

Testimony of Neal Desai
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For the House Natural Resources Committee
Legislative Hearing on H.R. 2989, Save Our Sequoias Act
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Chairman Westerman, Ranking Member Grijalva, and Members of the Natural Resources Committee, thank you for inviting me to testify on H.R. 2989, the Save Our Sequoias Act. I am Neal Desai, Senior Program Director in the Pacific Region for the National Parks Conservation Association (NPCA). Founded in 1919, NPCA is the leading national, independent voice for protecting and enhancing America's National Park System for present and future generations. We appreciate the opportunity to testify today on a critically important issue within the National Park System-- ensuring the survival of majestic giant sequoia trees and their habitat on the west slopes of the Sierra Nevada.

We are pleased Congress is looking at how to address this challenge—Americans hold so much pride for our national parks and are concerned when we are faced with losing iconic species. 5.4 million visitors from across the country and world flocked to Yosemite, Sequoia and Kings Canyon last year, home to these audacious, humongous trees that stand the test of time.

Sequoia, Kings Canyon and Yosemite National Parks have over 40 giant sequoia groves. Even though Yosemite has fewer groves, it's known for some of the most famous, including the Grizzly Giant, one of oldest known giant sequoia trees on federal lands at 3,000 years old. Sequoia National Park has the highest density of trees within the park system, which includes the largest tree known as General Sherman, which is 275 ft tall and 36 feet around at its base.

In 1890, Congress had the forethought to designate these places as national parks in part to protect these amazing natural wonders. Now, in bipartisan fashion, this Congress is looking at how to continue the legacy of protecting these trees.

This discussion is also a continuation of something already started seven years ago: funding efforts to protect giant sequoias. In 2016, Congress passed the National Park Service Centennial Act to fund signature projects coupled with philanthropic matching funds. Restoration of the Mariposa Grove at Yosemite was one of the first Centennial Challenge projects undertaken. The Park Service has noted, "Sequoias have a relatively shallow but extensive root system, reaching to over a hundred feet in all directions from their base. These roots capture the groundwater which allows the trees to survive the long, hot summers of Yosemite; a healthy root structure is essential to ensure their longevity." To better protect the root system, roads and parking lots were removed to restore the natural flow of groundwater. More suitable trails and bathrooms were also added as part of the project. NPCA worked with Congress to establish the Centennial Challenge Fund and continues to lobby to maintain the annual appropriations for it. We are grateful for this continued investment and believe the restoration of the Mariposa Grove is a fantastic example of putting this important funding to work.

As we all know, there is more work to be done to protect this species.

While giant sequoias are resilient trees known to be fire-resistant due to their fibrous bark, warmer weather and longer, more intense drought is having a profound effect on these trees. As the Park Service has stated: "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 in numerous giant sequoia groves. These included: 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.” There is no doubt the earth is warming and as a consequence drought, invasive species and wildfires have become threats to the survival of giant sequoias.

Hotter summers, shorter winters, longer droughts and more intense storms are changing our parks. In 2018 researchers at the University of California Berkley and the University of Wisconsin looked specifically at the effects of climate change on national parks. “In this study, the team used these maps to calculate historical temperature and rainfall trends within the parks and over the U.S. as a whole. They found that the temperature in national parks increased by a little over 1 degree Celsius from 1895 to 2010, roughly double the warming experienced by the rest of the country. Yearly rainfall totals decreased over 12 percent of national park land, compared to 3 percent of land in the United States.” (<https://news.berkeley.edu/2018/09/24/national-parks-bear-the-brunt-of-climate-change/>). The impacts of these threats are creating unavoidable changes to parks across the country. Higher temperatures are melting glaciers in Glacier National Park. Extreme drought along the Colorado River is shrinking water at Lake Mead and the Grand Canyon. Heavier, unpredictable rains led to extreme flooding at Yellowstone. The same threats face the giant sequoias.

The National Park Service is working hard to address these threats with active fuel reduction treatments and plans for reforestation.

For example, in Yosemite, the National Park Service started active treatment of the Merced and Tuolumne giant sequoia groves in 2021 and is continuing this important work that includes biomass removal and thinning of trees. The National Park Service also plans to implement fuels reduction and forest restoration work in the Mariposa Grove this year. In Sequoia and Kings Canyon, the National Park Service has developed a FY23-25 three-year Sequoia Protection Action Plan for fuels treatments for 11 groves that have not burned in recent years and have unhealthy accumulations of living and dead forest fuels. This work is underway and is planned to be completed by FY25. The Sequoia Protection Action Plan defers treatment on three small at-risk groves, which constitute just 5% of sequoia groves in the parks, in order to complete a Fire Management Plan that can determine the best way to treat these three small groves in remote, extreme terrain. The Sequoia Protection Action Plan notes that the remaining 23 sequoia groves in the parks are within a natural burn cycle and not currently in need of fuels reduction treatment. Additionally, the National Park Service is proposing to replant giant sequoia and other mixed conifer seedlings in up to six giant sequoia groves, since these areas burned at such high and unprecedented severity that natural regeneration is unlikely to occur. We applaud the agencies for conducting this critical work—they are employing the very strategies listed in this bill.

However, this work can only occur if the National Park Service, and agencies including the US Forest Service, have the resources, specifically funding and staffing, to implement their plans. We are grateful that Congress has passed critical legislation, such as the Bipartisan Infrastructure Law and Inflation Reduction Act, that provided the agencies with funding that can be used towards conducting the sequoia grove restoration work.

The work of the Giant Sequoia Lands Coalition highlights that if agencies are provided with funding and staffing, impressive results can be achieved. For example, in 2022, the Coalition treated more than double the acres originally targeted. The cost of this work was \$10.5 million and involved 824 personnel.

We believe this is the type of work that Congress and the administration should continue to fund and at an increased scale.

Thank you for inviting me to testify. I look forward to answering your questions.