

BIG STUMP GROVE

BIG STUMP GROVE OVERVIEW

Relative Overall Vulnerability

MODERATE
2.7

This grove is ranked **MODERATE** for Relative Overall Vulnerability due to:

Wildfire Vulnerability

MODERATE - 2.7

Regen Vulnerability

MODERATE - 2.5

See the [Grove Health & Resilience](#) section below for more information.

Relative Management Priority

MEDIUM
2.7

This grove is ranked **MEDIUM** for Relative Management Priority due to:

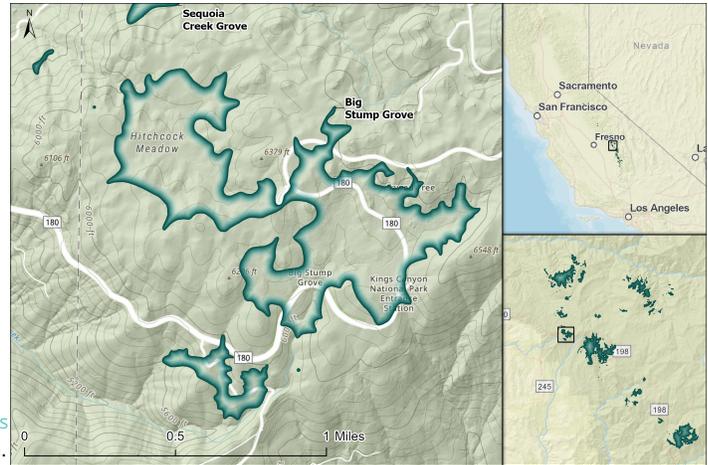
Overall Vulnerability

MODERATE - 2.7

Treatment Feasibility

GOOD - 10.0

See the [Management Considerations](#) section below for more information.



Grove Map - click map for more detailed spatial information

Grove Information

Grove Size (Acres)	283
Location	Kings River Watershed, Tulare County & Fresno County
Management Unit(s)	Giant Sequoia National Monument / Sequoia National Forest, Sequoia - Kings Canyon National Park
Land Steward(s)	NPS SEKI, USFS SQF GSNM, Private

About Big Stump Grove

Big Stump Grove is a 283-acre grove in the Kings River Watershed region situated between 5,559 - 6,470 feet elevation at 36.71982°N. It is managed by Sequoia-Kings Canyon National Park and Sequoia National Forest. Most of Big Stump Grove is located in the headwaters of Mill Creek, within the Kings River watershed. The upper grove portion around Big Stump Basin is in Sequoia-Kings Canyon National Park, while the larger, lower portion of the grove is in the Sequoia National Forest. The grove has a history of old-growth logging, but some mature giant sequoias remain. The grove is named after the once exceptionally large Mark Twain Tree, which was cut in 1891. Its remaining stump became known as the "Big Stump." The tree was cut so that slabs of the trunk could be displayed in the American Museum of Natural History and the British Museum.

HEALTH & RESILIENCE

MODERATE
2.7

Big Stump Grove is ranked **Moderate** for Relative Overall Vulnerability because it is at a **Moderate** risk of being negatively impacted by the effects of severe wildfire and at **Moderate** risk for inadequate natural regeneration.

Relative Overall Vulnerability

Additionally, Big Stump Grove is at **Low** risk for negative impacts from drought stress, **Medium** levels of tree mortality have been detected in the grove, and the presence and activity of beetles in the grove is **Unknown**. 12.9% of Big Stump Grove has burned in large fires since 1984. See below for more detailed information.

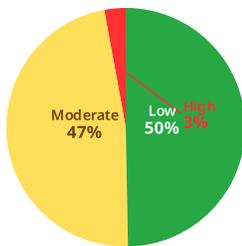
Components of Relative Overall Vulnerability

Relative Overall Vulnerability is based on **Wildfire Vulnerability** and **Regeneration Vulnerability** using an area-weighted calculation. See [Grove Assessment Analysis Methods](#) for more details.

The pie charts below provide the percentage of the grove with high, medium, and low vulnerabilities. Click on the charts to view interactive maps of these vulnerabilities within the grove.

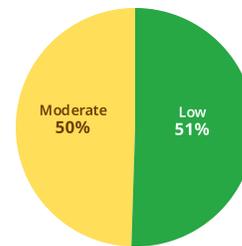
Wildfire Vulnerability

MODERATE - 2.7



Regeneration Vulnerability

MODERATE - 2.5

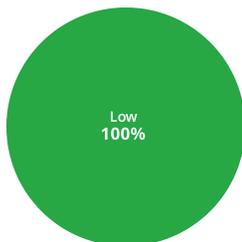


Additional Grove Health & Resilience Information

Below is additional information about Big Stump Grove's Health & Resilience. These data, their inputs, and any available notes and updates may be found in the [Grove Resilience Datasheet](#).

Relative Drought Stress

LOW



Relative Drought Stress in Big Stump Grove is Low based on an area-weighted average. Click on the chart for an interactive map.

Beetle Activity

UNKNOWN

Beetle Activity in Big Stump Grove has not been determined. Please see the [Grove Resilience Datasheet](#) for details.

Tree Mortality

MEDIUM

Tree Mortality in Big Stump Grove is Medium according to the most current available USFS dead canopy data. Please see the [Grove Resilience Datasheet](#) for details.

Wildfire History

The table below provides information about large wildfires in this grove recorded since 1984. See this [map of wildfires and locations of high severity fire](#).

Wildfires	RABBIT - 2023
% of grove burned	12.9%
% of grove unburned	87.1%
Fire Return Interval Departure	High

MANAGEMENT CONSIDERATIONS

MEDIUM
2.7

Big Stump Grove is ranked **Medium** for Relative Management Priority because it has **Moderate** Relative Overall Vulnerability and **Good** feasibility for implementing management actions toward restoration goals.

Relative Management Priority

Additionally, the grove is 0.6 miles from a community and contains recreational infrastructure. Residential homes are located immediately southwest of the grove. See below for more detailed information.

Components of Relative Management Priority

Relative Management Priority is determined by combining the **Relative Overall Vulnerability** and **Treatment Feasibility** ranks. See [Grove Assessment Analysis Methods](#) for more details.

Relative Overall Vulnerability

MODERATE - 2.7

See the [Health & Resilience](#) section above for the component metrics for the Relative Overall Vulnerability rank.

Treatment Feasibility

GOOD - 10.0

Special Land Designation	None
Grove Manager Opinion	Fuel Treatments are Possible
Remote	No

Additional Management Considerations

Below is additional information relevant to Big Stump Grove's Management Considerations. These data, their inputs, and any available notes and updates may be found in the [Grove Resilience Datasheet](#).

Treatment History

The table below lists treatment projects in and 90 meters around this grove implemented **since 2022**. See this [map of grove treatments](#).

Treatment Type	% of Grove	Acres
Mechanical Treatments	0%	0
Prescribed Fire	30.1%	176.1
Pile Treatments	17.2%	100.5
Pile Burns	15.3%	89.5
Replanting	0%	0

Management Recommendations

The table below provides an estimate of the percentage and acreage of the grove that are recommended for evaluation for treatment based on the Vulnerability Models. See this [map of Grove Vulnerability Models](#).

Treatment Need	% of Grove	Acres
Fuels Reduction/Restoration	2.9%	8.207
Reforestation	0%	0

BIG STUMP GROVE REFERENCES

Willard, D. 1994. Giant Sequoia Groves of the Sierra Nevada: A Reference Guide.

Giant Sequoia Health & Resilience Assessment [Glossary](#) 

[How to Use the Giant Sequoia Health & Resilience Assessment](#) 

[Giant Sequoia Health & Resilience Assessment Analysis Methods](#) 

Find more giant sequoia science by searching the [GSLC Scientific Publications Library](#) .

Explore more groves or learn about the Giant Sequoia Lands Coalition.

DISCLAIMER

The information presented in the Giant Sequoia Grove Health & Resilience Assessment is intended to supplement on-the-ground knowledge of giant sequoia groves for use in conjunction with current on-the-ground knowledge of grove condition and management activities when planning fuel treatment and reforestation projects. It should not be considered the only source of information about the condition of groves.