

Does Environmental Review Worsen the Wildfire Crisis?

How environmental analysis delays fuel treatment projects

by Eric Edwards and Sara Sutherland



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Wildfires are burning record numbers of acres in the western United States each year. More than 10 million acres burned nationwide in three of the past seven years, most of them in the West. In California, nine of the 20 largest wildfires in the state's history have burned in the past two years. Changing patterns of temperature and precipitation, coupled with growing populations near fire-prone landscapes, make wildfires increasingly destructive and costly. The arid climate and vast federal estate make western states especially prone to large wildfires.

More than half of the land in the 11 contiguous western states is federally owned and managed. While multiple federal agencies must deal with wildfires, the largest burden falls on the U.S. Forest Service. Of the 640 million acres of federal land in the United States, the Forest Service manages 193 million.¹ In 2020, 7.1 million acres of federal land burned in wildfires, including 4.8 million acres of Forest Service land.²

Wildland fire management is the top budget item for the Forest Service, with suppression costs reaching \$1.76 billion in 2020.³ Increasingly, legislators, agency officials, and forest science researchers are concluding that more proactive fire mitigation activities are needed to lessen the severity and costs of western wildfires. For instance, a new initiative by the Biden

Highlights

- ▶ Fuel treatment projects designed to reduce wildfire risks, including mechanical treatments and prescribed burns, often take longer to implement than other U.S. Forest Service projects because they are more likely to require rigorous environmental review or be litigated.
- ▶ Once the Forest Service initiates the environmental review process, it takes an average of 3.6 years to begin a mechanical treatment and 4.7 years to begin a prescribed burn.
- ▶ For projects that require environmental impact statements—the most rigorous form of review—the time from initiation to implementation averages 5.3 years for mechanical treatments and 7.2 years for prescribed burns.
- ▶ Given the time it takes to conduct environmental reviews and implement fuel treatments, it is unlikely that the Forest Service will be able to achieve its goal of treating an additional 20 million acres over the next 10 years.

administration aims to carry out fuel treatments on an additional 50 million acres over the next 10 years to reduce extreme wildfire risks, including an additional 20 million acres of national forest lands.⁴

To preemptively reduce the impacts of large and costly wildfires, forest managers use methods that remove fuels—brush, trees, and other flammable materials—to lessen the intensity of burns. The two most common fuel treatments are prescribed burns and mechanical treatments.⁵ The effectiveness of these measures was demonstrated in 2021 during Oregon’s Bootleg Fire, which ultimately burned 400,000 acres. Firefighters reported that where both treatments had been applied, fire intensity was reduced, the crowns of trees were left intact, and the blaze became a more manageable ground fire. Such low-intensity fires, which frequently burned in the West before aggressive fire suppression policies were adopted, are ecologically important. Managed forests are more resilient to drought, high temperatures, fire, and insects.⁶

While these approaches have proven effective at reducing the likelihood and severity of wildfire, the Forest Service has not been able to undertake mitigation activities at the scale needed to address the threat in a meaningful way. Indeed, reports from the Bootleg Fire suggested that an area where scheduled prescribed burns had been delayed suffered more damage than areas where treatments had been completed.⁷ As of 2018, 80 million acres of national forest land needed restoration to reduce susceptibility to wildfire, disease, and insects, according to Forest Service officials,⁸ yet the agency has treated just 2 million acres annually in recent decades.⁹

Forest Service estimates suggest that an investment of \$5-\$6 billion over 10 years would be required to perform fuel treatments on all of the highest-priority areas. Regulatory processes and litigation, however, pose significant barriers to achieving these mitigation goals.¹⁰ One survey of forest managers suggested that environmental policies are viewed as an important hurdle to prescribed burns, a key method of reducing fuels.¹¹ Regulatory processes that increase the time between identifying and

implementing treatments exacerbate wildfire risk and limit the flexibility of managers to use new information to quickly address emerging risk. In 2021, for example, several proposed treatment areas burned in large wildfires while facing delays from environmental review and litigation.¹²

This policy brief examines the amount of time it takes the U.S. Forest Service to implement fuel treatment projects while navigating the requirements of the National Environmental Policy Act (NEPA). NEPA is a procedural law that requires federal agencies to assess the environmental impacts of proposed actions. Under NEPA, proposed projects are treated in one of three ways: Projects determined to have no significant impacts receive categorical exclusion (CE) from more stringent review. For projects with uncertain impacts, agencies must conduct an environmental assessment (EA). For projects deemed to cause significant environmental impacts, federal agencies must complete an environmental impact statement (EIS), the most stringent type of review under the law. During an EIS, agencies gather information about expected project impacts to the quality of the human environment, solicit public comments, and respond to all substantive comments.¹³ While only some fuel-reduction activities require an EIS, the NEPA process can be time-consuming and resource-intensive for all projects.

The NEPA process increases the time it takes to implement fuel treatments through direct and indirect channels. Direct effects come from administrative and processing time associated with preparing and approving an analysis, plus potential objections and litigation of the agency’s analysis. Indirect delays occur when agency officials proactively attempt to ward off future controversy, objections, and litigation through additional processing time and analysis.¹⁴

Advocacy groups, firms, and the general public can file objections to NEPA decisions to the Forest Service and, once that avenue is exhausted, can also file lawsuits to overturn decisions or compel additional analysis. Objecting is a pre-decision process designed to avoid future litigation by allowing the agency to resolve concerns over a project before a

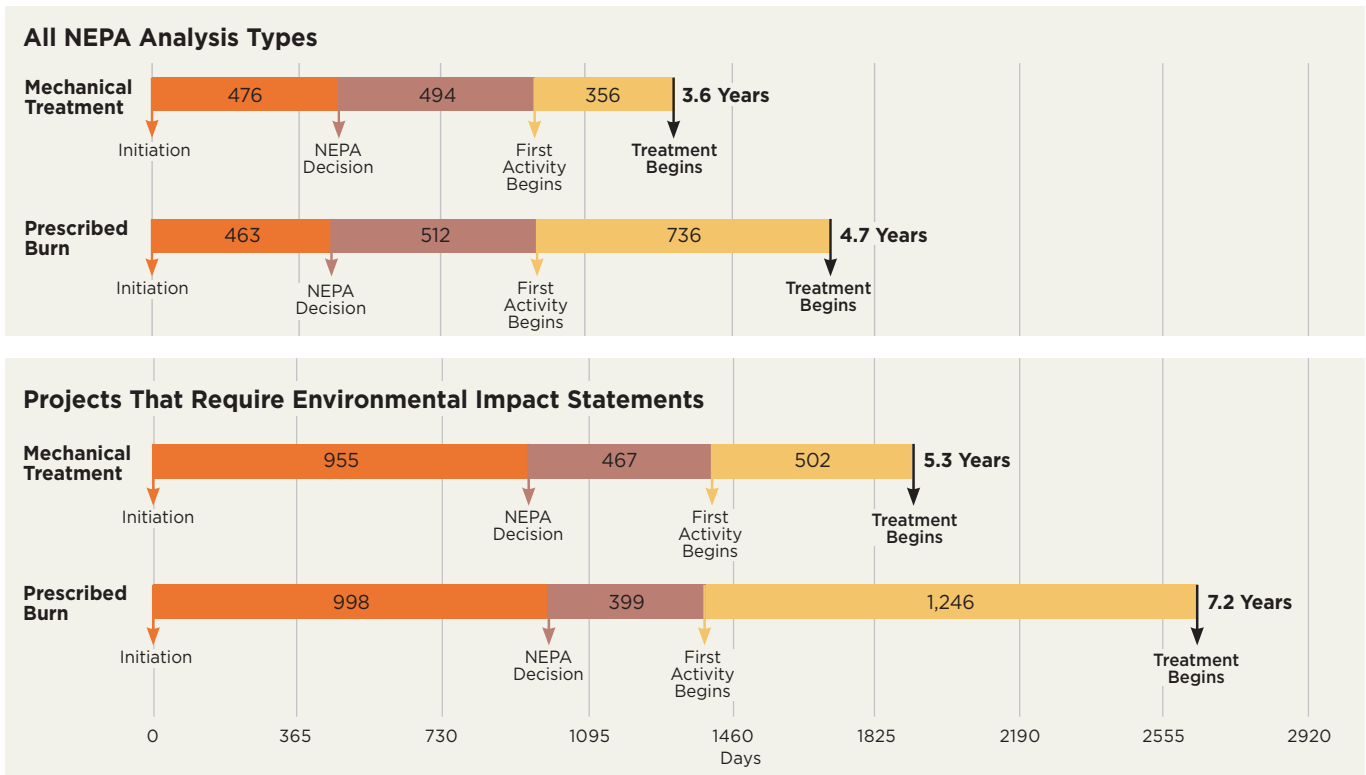
NEPA decision has been made.¹⁵ Although most projects are not litigated, the depth of analysis and time spent on the NEPA process is commonly based on the threat of litigation, as well as the level of public and political interest and defensibility in court.¹⁶

This brief compiles new NEPA data to examine the duration of administrative review for Forest Service wildfire mitigation activities. It documents how long it takes to implement fuel treatment projects and then separates out the portion that involves NEPA review from other factors, including litigation.



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Figure 1
Average Time to Begin U.S. Forest Service Fuel Treatments



The timeline for a U.S. Forest Service fuel treatment project includes the following steps: initiation of the NEPA environmental review process, NEPA decision, first on-the-ground activity (often an inventory of fuels or similar preparation step) begins, and, finally, treatment begins. Once the Forest Service initiates the environmental review process, it takes an average of 3.6 years (1,325 days) to begin a mechanical treatment. Prescribed burns average 4.7 years (1,711 days) from initiation to beginning of treatment. For both types of treatment, projects that require rigorous review in the form of an environmental impact statement take significantly longer to begin on average: 5.3 years (1,924 days) in the case of mechanical treatments and 7.2 years (2,643 days) in the case of prescribed burns.

Reducing Hazardous Fuels

Fuel levels are the most influential factor, on average, driving high-severity fire in the western United States.¹⁷ Mechanical treatments and prescribed burns are the primary management tools for proactively reducing the severity of wildfires. Mechanical treatments use machinery to remove and rearrange vegetation in forests with the intent of reducing ladder and canopy fuels.¹⁸ Prescribed burns are planned fires that aim to achieve specific management objectives such as reducing fuel loads or improving habitat.

Fuel treatment objectives and effectiveness differ between the wildland-urban interface and wilderness areas.¹⁹ Mechanical treatments are often used in the wildland-urban interface because they are more precise, create lower emissions, do not entail the same risks of fire escape, and have the potential to create wood products or biomass.²⁰ Mechanical treatments may also be preferred to prescribed burns in dense forests, areas with limited resources to implement burns, and areas with nearby markets for small-diameter trees.

While less precise and more risky, prescribed burning offers a lower-cost and less labor-intensive method of reducing fuels by applying fire in a controlled manner. By burning low-level fuels such as dead trees and brush—often called ladder fuels because they carry flames from the ground to the tree canopy, where fires are more destructive and spread faster—prescribed burns disrupt the growth and limit the intensity of future wildfires.²¹ Prescribed burns can only be implemented under a narrow window of specific weather conditions, occurring outside of the most dangerous fire seasons, and they require expert planning personnel. Because prescribed fires emit air pollution, various permits and permissions are typically required prior to conducting them.²²

One Forest Service meta-analysis of research on fuel treatments and subsequent fire severity found a reduction in canopy scorch from 100 percent to 40 percent and a significant reduction in scorch height and flame length.²³ Treatments were found to be most

effective in conifer forests that had previously burned and in grasslands and least effective when only mechanical rearrangement had been undertaken. The researchers found no difference in effectiveness between the southern and northern latitudes of the western United States. In the face of changing climate, proactive forest management via mechanical treatments, prescribed burns, or both in concert is well-justified in the scientific literature.²⁴

Although mechanical treatments and prescribed burns are important tools to lessen the severity of wildfires, both treatment types come with risk. Mechanical thinning, for example, may reduce land productivity due to soil compaction and other machine-related land damage, including erosion. The major short-term risk of prescribed burns is escaped fires, but air quality concerns and potential damage to property also constrain their use.²⁵ Activities that reduce hazardous fuels modify the natural landscape and are subject to NEPA when they meet the definition of a “major Federal action.”²⁶

The NEPA Process

The National Environmental Policy Act is a procedural statute that ensures agencies consider significant environmental consequences of their proposed actions and inform the public about their decision making. When agencies anticipate that an action will have significant environmental impacts, NEPA requires them to prepare a detailed statement on:

- (1) the environmental impact of the proposed action;
- (2) any adverse effects that cannot be avoided;
- (3) alternatives to the proposed action;
- (4) the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity; and
- (5) any irreversible and irretrievable commitments of resources that would be involved in the proposed action.²⁷

As a procedural law, NEPA requires that any proposed action be in compliance with other environmental laws such as the Endangered Species

Act, Clean Water Act, and Clean Air Act. The Forest Service organizes its environmental review process around NEPA compliance, and every on-the-ground action must be linked to an approved NEPA authorization. The agency's process differs depending on the degree of potential environmental impacts of a project, but all projects undergo proposal development and scoping, which determine the analysis category that applies to a proposed action.²⁸

There are three potential analysis categories: categorical exclusion (CE), environmental assessment (EA), and environmental impact statement (EIS). CEs require the least-intensive analysis, typically because the type of project has previously been determined to have no significant environmental impact or has been statutorily excluded from NEPA review. If it is determined that the proposed project will receive a CE designation, it exits the NEPA system and is exempt from further analysis. An EA is chosen if it is uncertain “whether the proposed action may have a significant effect on the environment.”²⁹ The purpose of an EA is to provide sufficient evidence and analysis to justify a finding of “no significant impact,” or, when this is not the case, to facilitate the transition to an EIS. The EA process involves scoping, analysis, a period for formal public comment, and a “concise” public document, but it does not require as much public comment or analysis as an EIS.³⁰ The EIS is a detailed written document providing a full discussion of significant environmental impacts of proposed actions and potential alternatives to avoid or mitigate the damages. The process of preparing an EIS entails research and analysis, formal public comments, and preparation of several drafts as well as a final document. The final statement includes a full description of the entire analysis, public comments, and responses to comments.

Administering the NEPA process is costly and time-consuming. The Forest Service incurs direct costs to perform analyses, administer public comment periods, respond to comments, and respond to objections and litigation. When projects are delayed and forests are left untreated, indirect costs arise as well, such as the foregone value from

potential timber sales or increased wildfire suppression costs incurred due to continued fire risks. There is little information, however, on the costs and benefits of completing a NEPA analysis. Most agencies do not directly track the costs associated with the process. The Department of Energy is an exception; its median per project direct cost for an EIS contractor in 2013 was \$2.9 million.³¹ The process at the Forest Service may be even more costly: From 2008 to 2012, the agency had the lowest share of projects classified as CEs—those that are exempt from stringent environmental analysis—at 78 percent. (Over the same period, the Department of Energy share was 95 percent.) In 2020, the Forest Service published 30 EISs in the federal register, which was more than all other agencies except the Bureau of Land Management and U.S. Army Corps of Engineers.³²

NEPA itself does not provide any standard by which environmental impacts are weighed nor any criteria for whether a project can proceed. Advocates of the review process argue it “reduces overall project costs by identifying and avoiding problems that may occur in later stages of project development.”³³ NEPA also serves as a tool that allows citizens to participate in federal agencies’ environmental reviews. The public may submit written comments on proposed projects, challenge a proposed project or final decision by filing an internal objection, or bring litigation. The extent of public participation depends on the analysis category.

Stakeholders use the federal court system to resolve major concerns over Forest Service decisions, and the number of lawsuits has increased over time.³⁴ Between 2001 and 2008, the Forest Service was litigated more than any other federal agency under NEPA.³⁵ Litigation occurred most often in the U.S. Court of Appeals for the Ninth Circuit (65.8 percent of all cases), whose jurisdiction covers eight western states, Hawaii, and Alaska, which includes more than half of all national forest acreage. Overall, the agency won 53.8 percent of its NEPA cases.³⁶ Litigation is costly due to legal fees, analytical and administrative costs, loss of timber sale revenue, and consultation

costs.³⁷ According to a 2011 Congressional Research Service report, “a project sponsor may be mindful of previous judicial interpretation when preparing NEPA documentation in an attempt to prepare a ‘litigation-proof’ EIS.”³⁸ Such behavior may also be costly in that it increases the time and money spent on all analyses, whether ultimately litigated or not.

Analysis

To analyze the NEPA review process for forest restoration projects, we use a large dataset on NEPA decisions maintained by the Forest Service.³⁹ (For more background on our analysis, access the Appendix at: perc.org/nepa-fire-app). Because the NEPA dataset does not document on-the-ground activities conducted after reviews are completed, we match the NEPA data with another dataset to look more granularly at fuel treatment projects. Our novel NEPA-Activity Dataset provides the most complete picture of the administrative process from the time a project is proposed through the entirety of its activities conducted to date. We first calculate a measure of how long the NEPA process takes for a broadly defined set of forest restoration projects. We then use the NEPA-Activity Dataset to look at the subset of these projects that have implemented fuel treatments, either mechanical treatments or prescribed burns. We conclude with an analysis of the effect of litigation on the NEPA duration measure.

NEPA Processing Times

We measure the time it takes for a project to complete the Forest Service NEPA process as the number of days from its entry into the project management system (also called project initiation) until the date a NEPA decision is signed. For the period 2006 to 2017, the average NEPA process across all three categories of analysis took more than nine months (288 days). More than 81 percent of NEPA approvals are for projects that receive a CE designation, which although exempt from more stringent environmental analysis still take about seven months to complete on average (208 days). For projects receiving an EA designation, the average NEPA duration is 19 months (572 days), and EIS projects take more than three years on average (1,194 days). Table 1 shows the number of projects and duration statistics by analysis category.

Of the 30,111 NEPA decisions in the dataset, we identify 7,385 that are related to forest restoration.⁴⁰ These activities tend to fall into the more rigorous analysis categories. While less than 25 percent of all NEPA approvals fit into the forest restoration category, 45 percent of all EA decisions and almost 49 percent of all EIS decisions were related to forest restoration activities. Because more intensive analysis categories have longer NEPA process durations, average times for the subset of projects related to forest restoration across all analysis

Table 1

U.S. Forest Service NEPA Projects

Analysis Type	Observations		Percent	Average NEPA Duration (days)	
	All	Forest Restoration	Forest Restoration	All	Forest Restoration
Categorical Exclusion	24,509	4,836	19.7%	208	220
Environmental Assessment	5,004	2,258	45.1%	572	590
Environmental Impact Statement	598	291	48.7%	1,194	1,018
Total	30,111	7,385	24.5%	288	366

categories take a full year, about 80 days more than the overall average.

We perform a statistical analysis to estimate the effect of different NEPA designations on project duration.⁴¹ Relative to a CE, an EA designation adds more than nine months (284 days) to the process, and an EIS designation adds nearly two years (715 days).⁴² These results remain consistent even when including different controls and are similar when the analysis is limited exclusively to forest restoration projects. The results suggest that the analysis category of a proposed action is the key determinant of its processing time. The odds that a project with an EA or EIS designation will be completed quickly are low. While almost 85 percent of Forest Service CE projects are approved within one year, this is true for only 42 percent of EAs and only about 20 percent of EISs.⁴³ Because forest restoration projects are more likely, on average, to require an EA or EIS, they are also less likely to be completed quickly.

Fuel Treatments

The most important metric for understanding the Forest Service’s ability to implement fuel treatments is how long it takes before the agency can begin performing an action in the forest. Our NEPA-Activity Dataset provides the granular activity data to address the role of NEPA in the overall time from project initiation to on-the-ground

activity.⁴⁴ For mechanical treatments and prescribed burns, the first activity is any activity associated with a project that ultimately includes fuel treatment. The first activity is not necessarily the fuel treatment itself because other activities, such as a fuel inventory or construction of a firebreak, might be undertaken first.

The data reveal that mechanical treatments and prescribed burns are more likely to require more intensive NEPA analysis than the average project, as shown in Table 2. While 5.2 percent of all Forest Service NEPA projects require an EIS, the share is 7.7 percent for mechanical treatments and 6.5 percent for prescribed burns.

The first activity undertaken on the average agency CE project occurs 2.5 years (909 days) after it is initiated; this time increases to 3.4 years (1,242 days) for an EA and 4.9 years (1,790) days for an EIS. For CE analyses, the NEPA duration represents only about 25 percent of the total time from project proposal to first activity. The proportion of time spent on the NEPA process increases to about 50 percent for EA analysis and 60 percent for an EIS.

We can further examine the timeline from project initiation to the actual implementation of a mechanical treatment or prescribed burn. As mentioned above, the first activity conducted on many NEPA-approved mitigation projects is not a fuel treatment because both mechanical removal of

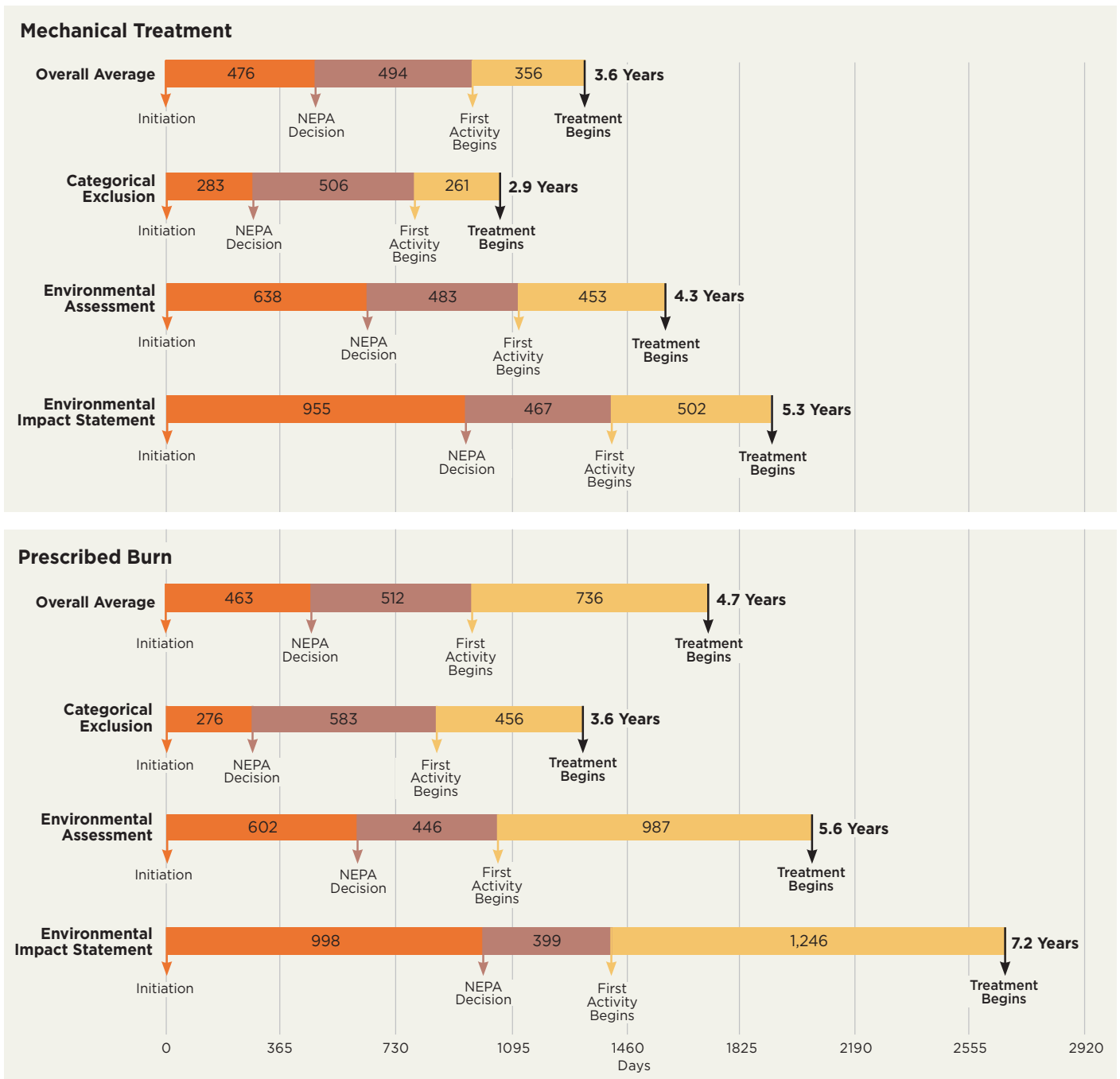
Table 2

Share of Projects by NEPA Analysis Type

Analysis Type	All Projects	Mechanical Treatments	Prescribed Burns
Categorical Exclusion	59.5%	52.5%	50.4%
Environmental Assessment	35.3%	39.8%	43.0%
Environmental Impact Statement	5.2%	7.7%	6.5%

Figure 2

Average Time to Begin Fuel Treatments by NEPA Analysis Type



Across all mechanical treatment projects, it takes an average of 3.6 years (1,325 days) to move from project initiation to start of treatment. For all prescribed burn projects, the corresponding time averages 4.7 years (1,711 days). For both types of project, it takes longer to begin the treatment as the level of environmental analysis becomes more rigorous. Similarly, the average time to complete NEPA review, displayed as the orange interval between Initiation and NEPA Decision, noticeably increases as the rigor of analysis increases.

fuel and prescribed fire require extensive planning and assessment, which must occur before implementation. To get a better idea of the time from project initiation to first mitigation treatment, we review project data on three periods: initiation to decision, decision to first activity, and first activity to first fuel treatment, as shown in Figure 2.⁴⁵ We find that across all analysis types, the average time from initiation to treatment for a mechanical treatment is 3.6 years (1,325 days) and 4.7 years (1,711 days) for the average prescribed burn.

The duration between NEPA initiation and first fuel treatment increases with the rigorousness of analysis type. From the date it is initiated, the average mechanical project designated as a CE takes nearly three years (1,050 days) before implementing its first treatment, 4.3 years (1,574 days) for EAs, and more than five years (1,924 days) for an EIS. For a prescribed burn, the average time to implementation of the burn is 3.6 years (1,315 days) for a CE designation, 5.6 years (2,035 days) for an EA, and 7.2 years (2,643 days) for an EIS.

Figure 2 also displays which segments of the process cause the increase in total duration to implementation as analysis rigor increases. NEPA processing time increases by almost 700 days (nearly two years) from CE to EIS for both types of treatment. Conversely, the time from NEPA approval to first activity decreases with more rigorous analyses for both treatment types. Where differences between the two treatment types emerge is in time from first activity to first treatment. While mechanical treatments see about 240-day (eight-month) increases moving from a CE to an EIS, the increase is much larger for prescribed fire, from 456 to 1,246 days (1.2 to 3.4 years). Reasons may include the need for various permits and the limited windows, in terms of time of year and weather, during which prescribed burns can be undertaken. These results suggest that there are several reasons for the amount of time it takes to implement fuel treatments and that the time to complete a NEPA review becomes a larger share of the total time as the rigor of analysis increases.

Litigation

Litigation can affect the duration of the NEPA approval process via direct and indirect channels. A legal challenge that enjoins an approved NEPA decision directly affects the time to implementation. Similarly, anticipation of litigation can be a key indirect consideration when Forest Service staff choose which analysis type to undertake and the level of detail to include in the analysis. If the agency anticipates litigation, it may engage in a more thorough regulatory analysis to reduce the chances of a challenge or the odds the proposed action will be overturned, in essence trying to construct a “bullet-proof NEPA.”

Our review of NEPA projects finds that litigation is quite different across analysis categories: Less than 1 percent of CE approvals are litigated, while nearly 18 percent of EIS projects are, as shown in Table 3. Projects that are eventually challenged in court spend more time in the NEPA process than non-litigated ones. For EIS reviews, projects that are ultimately litigated spend almost 500 more days—nearly a year and a half—under review.

To better understand underlying causes, we compare litigated and non-litigated fuel treatment projects that go through the EIS process. Table 4 shows that on average, non-litigated projects undergoing an EIS take 1,809 days (5.0 years) before a mechanical treatment is undertaken, while those that are litigated take 2,488 days (6.8 years), a difference of 679 days (nearly two years). Similarly, non-litigated prescribed burns take an average of 2,474 days (6.8 years) from initiation to burn treatment, but 3,413 days (9.4 years) if litigated, a difference of 939 days (2.6 years).

Table 4 also allows us to observe where these increases in process duration occur. Litigated projects see longer NEPA processing times, and this is true for both mechanical treatments (increasing from 907 to 1,190 days, a difference of more than nine months) and burn treatments (from 935 to 1,285 days, a difference of nearly one year). Litigation also has a post-decision effect, lengthening the time from first activity to first treatment.

Table 3

Forest Restoration Projects and Litigation

Analysis Type	Percent Litigated	Average NEPA Duration (days)	
		Not Litigated	Litigated
Categorical Exclusion	0.7%	284	370
Environmental Assessment	3.2%	533	717
Environmental Impact Statement	17.5%	623	1,119

For mechanical treatments, litigation has a limited effect—100 days—on time to first activity but increases time from first activity to first treatment by about 300 days. For prescribed burns, litigation does not appear to increase the time to first activity but does increase time to the first treatment by about 600 days.

While this analysis suggests litigation and NEPA duration are correlated, it does not establish causation. It is not clear if the expectation of litigation causes NEPA processing times to increase or if the most complicated and difficult to review projects are also the ones most likely to be litigated.⁴⁶

Conclusion

The growing severity and cost of wildfires in the western United States has brought new attention to the fuel treatment options available to public land managers. While mechanical treatments and prescribed fire are effective, the scale of the area needing treatment—more than 80 million acres—suggests more intensive effort is needed. Broadening the types of projects that qualify for categorical exclusions could provide significant time-savings in the NEPA review process. Environmental assessments and environmental impact statements involve significantly more administrative effort and several rounds of public comment. Even compared to an EA, an EIS has higher costs and nearly double the

size of a team.⁴⁷ Our research shows that the level of analysis is the key determinant of the length of NEPA review.

Over the past two decades, Congress and the Forest Service have attempted to reduce the cost and burden of NEPA requirements for wildfire mitigation activities. As a response to widespread forest fires in 2000, the Forest Service launched the Healthy Forest Initiative in 2002, which included creation of a fuel-reduction CE. That CE, however, was struck down in litigation.⁴⁸ In 2003, Congress enacted the Healthy Forest Restoration Act, which limited the number of alternatives the Forest Service must consider under NEPA for projects in particularly high-risk areas.⁴⁹ In 2018, Congress created a CE for collaborative restoration projects under 3,000 acres, subject to several technical limits.⁵⁰ In November 2020, the Forest Service established a CE for restoration projects under 2,800 acres (a significant decrease from its original proposal of a 7,300-acre CE).⁵¹ And in 2021, Congress enacted the Infrastructure Investment and Jobs Act, which created a CE for constructing fire breaks under 3,000 acres, eliminated NEPA's alternatives analysis for emergency actions to reduce wildfire risks, and set a government-wide target of completing NEPA reviews in less than two years and under certain page limits.⁵²

Table 4

Environmental Impact Statement Project Time to Implementation by Litigation Status

	Average Duration (days)			
	Mechanical Treatments		Burn Treatments	
	Not Litigated	Litigated	Not Litigated	Litigated
Initiation to NEPA Decision	907	1,190	935	1,285
NEPA Decision to First Activity	450	550	398	402
First Activity to First Treatment	451	749	1,140	1,726
Total: Initiation to First Treatment	1,809	2,488	2,474	3,413

Although past attempts at increasing wildfire mitigation have focused on more categorical exclusions, these efforts have not had a large impact on on-the-ground treatment relative to the scope of the forest acreage in need. The range of projects that qualify for a CE have been continually challenged in court, and the environmental review process has increased in duration and intensity over time. Across all agencies, the National Association of Environmental Professionals estimated the average time to prepare an EIS increased at an average rate of 34.2 days per year between 2000 and 2012.⁵³

Legally, the Forest Service is only obligated to pursue an EIS when significant impacts to natural resources and the physical environment are expected to occur. In practice, research suggests that the decision to pursue an EA or EIS instead of a CE is commonly based on threat of litigation, level of public and political interest, and defensibility in court.⁵⁴ Anecdotal accounts from Forest Service employees suggest that litigation aversion limits the implementation of the streamlining tools that would allow the use of more categorical exemptions.

In 2022, the Biden administration proposed a plan to treat 50 million additional acres to mitigate wildfire over the next decade. To be successful, this type of initiative will require sufficient fiscal support. However, even with adequate appropriations, changes in the process by which the Forest Service

conducts environmental reviews and implements fuel treatments are likely needed, as a 10-year timetable is infeasible for EIS approvals under the current system. Our analysis shows that for EIS approvals, the average prescribed burn project takes 7.2 years before first burn treatment, and the average mechanical treatment is not far behind at 5.3 years. Finding ways to reduce the 2.7 years mechanical treatments and prescribed burn projects spend, on average, in NEPA review for an EIS, or the extra 1.9 or 2.6 years, respectively, that such litigated projects take prior to implementation, would work in tandem with budgetary increases to meet ambitious fuel-reduction targets.

Endnotes

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12. R. Sabalow and D. Kasler, “Wildfire Experts Escalate Fight Over Saving California Forests,” *The Sacramento Bee*, October 17, 2021.
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14. Much of NEPA’s effect on project implementation timelines occurs during NEPA review; however, the direct litigation effect typically occurs after the NEPA review process is complete but before on-the-ground implementation. Congressional Research Service, “The National Environmental Policy Act (NEPA): Background and Implementation,” RL33152 (2011) <https://crsreports.congress.gov/product/pdf/RL/RL33152/10>.
15. Objections may be filed by parties who previously commented on draft plans and must specify concerns with a plan, suggest how the proposed decision could be improved, and note previous formal comments on the draft plan. Objections must be filed within 30 days (for projects authorized under the Healthy Forests Restoration Act) of completion of the environmental analysis document, and the agency must respond to objections within 30 days. U.S. Forest Service, “The Forest Service Objection Process for Project-Level Decisions,” (undated) <https://www.fs.fed.us/emc/applit/includes/20160531Final218ObjectionBrochure.pdf>.
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43. See Appendix Table A4.
44. Note that project initiation represents the date the project enters the NEPA system, and it does not account for any pre-entry preparation the agency might conduct.
45. Figure 2 corresponds to Appendix Table A5.
46. We perform a statistical analysis (see Appendix Table A6) to control for observable characteristics of the projects. The results show that after controlling for observable characteristics, litigated burn treatments take 202 days longer from initiation to decision and 432 days longer from activity to treatment. These differences, however, must be interpreted with caution as we do not find any statistical significance.
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Access the Appendix at: perc.org/nepa-fire-app



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