biological Opinion (USFWS 2016, 2019) and that the NPS has no additional Section 7(a)(2) consultation responsibility with respect to the northern long-eared bat. As described in Appendix A of the EA, three additional ESA-protected wildlife species could occur at the Memorial. Suitable habitat for the red knot and least tern does not occur at the Memorial. The only known wild population of whooping cranes nests in Canada and winters in Texas. Their migration occurs in the fall several months after the proposed fireworks event, and their migration route is not known to include the Memorial. A comprehensive bird survey of the Memorial (Panjabi 2006) and subsequent bird monitoring by Bird Conservancy of the Rockies (NPS 2016) also did not find any evidence of these three species. The NPS has determined that the selected alternative would therefore have no effect on these additional species.
		See also responses to concern statements 7.1 and 11.2.

Concern Statement Number	Concern Statement	Response
11.2	While the EA cites the northern long-eared bat Programmatic Biological Opinion (USFWS 2016, 2019) and states that any take is not prohibited under the 4(d) rule, a recent court ruling overturned the decision by USFWS to protect northern long-eared bats as threatened rather than endangered under the ESA. While the threatened listing will stay in place while the USFWS reconsiders its decision, this ruling calls into question the status of the northern long-eared bat and applicability of the 4(d) rule (See Ctr. for Biological Diversity v. Everson, No. 15-CV-477, 2020 WL 437289 (D.D.C. Jan. 28, 2020)).	The threatened designation and 4(d) rule will remain in place until a new rule is published, so currently, the status of the bat is still threatened, and the 4(d) rule applies.
11.3	The EA incorrectly states that Leedy's roseroot is not known to occur at the Memorial.	The NPS further researched the occurrence of Leedy's roseroot, which is listed as threatened under the Endangered Species Act, and found that there is a recently-discovered isolated occurrence in the Black Hills, near Black Elk Peak (formerly Harney Peak). NPS mistakenly referenced older information when preparing the EA, which indicated that Leedy's roseroot occurred only in Minnesota and New York. Leedy's roseroot has not been found at the Memorial during general surveys, annual vegetation plot monitoring, in the targeted floristic inventory of Lafferty Gulch and Starling Basin, or in the 2004/2005 Comprehensive Vascular Plant Inventory of the entire Memorial. Information on Leedy's roseroot will be included in an errata, though no impacts to vegetation are expected as part of the event. The NPS has determined that the event would have no effect on Leedy's roseroot.

Appendix C

APPENDIX C: ERRATA

As a result of public comments, no substantive changes were made to the EA. The NPS is providing the following information as clarification to material presented in the EA.

- The EA correctly conveyed the event's potential to impact bat species, including threatened and endangered species, but some readers believed the EA implied that bats would be hibernating at the time of the event. The event would occur in July, outside of the hibernation period, and bats would either be roosting or in flight during the event. Prohibited activities under the northern long eared bat 4(d) rule include: 1) removal of trees within 150 feet of a known, occupied maternity roost tree from June 1 to July 31, 2) removal of trees within ¼ mile of a known hibernaculum at any time of the year, and 3) activities that would cause take within a known hibernaculum. The references to tree removal and hibernating bats in the EA were intended to show that the proposed alternative would not include tree removal or affect hibernating bats (due to the timing of the event) and would therefore not represent prohibited or incidental take under the 4(d) rule.
 - Page 53 of the EA is revised, from "The bats are sensitive to acoustics, but are likely to be in roosts and remain sheltered during the event. Under the preferred alternative, no tree removal is planned during preparation of launch sites or during the proposed event, and hibernating bats would not be affected.", to: "The bats are sensitive to acoustics, and are likely to either be in roosts and remain sheltered during the event, or be in flight, and could relocate to an area away from auditory disturbances. Under the preferred alternative, no activities that would represent prohibited take under the 4(d) rule would occur, including removal of trees or disturbance of hibernating bats. The proposed event would occur in July, outside of the hibernation period, and no tree removal is proposed."
- The EA stated that Leedy's roseroot was not known to occur in the Memorial. That statement is correct, but there is one known isolated occurrence of Leedy's roseroot elsewhere in the Black Hills. The plant has not been found at the Memorial during general surveys cited in the EA, annual vegetation plot monitoring, in the targeted floristic inventory of Lafferty Gulch and Starling Basin, or in the 2004/2005 comprehensive vascular plant inventory of the entire Memorial. If Leedy's roseroot is present and has not yet been discovered in the Memorial, no impacts to the plant would be expected as a result of the event. Impacts on vegetation as a whole were determined to be negligible, and were dismissed from detailed analysis in the EA. The NPS has determined that the event would have no effect on Leedy's roseroot.
 - Page 53 of the EA is revised, from: "Leedy's roseroot also is not known to occur at the Memorial (NPS 2002; Marriott and Mayer 2005) and is found only in Minnesota and New York.", to: "Leedy's roseroot is not known to occur at the Memorial (NPS 2002; Marriott and Mayer 2005), despite one isolated occurrence elsewhere in the Black Hills."

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF SOUTH DAKOTA CENTRAL DIVISION

SOUTH DAKOTA,	
Plaintiff,	
v. DEB HAALAND, in her official capacity as United States Secretary of the Interior, et al.,	Case No.
Defendants.	

DECLARATION OF KENNEDY NOEM

- 1. My name is Kennedy Noem. I am over the age of eighteen and under no mental disability or impairment. I have personal knowledge of the following facts and, if called as a witness, would competently testify to them.
- 2. I am a former policy analyst and federal liaison for the State of South Dakota. In that role, I helped manage the State's effort to win federal approval for the 2020 Independence Day fireworks celebration at Mount Rushmore.
- 3. My former colleagues and I worked closely with Memorial employees and the U.S. Department of the Interior ("DOI"), to ensure

that the 2020 Independence Day fireworks celebration provided an unforgettable experience for spectators in a safe and responsible manner. Communications about restoring the fireworks celebration to Mount Rushmore between DOI and the State began in early 2019.

- From the outset, our first priority was to ensure that the event 4. could be held with proper consideration for the safety of spectators, tribal cultural sites, and the environment. That meant we agreed early on to limit attendance so as to ensure the safety of the spectators. Also, our team held multiple community meetings and public hearings leading up the event, and we invited tribal leaders to provide their perspectives. We also engaged tribal leaders in private discussions that included the National Park Service's ("NPS") regional Office of Tribal Relations/Indian Affairs, to make sure that we understood and addressed any concerns they might have.
- 5. We exhaustively identified, catalogued, and measured potential risks and possible outcomes associated with the event. We then employed various control measures to eliminate every risk that we could, and to mitigate any risk that we could not completely eliminate.

- 6. For example, we implemented an incident management team that complied with every guideline outlined by Ready.gov. We also established a round-the-clock emergency operations center at the event site for two weeks—one week leading up to the event and one week after it occurred. All stakeholders and decisionmakers were provided with an emergency response checklist and manual to follow in the unlikely event of an emergency.
- 7. We also created a "Go/No-Go Checklist" that listed eleven separate safety conditions that had to be independently satisfied before the fireworks event could begin. All of the conditions on the checklist were evaluated within one hour of the event's scheduled start time. If any conditions were at unacceptable levels, the fireworks show would have been postponed.
- 8. Conditions on the Go/No-Go Checklist included whether the Fire Danger Rating was at a level of "concern," whether the wind speed was below the "preferred" level of "less than 10mph for a 10-minute average," and whether the National Weather Service had "predicted red flag warnings" for the day of the event or the following day. Pursuant to the protocol that we coordinated with DOI, we presented our event-day

evaluations to the Secretary of the Interior for approval. The Secretary retained final approval authority for the fireworks show throughout the entire planning process.

- 9. Our efforts to ensure that the event posed no danger to the environment were no less thorough. We coordinated with DOI on all required environmental rules and complied with every item on the National Environmental Policy Act (NEPA) checklist.
- 10. We also coordinated with the National Park Service ("NPS"), which conducted an in-depth environmental assessment and published a Finding of No Significant Impact (FONSI).

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11. Finally, even though the coronavirus is least likely to spread through outdoor activities, we took steps to minimize any risks to public health. After the event occurred, we coordinated with relevant agencies to conduct contact tracing to determine whether any COVID-19 cases in the State—or anywhere else in the country—could be traced to the fireworks show. After several weeks, contact tracers did not identify a single COVID-19 case that was linked to the event at the Memorial.

Pursuant to 28 U.S.C. §1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on April 28, 2021.

Kennedy Noem

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF SOUTH DAKOTA CENTRAL DIVISION

SOUTH DAKOTA,	
Plaintiff,	
v. DEB HAALAND, in her official capacity as United States Secretary of the Interior, et al.,	Case No
Defendants.	

DECLARATION OF JAMES D. HAGEN

- 1. My name is James D. Hagen. I am over the age of eighteen and under no mental disability or impairment. I have personal knowledge of the following facts and, if called as a witness, would competently testify to them.
- 2. I am Secretary of Tourism for the State of South Dakota. In that role, my team and I work to increase domestic and international travel to our state.
- 3. The annual Independence Day fireworks celebrations at Mount Rushmore National Memorial (the "Memorial") are an economic boon for the State. They provide tens of millions of dollars in advertising

value, increase tourism to the State both during the Independence Day holiday and throughout the rest of the year, and generate significant income for the State's small businesses and tax revenue for state and local governments.

- 4. The July 3, 2020 celebration, for example, carried an advertising value of at least \$22 million, according to the most conservative estimates.
- 5. Google searches for "Mount Rushmore" during and after the event reached an all-time high—1,250% higher than the previous record—and web traffic to the State's tourism website increased by 872% compared to the previous year.
- 6. Thousands of visitors from across the country travel to the State for the fireworks celebration. Last year, 7,500 citizens from around the nation visited the Memorial for our Independence Day celebration. Those visitors spent more than \$2 million over the course of the holiday weekend, which generated substantial tax revenue for the State and for various municipalities within it.
- 7. With millions of Americans receiving the COVID-19 vaccine every day and the COVID-19 pandemic rapidly falling in the rearview

mirror, South Dakota expects that the number of visitors to the Memorial will increase if the fireworks show occurs this year.

- 8. Moreover, those numbers are just from the celebration itself. The event—which is watched on television by millions of people both in the United States and across the world—inspires thousands of other visitors to travel to the State throughout the year, providing additional income for South Dakota businesses.
- 9. South Dakota knows that many of its visitors last year would not have otherwise visited the State if not for the publicity attracted by the fireworks show. Though South Dakota is unable to measure exactly how many visitors were inspired to visit as a result of the fireworks show.
- 10. For all of the seasons, the 2020 event was an economic lifeline for the State's tourism industry, which employs nearly 50,000 South Dakotans that were battered by the effects of the COVID-19 pandemic. The 2021 event would likewise provide critical income during a crucial time for the State's economy.
- 11. Moreover, the fireworks celebration also has intangible benefits for the State. It burnishes the State's image and reinforces residents' sense of pride in their home state. Those factors are even more

important this year, in light of the hardship imposed by the pandemic over the last twelve months.

- 12. Finally, because tourism is such a big part of South Dakota's economy, the State has taken many steps to ensure that visitors understand that visiting the state is safe during the COVID-19 pandemic. For example, since the onset of the pandemic, the Department of Tourism has included a 'safe travel' message in all of its television, print and digital marketing; maintained a COVID-19 website to provide visitors with the latest news and information about the virus; developed a COVID-19 resource page for the South Dakota tourism industry, which included the latest guidelines and recommendations from the CDC and the South Dakota Department of Health; and, for the past 13 months, shared monthly COVID-19 email updates with thousands of members of the South Dakota tourism industry.
- 13. Because the Memorial and the fireworks show are such a big part of South Dakota's image, labeling the Memorial and the event unsafe due to COVID-19 will significantly undermine those efforts and have ripple effects throughout the tourism industry.

- 14. In summary, if the permit denial stands and this year's fireworks celebration is canceled, the State and its small businesses will be deprived of critical advertising, publicity, and tourism revenue.
- 15. In order to successfully execute this year's fireworks celebration, the State needs to know we have the legal authority to move forward by June 2, 2021.

Pursuant to 28 U.S.C. §1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on April 29, 2021.

ames D. Hagen

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF SOUTH DAKOTA CENTRAL DIVISION

GOVERNOR KRISTI NOEM, in her
official capacity as the Governor of
South Dakota, et al.,

Plaintiffs,

Case No. 3:21-cv-03009

v.

DEB HAALAND, in her official capacity as United States Secretary of the Interior, et al.,

Defendants.

[PROPOSED] ORDER

Before the court in the above styled and numbered action is Plaintiffs' motion for preliminary injunction, filed April 30, 2021. Having considered the motion, case file, and applicable law,

IT IS ORDERED that Plaintiff's motion is **GRANTED**, and Defendants' denial of South Dakota's permit request is **VACATED**.

IT IS FURTHER ORDERED that Defendants must approve Plaintiffs' request for a permit to hold a fireworks celebration at Mount Rushmore National Memorial on July 3, July 4, or July 5, 2021.

	SIGNED this	day of	, 20
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/s/
Hon. Roberto Lange
Chief District Judge