



HOUSE COMMITTEE ON
NATURAL RESOURCES
CHAIRMAN BRUCE WESTERMAN

To: House Committee on Natural Resources Republican Members
From: Natural Resources Committee Republican Staff; Aniela Butler – Aniela@mail.house.gov, x6-7736
Date: Wednesday, May 10, 2023
Subject: Legislative Hearing on H.R. 2989 (McCarthy), the “Save Our Sequoias Act”

The Committee on Natural Resources will hold a legislative hearing on H.R. 2989 (McCarthy), the “Save Our Sequoias Act”, on **Wednesday, May 10, 2023, at 10:15 a.m.** in Room 1324 Longworth House Office Building.

Member offices are requested to notify Sophia Varnasidis (sophia@mail.house.gov) by 4:30 p.m. on Monday, May 8, if their Member intends to participate in the hearing.

I. KEY MESSAGES

- Giant Sequoias are facing an unprecedented and existential threat that could push the species to extinction in the next 25 years.¹
- Giant Sequoias, which can live for more than 3,000 years, are among the most fire-resilient tree species on the planet. Yet in the last few years, catastrophic wildfires have decimated nearly one-fifth of the world’s Giant Sequoias.
- We have reached a tipping point. Decades of inadequate forest management, combined with worsening drought conditions and rising temperatures, have created an environment that is killing these trees at an alarming rate never seen before in history.
- Fewer than 75,000 Giant Sequoias remain and without drastic intervention, this crisis will only worsen. Science-based management to restore natural conditions on the ground is vital to ensuring future generations can enjoy these awe-inspiring and majestic trees.
- The “Save Our Sequoias (SOS) Act” would give land managers the emergency tools and resources they need to save these iconic trees. This comprehensive, bipartisan legislation has 50 original cosponsors and is supported by more than 100 organizations.

II. WITNESSES

- **Chief Randy Moore**, Chief of the Forest Service, U.S. Department of Agriculture
- **The Honorable Shine Nieto**, Vice-Chairman, Tule River Indian Tribe of California
- **The Honorable Dennis Townsend**, Chairman and Supervisor – District 5, Tulare County Board of Supervisors, California

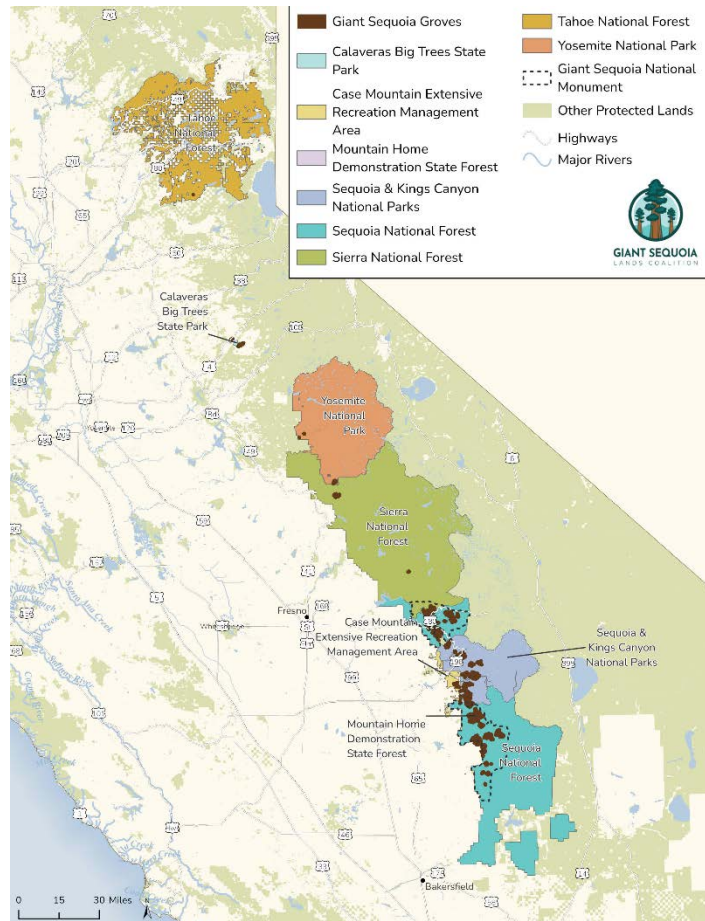
¹ Mariposa County Resource Conservation District, “Last of the Monarchs,” <https://vimeo.com/685657372/c526d9eecl>.

- **Dr. Joanna Nelson**, Director of Science and Conservation Planning, Save The Redwoods League
- **Mr. Neal Desai**, Senior Program Director – Pacific Region, National Parks Conservation Association [*Minority Witness*]

III. BACKGROUND

Overview of Giant Sequoias

Sequoiadendron giganteum (Giant Sequoias) are the largest trees on Earth and are solely found in roughly 70 distinct groves across approximately 37,000 acres in the Sierra Nevada Mountain range in central California.² Giant Sequoias are world-renowned for their majestic size and ancient lifespan. For example, the largest Giant Sequoia ever measured was over 36 feet in diameter and 311 feet tall.³ For comparison, the Capitol Dome, including the Statue of Freedom, rises 288 feet above East Front Plaza.⁴ The world’s current largest tree by volume is the iconic General Sherman Tree in Sequoia and Kings Canyon National Parks, which is 275 feet tall, 36 feet in diameter at the base, and weighs an astonishing 2.7 million pounds.⁵ An extremely resilient species, Giant Sequoias can live for thousands of years and the oldest known Giant Sequoia was dated at roughly 3,266 years old.⁶



Source: Giant Sequoia Lands Coalition, 2022.

Giant Sequoias owe this size and longevity to a set of unique characteristics that make them highly resilient to fire, insects, and disease. Giant Sequoias possess a very thick and spongy bark, which typically ranges from 6-10 inches but can be up to

² Sillett, et al., “Structure and dynamics of forests dominated by *Sequoiadendron giganteum*,” *Forest Ecology and Management* 448, June 15, 2019, pages 218-239.

³ Shive, et al., “Ancient trees and modern wildfires: Declining resilience to wildfire in the highly fire-adapted giant sequoia,” *Forest Ecology and Management* 511, February 2022.

⁴ Architect of the Capitol, “Dome By-The-Numbers,” <https://www.aoc.gov/what-we-do/projects/dome-restoration-project/by-the-numbers>.

⁵ National Park Service, “The General Sherman Tree,” Sequoia and Kings Canyon National Parks, December 31, 2021, <https://www.nps.gov/sequi/learn/nature/sherman.htm>.

⁶ Shive, *supra* note 3.



The historic General Sherman Tree, seen here wrapped in space blankets during the KNP Complex Fire.

Source: Los Angeles Times, 2021.

two feet thick, that provides strong protection against wildfire and insects.⁷ The immense height of the Giant Sequoias and their branches also means that, historically, fires have had difficulty reaching the crown (top) of the tree, thus reducing overall damage to the tree. Even if fires do reach the crown, older Giant Sequoias can survive if 5 percent of their crown remains unburned.⁸ Because of this, when Giant Sequoias died in the past, it was largely due to falling over or after experiencing several severe fires over their long lifespans. According to research from the National Park Service (NPS), Giant Sequoia deaths due to fire events were “relatively rare” and standing death unrelated to fire was “almost never observed by scientists who had spent decades working in the Sierra Nevada.”⁹ In fact, prior to 2015, the last recorded evidence of Giant Sequoia mortality due to wildfires occurred in the year 1297 A.D.¹⁰

Giant Sequoias are important ecologically, scientifically, and culturally. Giant Sequoias provide abundant recreation opportunities and millions of visitors flock to these forests annually to marvel at these majestic trees. The Giant Sequoia is an iconic symbol in nature and is featured prominently

⁷ National Park Service, “Description of the Giant Sequoia,” February 2, 2007, https://www.nps.gov/parkhistory/online_books/cook/sec1.htm#:~:text=Padilla%20Photo,-The%20bark%20of%20the%20giant%20sequoia%20is%20one%20of%20its,even%20be%20%20feet%20thick.

⁸ Boxall, Bettina, “Hundreds of towering giant sequoias killed by the Castle fire — a stunning loss,” LA Times, November 16, 2020, <https://www.latimes.com/environment/story/2020-11-16/sierra-nevada-giant-sequoias-killed-castle-fire>.

⁹ National Park Service, “Giant Sequoias Face New Threats,” February 24, 2022, <https://www.nps.gov/articles/000/giant-sequoias-face-new-threats.htm>.

¹⁰ Boxall, *supra* note 8.

on the official logo for NPS.¹¹ For thousands of years, these trees also “provided healing, shelter, and warmth” to Native Americans, including the Tule River Tribe.¹² Like many other forests, Giant Sequoia groves also provide clean air and clean water, store archaeological and historic resources, and serve as important wildlife habitat. Additionally, Giant Sequoias are extremely important for carbon storage, as certain Giant Sequoia forests are second only to coastal redwoods in “carbon storage per hectare globally.”¹³ Notably, Giant Sequoias have “little monetary value” for wood products due to their brittleness and large weight.¹⁴

Management: History, Jurisdictions, and Current Practices

Federal interest in the protection and management of Giant Sequoias can be traced back to 1864, in the midst of the Civil War, when President Abraham Lincoln signed legislation transferring the Mariposa Grove (now located in Yosemite National Park) to the State of California “upon the express conditions that the premises shall be held for public use, resort and recreation.”¹⁵ This is considered the first piece of legislation setting aside lands for public use and future enjoyment, preceding the creation of the first national parks. Nearly three decades later, in 1890, Congress created Sequoia and Yosemite as the second and third national parks, respectively, to, in part, protect the Giant Sequoias.¹⁶ In 1903, Teddy Roosevelt’s famous camping trip in the Mariposa Grove, which he dubbed “a temple greater than any human architect could by any possibility build,” inspired him to expand protections for Giant Sequoias, eventually leading to the creation of the Sequoia National Forest in 1908.¹⁷ Nearly one century later, in 2000, President Clinton designated 328,315 acres in the Sequoia National Forest as the Giant Sequoia National Monument.¹⁸ Along with this designation, sequoias are now largely under the most restrictive land designations, including 808,000 acres of wilderness and 29,500 acres of proposed wilderness in Sequoia and Kings Canyon National Parks and 314,448 acres of wilderness in the Sequoia National Forest. As such, with the exception of a fairly robust prescribed burning program within NPS, many Giant Sequoia groves are not regularly managed with fuels reduction treatments such as prescribed burning or mechanical thinning.

Although the geographic distribution of Giant Sequoias is relatively confined, the groves today cross a multitude of different jurisdictions. The majority of groves are managed by the federal government, although the following entities all have a current ownership interest in at least one Giant Sequoia grove:

- *Federal Lands:*
 - *U.S. Forest Service (USFS):* Sequoia National Forest (including the Giant Sequoia National Monument), Sierra National Forest, and Tahoe National Forest.

¹¹ National Park Service, “History of the NPS Arrowhead,” May 15, 2019, <https://www.nps.gov/glac/learn/news/history-of-the-nps-arrowhead.htm>.

¹² Quote from William Garfield, Chairman of the Tule River Tribal Council, “Giant Sequoia Lands Coalition Formed to Protect Iconic Trees from Threats of Climate Change and Catastrophic Wildfire,” National Park Service, July 19, 2021, <https://www.nps.gov/seki/learn/news/giant-sequoia-lands-coalition-formed-to-protect-iconic-trees-from-threats-of-climate-change-and-catastrophic-wildfire.htm>.

¹³ Shive, *supra* note 3.

¹⁴ Save The Redwoods League, “Giant Sequoia,” <https://www.savetheredwoods.org/redwoods/giant-sequoias/>.

¹⁵ Glass, Andrew, “President Lincoln creates Yosemite Park, June 30, 1864,” Politico, June 30, 2016, <https://www.politico.com/story/2016/06/president-lincoln-creates-yosemite-park-june-30-1864-224818>.

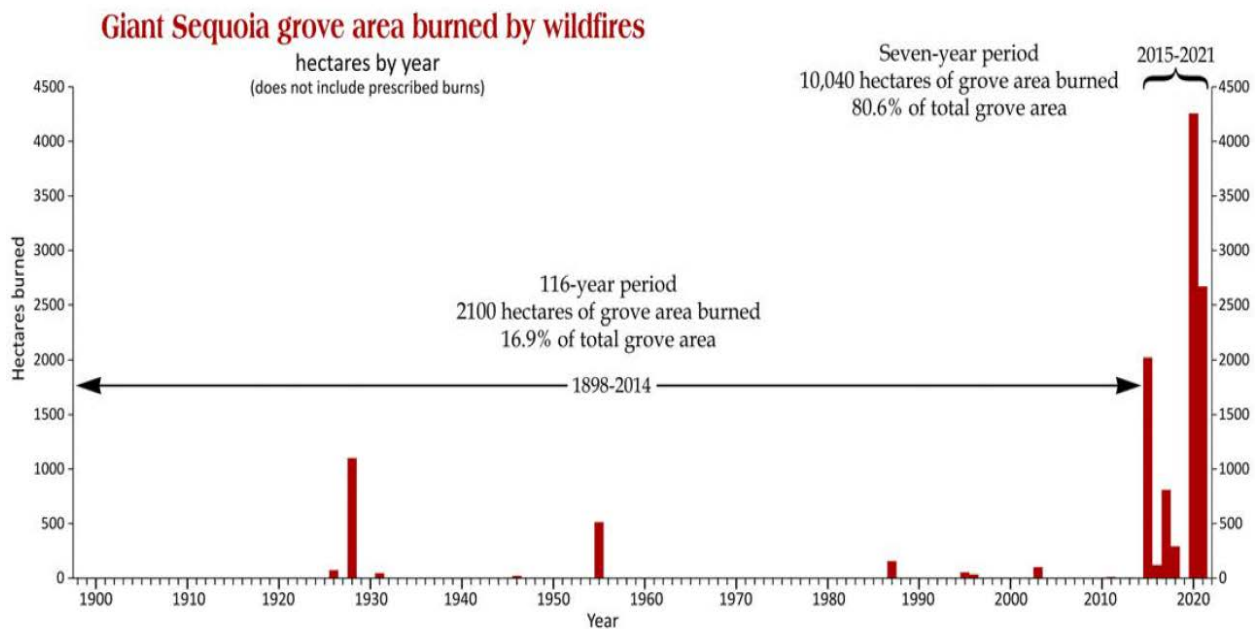
¹⁶ *Id.*

¹⁷ National Park Service, “Roosevelt, Muir, and the Grace of Place,” August 26, 2021, <https://www.nps.gov/yose/learn/historyculture/roosevelt-muir-and-the-grace-of-place.htm>.

¹⁸ U.S. Forest Service, “The Giant Sequoia National Monument,” <https://www.fs.usda.gov/detail/sequoia/home/?cid=stelprdb5394941>.

- *NPS*: Sequoia and Kings Canyon National Parks and Yosemite National Park.
- *Bureau of Land Management (BLM)*: Case Mountain Extensive Recreation Management Area.
- *State and Local Lands*: Several groves are owned and managed by Tulare County and the State of California, including the Mountain Home Demonstration State Forest.
- *Tribal Lands*: The Tule River Tribe of the Tule River Indian Reservation owns and manages a Giant Sequoia grove.
- *Private Lands*: Several private groves are owned by organizations such as UC Berkeley and Save the Redwoods League.

While each agency manages Giant Sequoias in their jurisdiction differently, for the most part, fire has largely been excluded from these landscapes by federal land managers for well over a century. Due to their long lifespans, scientists can trace the fire history of Giant Sequoias through several millennia. For the 1,000-year period dating from 800-1800, groves experienced an average of 30.6 fires per century.¹⁹ This coexistence with low-intensity fire was extremely important for the health and longevity of Giant Sequoias, which have semi-serotinous cones, or cones that need heat to open and begin the process of regeneration.²⁰ These low-severity fire intervals also helped clear undergrowth, thin out shade-tolerant species, and enable seedlings to take root and receive the necessary sunlight to fully develop.²¹ In contrast, as depicted on the chart below, from 1898-2014, only approximately 17 percent of groves experienced wildfire, meaning some went untouched by fire for more than a century.²² This exclusion of fire created a massive build-up of surface fuels.



Source: Professor Robert Van Pelt, 2021.

¹⁹ Van Pelt, Robert, “Annual Summary of Permanent Research Plots in Old-Growth Giant Sequoia Forests as Part of the Redwoods and Climate Change Initiative (RCCI), 2021, page 35.

²⁰ Shive, *supra* note 3.

²¹ The Guardian. “It could be a big tree in 1,000 years’: tiny seedlings of giant sequoias rise from ashes of wildfire” November 2, 2021. <https://www.theguardian.com/us-news/2021/nov/02/california-giant-sequoias-wildfires-climate-change-trees>.

²² Van Pelt, *supra* note 19.

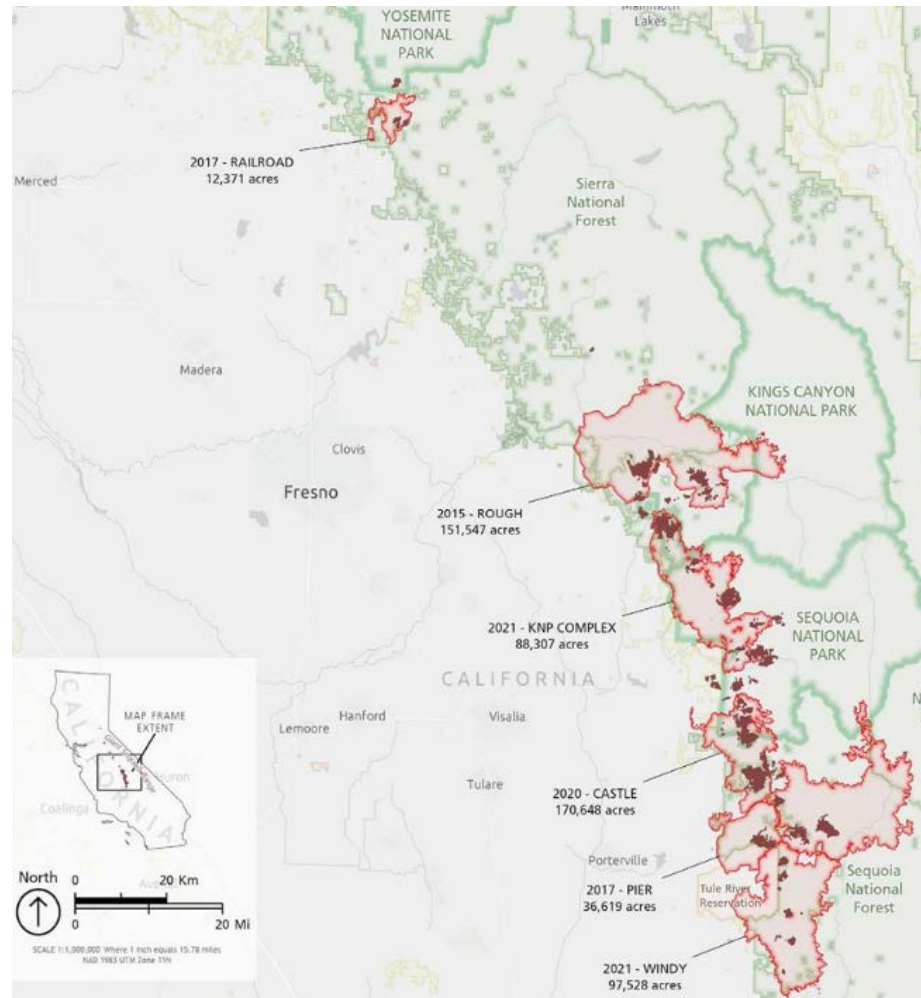
Compounding excessive fuels build-up is the devastating drought experienced throughout the West and rising temperatures. In particular, the drought period from 2012-2016 killed an enormous amount of pines, incense-cedars, and firs around the Giant Sequoias, creating a significant amount of ladder fuel that could carry fire into the forest canopy and affect the Giant Sequoias.²³ Due to “very low relative humidity and higher than average temperatures,” that fuel also became exceptionally dry and allowed fires to burn day and night.²⁴ For the first time in recorded history, scientists also observed mortality in 33 standing Giant Sequoias as a result of bark beetle infestation, thought to have been the result of drought-related conditions.²⁵

Current Wildfire Crisis

The past decade marked a significant turning point in the health and resiliency of Giant Sequoias. According to NPS, “prior to 2014, scientists recorded only subtle, long-term changes in forest health. During and after the drought, they observed large, abrupt, and novel changes to forests, including ...

unprecedented numbers of large sequoias dying in severe wildfires, Giant Sequoias dying from bark beetle attacks, and acute foliage dieback as a short-term adaptation to drought.”²⁶ Since 2015, the combination of excessive fuels build-up and drier conditions caused several wildfires

to wreak unprecedented destruction. As stated above, while only 17 percent of groves burned over the 116-year period ending in 2014, six fires in the past six years have burned over 85 percent of groves.²⁷ Unlike low-severity fires of the previous millennia, these fires had a higher severity and were incredibly deadly to Giant Sequoias. Studies suggest that groves that



Source: NPS, 2022.

²³ *Id.*

²⁴ National Park Service, *supra* note 17.

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.* (The six-year period referred to is 2015-2021).

experienced high-severity fires had average mortality rates of 84 percent, with some groves experiencing 100 percent mortality.²⁸

These high mortality events began with the 2015 Rough Fire, which burned 151,547 acres of USFS and NPS land and killed over 100 Giant Sequoias.²⁹ In 2017, the Pier and Railroad Fires had a combined total footprint of 48,990 acres and killed 110 Giant Sequoias, including 31 larger than 10 feet in diameter.³⁰ Truly unprecedented levels of devastation began in 2020 when the Castle Fire (also referred to as the SQF Complex Fire) burned 170,648 acres, including 9,530 acres of Giant Sequoia groves across federal, State, local, and private lands.³¹ The Castle Fire devastated Giant Sequoias at a scale previously unheard of, killing between 7,500 and 10,600 large Giant Sequoias, or roughly 31 to 42 percent of the Giant Sequoias within the Castle Fire's footprint. This also amounts to 10 to 14 percent of the world's Giant Sequoias killed by a single fire.³² While scientists have not yet determined precise ages, they estimate that Giant Sequoias "killed by the Castle Fire may have ages ranging from hundreds to as much as 2,000 to 3,000 years."³³

Just one year later, the KNP Complex and Windy Fires wreaked similar devastation across 185,835 acres, including 27 Giant Sequoia groves. Scientists initially estimated that "2,261-3,637 sequoias over four feet in diameter [were] killed or will die within the next three to five years" due to these two fires.³⁴ Combined with the data from the Castle Fire, this means that an estimated 13 to 19 percent of the world's Giant Sequoias were killed over the course of two years.³⁵ Concerningly, these are conservative estimates that could increase. Sadly, five of the 13 largest trees known in the 21st Century died or were negatively affected during these fires, including the Boole Tree (6th largest) in 2015, the Stagg Tree (9th largest) in 2020, the Genesis Tree (10th largest) in 2020, the Ishi Giant (12th largest) in 2015, and the King Arthur Tree (13th largest) in 2020.³⁶ The deaths of these trees are particularly significant, as named trees are often singled out for protection during fire response.

Unfortunately, these fires burned at such a high severity that "only minimal seedling establishment has been observed" in impacted groves.³⁷ This means that fires burned so intensely, the Giant Sequoia cones incinerated, even those high up in the canopy typically untouched by fire. After the KNP complex fire, NPS estimated that 436 acres were "vulnerable to total sequoia loss" without some level of replanting.³⁸ Similar to mortality estimates, these are conservative estimates of the true scope of reforestation that will be required. Importantly, while high-severity fires did cause significant destruction, some groves that experienced low- to moderate-severity fires over this period did see benefits from the re-introduction of fire.

²⁸ Shive, *supra* note 3.

²⁹ National Park Service, "Wildfires Kill Unprecedented Numbers of Large Sequoia Trees," February 25, 2022, <https://www.nps.gov/articles/000/wildfires-kill-unprecedented-numbers-of-large-sequoia-trees.htm>.

³⁰ *Id.*

³¹ *Id.*

³² *Id.*

³³ *Id.*

³⁴ Shive, et al. "2021 Fire Season Impacts to Giant Sequoias," National Park Service, November 23, 2021,

<https://www.nps.gov/articles/000/2021-fire-season-impacts-to-giant-sequoias.htm>.

³⁵ *Id.*

³⁶ Van Pelt, *supra* note 19.

³⁷ Shive, *supra* note 34.

³⁸ *Id.*

The Need for Urgent Action to Confront the Wildfire Crisis Facing Giant Sequoias

There is perhaps no greater example of the severity of the wildfire crisis facing the West than the fact that Giant Sequoias, which have withstood innumerable fires, droughts, and other natural disasters for thousands of years, are now succumbing to fire at such a rapid rate. With an estimated 75,000 trees remaining, the need to move quickly to protect these iconic trees as part of the broader effort to better manage our nation's forests cannot be overstated.³⁹ Unfortunately, at its standard pace, it would take USFS approximately 52 years to treat just their 19 most at-risk Giant Sequoia groves.⁴⁰ Land managers are now recognizing this alarming, unprecedented destruction as a call to action to expedite scientifically-sound forest management practices to improve the health and resiliency of groves. Dr. Christy Brigham, Chief of Resources Management & Science at Sequoia & Kings Canyon National Parks recently stated: "Government is slow, and wildfire is fast. We need a way to speed up government if we want to protect these trees we love so much."⁴¹ To speed up government, the land management agencies formed the newly established Giant Sequoia Lands Coalition (GSLC), which aims to:

- "Increase wildfire resilience through research and monitoring;
- Increase [the] pace and scale of forest treatments to reduce forest fuels through prescribed burning and restorative thinning; and
- Increase efficiency through partnerships aimed at policy changes that allow for more swift action."⁴²



Dead monarch Giant Sequoias in the Redwood Mountain Grove in Sequoia & Kings Canyon National Parks after the KNP Complex Fire. **Source:** LA Times, 2021.

³⁹ PBS News, "Wildfires torched up to a fifth of all giant sequoia trees," November 20, 2021, <https://www.pbs.org/newshour/nation/wildfires-torched-up-to-a-fifth-of-all-giant-sequoia-trees>.

⁴⁰ Information provided by USFS to the House Natural Resources Committee through technical assistance.

⁴¹ Warszawski, Marek, "California's giant sequoias are being destroyed by wildfires. This bill can save them," The Fresno Bee, June 27, 2022, <https://www.fresnobee.com/opinion/opn-columns-blogs/marek-warsawski/article262862988.html>.

⁴² National Park Service, *supra* note 29.

In a recent study, scientists concluded that untreated Giant Sequoia groves “are likely to facilitate intense fire behavior with resultant high severity burns unless fuel loads are reduced through restoration treatments such as prescribed fire and mechanical thinning.”⁴³ The study further found that imminent action is vital to protecting the remaining Giant Sequoias, stating: “recent trends in wildfire activity suggest that managers have a *narrowing window of opportunity* to protect the remaining legacy trees from severe fire via ecological restoration.”⁴⁴ Data collected after the KNP Complex Fire further suggested that fuel reduction treatments “positively affect[ed] fire behavior and allow[ed] fire suppression in Giant Forest and other groves impacted.” This same report later stated that “prescribed fire and thinning treatments can reduce fire severity and provide fire fighters with opportunities to safely control and manage wildfires” in Giant Sequoia groves.⁴⁵ Increasing the pace and scale of these treatments will involve empowering stakeholders to increase collaboration, removing burdensome regulatory hurdles that are delaying or cancelling vital treatments, and addressing funding and staffing shortfalls.

The Bipartisan Save Our Sequoias Act

The Save Our Sequoias (SOS) Act, which was re-introduced on Arbor Day 2023 by a bipartisan group of 50 lawmakers, would provide emergency tools and resources to land managers to take immediate action to protect Giant Sequoias from wildfires, insects, and drought.⁴⁶ The legislation would codify the existing GSLC; enhance shared stewardship and interagency coordination; develop a Giant Sequoia Health and Resiliency Assessment to prioritize forest management projects; create a



The General Sherman Tree. **Source:** HNRC GOP, 2022.

⁴³ Shive, *supra* note 34.

⁴⁴ Shive, *supra* note 34 (emphasis added).

⁴⁵ Shive, *supra* note 34.

⁴⁶ H.R. 2989, <https://www.congress.gov/bill/118th-congress/house-bill/2989?q=%7B%22search%22%3A%5B%22hr+2989%22%5D%7D&s=1&r=2>. (The bill has 23 Democratic/27 Republican cosponsors).

comprehensive reforestation strategy; and provide robust public and private funding for Giant Sequoia restoration. H.R. 2989 also codifies existing USFS regulations that the agency utilizes during emergencies (i.e., wildfires) so that land managers can respond *proactively* to this crisis, rather than waiting *reactively* to respond once a fire has already started.⁴⁷ This was modeled off of similar authorities used by the State of California and developed in close collaboration with entities in the GSLC.

Under the bill, land managers would still be required to comply with all environmental laws including the National Environmental Policy Act, Endangered Species Act, and National Historic Preservation Act. In fact, the bill sets forth specific guidelines for compliance with these laws, including creating a categorical exclusion for ecologically based Giant Sequoia Protection Projects that meet certain requirements. Due to the limited range of Giant Sequoias, this legislation is targeted and would not create any new precedents (in fact, precedent already exists for establishing a regionally specific categorical exclusion in California).⁴⁸ Last year, companion legislation was introduced in the Senate by California Democratic Senators Feinstein and Padilla.⁴⁹

Recent Emergency Actions and Addressing SOS Act Misinformation

The SOS Act has robust, bipartisan support from over 100 organizations representing conservation, recreation, environmental, forestry, and sportsmen’s interests. Additionally, the legislation is supported by those directly involved in the management of Giant Sequoia groves, including Save the Redwoods League, the Tule River Tribe, and numerous counties in California containing Giant Sequoia groves. These land managers will all be represented as witnesses during the hearing.

One month after the initial introduction of the SOS Act in 2022, the USFS announced it would take emergency actions, identical to those first proposed by the legislation, to protect Giant Sequoias.⁵⁰ These scaled-down actions covered 9,433 acres in 12 Giant Sequoia groves out of the 37 managed by USFS (less than one-third). The USFS began the “hand cutting of small trees, mechanical removal of trees, application of borate on green stumps, pulling duff away from the base of large giant sequoias and prescribed burning” in 4 groves that had only initiated the scoping process of NEPA and in 8 groves that were still “developing proposal[s]” and had not completed any formal NEPA analysis.⁵¹ USFS estimated these actions accelerated treatments by “9 to 12 months in most groves and years earlier in other groves.”⁵²

While these actions were important, they were limited in scope. For example, in one of the highest priority groves identified by USFS (the Long Meadow Grove), the emergency actions only cover 568 acres out of the 13,000-acre project area (4.4 percent).⁵³ While USFS used some

⁴⁷ 36 CFR 220.4, <https://www.ecfr.gov/current/title-36/chapter-II/part-220/section-220.4>.

⁴⁸ Public Law 114-322 (the WIIN Act) created a 10,000-acre categorical exclusion for the Lake Tahoe Basin in California. The categorical exclusion created by this legislation is 5,000 acres (including 2,000 acres within groves and a 3,000-acre grove buffer zone).

⁴⁹ S. 4833 (Feinstein), “Save Our Sequoias Act,” 117th Congress, <https://www.congress.gov/bills/117/congress/senate-bill/4833>.

⁵⁰ USDA, “Forest Service Taking Emergency Action to Protect Giant Sequoias,” July 22, 2023, <https://www.usda.gov/media/press-releases/2022/07/22/forest-service-taking-emergency-action-protect-giant-sequoias>.

⁵¹ Information provided by USDA, July 26, 2022.

⁵² USDA, *supra* note 50.

⁵³ *Id.*

funding provided by the Infrastructure Investment and Jobs Act for these projects, the agency still lacked millions of dollars in funding necessary to complete this work.⁵⁴ Several months later, NPS announced it would take similar action in 11 Giant Sequoia groves in Sequoia & Kings Canyon National Park that would begin, at the earliest, in Fall 2023.⁵⁵ Similar to USFS, this is only a small fraction of the 37 groves located in Sequoia & Kings Canyon and did not apply to groves in Yosemite National Park or those managed by BLM.

These actions, while limited, serve as an important test case for why full emergency authorities are needed for Giant Sequoia conservation. The SOS Act would build upon these actions by codifying the emergency and expanding it to ensure each and every Giant Sequoia grove receives the management work necessary to ensure resiliency to wildfire. Further, the bill provides the necessary funding and resources the agencies currently lack to complete these treatments.

Despite the broad, bipartisan coalition supporting the SOS Act and the Biden administration’s partial implementation of the emergency actions proposed in the bill, several groups with no experience in the management of Giant Sequoias have accused the bill of being unnecessary. These organizations have called the actions taken by the bill (and later the Biden administration) a “so-called ‘emergency.’”⁵⁶ This contradicts the opinions of several officials, including USFS Chief Randy Moore (a witness at this hearing), who justified the administration’s own emergency actions by stating, “Without urgent action, wildfires could eliminate countless more iconic giant sequoias.”⁵⁷ In addition, these organizations have mischaracterized the legislation as simultaneously waiving, delegating, and categorically excluding the National Environmental Policy Act, all of which cannot be true at the same time.⁵⁸ The organizations also wrongly asserted that the bill would hand over all decision making to the GSLC, a coalition comprised primarily of federal land managers, while waiving the Federal Advisory Committee Act.⁵⁹

Two weeks after the SOS Act’s introduction in 2022, one of the primary organizations opposed to the bill announced they had successfully blocked a forest management project through litigation in Yosemite National Park designed to protect the Giant Sequoias. *Two days later*, the Mariposa Grove of Giant Sequoias in Yosemite, the same grove that inspired President Theodore Roosevelt to conserve these trees for future generations, caught on fire.⁶⁰

In October 2021, the Editorial Board of the Sacramento Bee had this to say about the organization in question:

“By weaponizing federal protections — such as the National Environmental Policy Act and the Endangered Species Act — to obstruct or outright kill various wildfire prevention projects, environmentalists imperil the very ecosystems they wish to protect. Organizations like the John Muir Project ... have been accused by leading experts of

⁵⁴ Briefing to Congressional staff from the U.S. Forest Service.

⁵⁵ NPS, “Sequoia and Kings Canyon National Parks taking emergency action to protect giant sequoias,” October 13, 2022, <https://www.nps.gov/seki/learn/news/sequoia-and-kings-canyon-national-parks-taking-emergency-action-to-protect-giant-sequoias.htm>.

⁵⁶ Earthjustice et al., April 26, 2023, Letter in opposition to the SOS Act, on file with the Committee.

⁵⁷ *Id.*

⁵⁸ *Id.* (The legislation does not waive or delegate NEPA. The legislation creates a sequoia-specific categorical exclusion, which was developed over the course of 9 months during conversations with relevant land managers and is described in greater detail below).

⁵⁹ The bill does none of this.

⁶⁰ Inciweb, “Washburn Fire,” <https://inciweb.nwcg.gov/incident/map/8209/0/131450>. Accessed on July 11, 2022.

spreading ‘agenda-driven science’ that promotes specific unsupported narratives and avoids data to back up their litigious claims. At least 111 scientists have co-authored at least 41 scientific papers to rebut their dubious methods, The Bee reported, an extraordinary sign of how problematic these groups have become. Some of their disputed claims have caused the courts to delay important fire prevention projects.”⁶¹

Wildland firefighters responding to the Washburn Fire protected the Mariposa Grove by taking emergency actions to clear hazardous fuels from the Giant Sequoia trees, the exact same authorities the SOS Act would allow land managers to use *proactively* before a fire starts. These actions, along with prior fuels treatment work, are credited with saving the Mariposa Grove. Garrett Dickman, a firefighter and biologist at Yosemite National Park, stated:

“The really obvious takeaway is we’ve been preparing for this fire for 50 years. And that preparation is saving these trees. We haven’t had to wrap trees or really put firefighters at tremendous risk. They’ve been able to engage safely because those fuel reduction treatments have proven to be so effective.”⁶²



A firefighter fighting the Washburn Fire in the Mariposa Grove of Giant Sequoias in Yosemite National Park.

Source: AP, 2022.

⁶¹ Sacramento Bee Editorial Board, “Rogue environmentalists put Californians in harm’s way by blocking forest thinning projects,” Sacramento Bee, October 21, 2021.

⁶² Harrell, Ashley, “Yosemite’s Mariposa Grove will survive Washburn Fire, says park’s forest ecologist,” SF Gate, July 11, 2022, <https://www.sfgate.com/california-wildfires/article/mariposa-grove-will-survive-fire-17298114.php>.

Unfortunately, the vast majority of Giant Sequoia groves have not received similar treatments and remain extremely vulnerable to high-severity wildfires, insects, and drought. While the efficacy and urgency of fuels reduction treatments and the SOS Act are evident, the continued need for this bill is perhaps best summarized by the end of the GSLC’s December “2022 Progress Report for Saving the Sequoias”:

“One hundred human generations can come and go in the lifetime of a giant sequoia. This forest ecosystem has been here on the west slopes of the Sierra Nevada—and only here—for millions of years, and we lost nearly 20% in two years of unprecedented, intense wildfires. After millions of years of stability, the trajectory of this extraordinary forest has taken a drastic and devastating turn—on our watch. And how the giant sequoia species emerges from this existential threat will be determined by the choices that we make now. We, collectively, have to take responsibility for what happens next.

Together, the Giant Sequoia Lands Coalition has sounded the alarm. We are rallying the science community to prioritize and guide timely action. We are actively treating groves, already reducing fuel loads on more than 4,000 acres. We are shouting from the rooftops to get this crisis in every news outlet and on every kitchen table in the country.

As we advance the work of this impressive coalition and strive to meet our collective responsibility, we are determined to ensure that these irreplaceable natural treasures are better prepared for the fires of our new reality. And our work is just beginning.

We again urge elected officials and policymakers to take action to provide funding and personnel, enact policy changes, and help us reduce fuels now so we can address the problem at scale.”⁶³

IV. MAJOR PROVISIONS & SECTION-BY-SECTION

[H.R. 2989: “Save Our Sequoias Act” \(Rep. Kevin McCarthy, R-CA\)](#)

Section 1. Short title; table of contents.

Section 2. Definitions.

Section 3. Shared Stewardship Agreement for Giant Sequoias.

- Directs the Department of the Interior (DOI), USFS, the State of California, and the Tule River Tribe to enter into a [shared stewardship agreement](#) within 90 days to facilitate cross-boundary coordination and collaboration on Giant Sequoia management and reforestation. These entities all currently own and manage Giant Sequoia groves in California.

Section 4. Giant Sequoia Lands Coalition.

⁶³ GSLC, “2022 Progress Report on Saving the Sequoias,” December 2022, <https://giantsequoias.org/wp-content/uploads/2022/12/2022-GSLC-Progress-Report.pdf>.

- Codifies the Giant Sequoia Lands Coalition, a partnership of Giant Sequoia landowners and managers encompassing USFS, NPS, BLM, State of California, Tule River Tribe, County of Tulare, and private academic institutions.
- The Coalition will conduct the Giant Sequoia Health and Resiliency Assessment, coordinate joint management projects, share information and best available science, and provide oversight of the implementation of the SOS Act.

Section 5. Giant Sequoia Health and Resiliency Assessment.

- Directs the Giant Sequoia Lands Coalition to conduct a comprehensive Giant Sequoia Health and Resiliency Assessment based on the best available science to inform forest management practices for the Giant Sequoias and prioritize highest priority groves at risk of catastrophic wildfire within 180 days of its first meeting. The Assessment will:
 - Identify groves that have experienced stand-replacing disturbances, groves and nearby lands that are susceptible to experiencing a stand-replacing disturbance, and groves that are in need of reforestation following a stand-replacing disturbance.
 - Analyze the resiliency of individual Giant Sequoia groves to wildfire, insects, and drought.
 - Identify priority forest management projects to reduce the risk and severity of wildfire, giving highest priority to areas identified as being at high-risk of experiencing a stand-replacing disturbance.
 - Analyze how historical, Tribal, or current approaches to forest management have impacted the health and resiliency of Giant Sequoias.
 - Include any necessary program and policy recommendations to improve Giant Sequoia health and resiliency.
- Requires annual updates to the Assessment that track the status and implementation of forest management and reforestation activities within Giant Sequoia groves.
- Specifies the Coalition shall also maintain a public website that publishes the Assessment as well as a dashboard that contains searchable information on the reviews and costs of Giant Sequoia Protection Projects and reforestation activities.
- Clarifies that the Coalition shall rely on data and peer reviewed research from Federal, State, and academic sources as well as traditional tribal ecological knowledge.
- Allows the Secretary of the Interior to enter into agreements or memorandums of understanding to improve the use and integration of technology into the Assessment.
- Incorporates data from the Assessment into other relevant planning documents, such as the Forest Service's 10-year Wildfire Crisis Strategy.
- Clarifies the Assessment shall not be considered an analysis produced under the National Environmental Policy Act.

Section 6. Giant Sequoia Emergency Response.

- Declares an emergency for the Giant Sequoias that will expire 7 years after the enactment of the bill. This is based on existing Forest Service regulations and will allow federal land managers to respond to this crisis like they would during a wildfire. During the emergency period, DOI and USFS officials can take emergency actions prior to initiating environmental reviews under the National Environmental Policy Act or consultations under the Endangered Species Act and National Historic Preservation Act. Allows

Protection Projects to be subject to judicial review and emergency provisions in the Infrastructure Investment and Jobs Act and Healthy Forests Restoration Act.

- Authorized activities for Giant Sequoia Protection Projects include conducting hazardous fuels management, removing dead and dying trees, and other activities recommended by the Giant Sequoia Health and Resiliency Assessment. Those projects are categorically excluded under NEPA.
- Projects must be proposed by the Giant Sequoia Health and Resiliency Assessment, developed through a collaborative process, or proposed by a resource advisory committee. Projects can only occur in Giant Sequoia groves that have a grove-specific hazardous fuels reduction plan completed by the relevant land management agency. Projects can only cover 2,000 acres within a Giant Sequoia grove and 3,000 acres immediately surrounding the grove.
- Applies emergency, informal consultation requirements to projects for the National Historic Preservation Act and Endangered Species Act.

Section 7. Giant Sequoia Reforestation and Rehabilitation Strategy.

- Directs the development and implementation of a comprehensive Giant Sequoia Reforestation and Rehabilitation Strategy to address the 19 percent of Giant Sequoia groves that have burned in recent years. This strategy:
 - Creates a priority list of Giant Sequoia groves in need of artificial or natural regeneration, giving highest preference to groves that have experienced a stand-replacing disturbance.
 - Proposes reforestation and rehabilitation projects based on the priority list of Giant Sequoia groves.
 - Identifies barriers to Giant Sequoia reforestation, including limited seedlings supply, workforce shortages, and technological limitations.
 - Recommends program or policy reforms necessary to expedite Giant Sequoia reforestation and rehabilitation.
- Makes Giant Sequoia reforestation projects eligible for priority funding from the Reforestation Trust Fund.
- Clarifies that Giant Sequoia reforestation projects are consistent with the Wilderness Act in order to allow for the re-establishment of Giant Sequoias following stand-replacing disturbances, consistent with existing exemptions for fire, insects, and disease. This provision is necessary to address potential litigation against NPS for reforesting Giant Sequoia groves that will not naturally regenerate unless replanting occurs.

Section 8. Giant Sequoia Strike Teams.

- Establishes 10-person strike teams at DOI and USFS to help with the implementation of Protection Projects and reforestation activities. The strike teams may assist with environmental reviews and consultations, site preparation, and the implementation of Protection Projects and reforestation activities.

Section 9. Giant Sequoia Collaborative Restoration Grants.

- Provides competitive grants to eligible non-profit organizations, Tribal or local government, academic institution, or private organization involved in Giant Sequoia

protection, reforestation, and rehabilitation activities to promote public-private partnerships in Giant Sequoia management.

- Grants may be used to develop new markets (including markets for biomass and biochar) for hazardous fuels removed during Giant Sequoia protection projects, create facilities that can store or process hazardous fuels, improve nursery capacity and infrastructure, or reduce transportation or labor costs associated with Giant Sequoia protection projects.

Section 10. Good Neighbor Authority for Giant Sequoias.

- Adds Giant Sequoia Protection Projects to Good Neighbor Authority (GNA). Makes the NPS units that manage Giant Sequoias eligible for GNA (currently, only USFS and BLM can utilize this authority). Permanently reauthorizes GNA and cleans up the code to address drafting errors that have prevented Tribes and counties from becoming full partners under GNA.

Section 11. Stewardship Contracting for Giant Sequoias.

- Allows projects that promote the health and resiliency of Giant Sequoias to be eligible for stewardship contracts. Expands stewardship contracting authority to include the NPS units that manage Giant Sequoias.

Section 12. Giant Sequoia Emergency Protection Program and Fund.

- Directs the National Park Foundation and National Forest Foundation, the Congressionally chartered charitable partners of NPS and USFS, respectively, to create a program to accept philanthropic donations to promote the resiliency and reforestation of Giant Sequoias. Directs 15 percent of donations to support Tribal Giant Sequoia conservation.

Section 13. Authorization of Appropriations.

- Provides funding, consistent with House floor protocols (CUTGO), for the bill including \$10 million in fiscal year (FY) 2024, \$25 million in FY 2025, \$30 million over FY 2026-2028, and \$40 million over FY 2029-2030.

V. COST

H.R. 2989 has not received a formal Congressional Budget Office (CBO) cost estimate.

VI. ADMINISTRATION POSITION

During the 117th Congress, the Forest Service testified on similar legislation introduced by Senators Feinstein (D-CA) and Padilla (D-CA) in the Senate Energy and Natural Resources Committee and stated: “*The emergency facing giant sequoias is unprecedented. While USDA has concerns with several aspects of the legislation as written, we appreciate the intent of the Save Our Sequoias Act and looks forward to continued discussions with the Committee and bill sponsors on ways to expedite this important work.*”⁶⁴ During the same hearing, DOI testified: “*The Department supports the goals of S. 4833, the Save Our*

⁶⁴ Crockett, John, Testimony before the Senate Energy and Natural Resources Committee on S. 4833 (Feinstein), the “Save Our Sequoias Act,” September 29, 2022, <https://www.energy.senate.gov/services/files/9DB6CEE1-A979-4F02-A46D-50DE431B663B>.

Sequoias Act. We recognize there are serious threats to sequoia groves and believe it is important to address these threats. The Department would like to work with the bill's sponsor and the Committee to better understand the effects of the legislation, if enacted, on the protection of other natural and cultural resources.”⁶⁵

VII. EFFECT ON CURRENT LAW (RAMSEYER)

H.R. 2989

⁶⁵ Rupert, Jeffery, Testimony before the Senate Energy and Natural Resources Committee on S. 4833 (Feinstein), the “Save Our Sequoias Act,” September 29, 2022, <https://www.energy.senate.gov/services/files/3D50BE86-B587-4333-9267-D2AD506D2996>.