

2019 KINCADE FIRE & POWER SHUTOFFS IN SONOMA COUNTY

In collaboration with **Moody's Analytics**, this report showcases key **impacts** from the PG&E's power shutoffs and Kincade Fire of 2019. The power shutoffs include four separate events: October 9-12, October 23-24, October 26-27, and November 20, 2019. The Kincade Fire began late on October 23 and was not fully contained until November 6, 2019.

HIGHLIGHTS

\$725 million

Total economic impact from Kincade Fire and power shutoffs.

374 structures*

Destroyed by Kincade Fire, compared to 5,000+ from Tubbs Fire.



Increase in hotel occupancies in June indicate *change in peak tourist season* to avoid fires.



As fires and power shutoffs grow more frequent, costs and losses may grow far more significant.



Overall visitor spending is in line with the annual average growth rate from 2010 to 2018.



Fight negative perceptions of Sonoma County & continue to promote spring/summer visitor seasons to drive same type of demand in tourism pre-2017 wildfires.

	Kincade Fire	Power shutoffs
Lost economic output	\$235 mil	\$105 mil
Property damage	\$385 mil	N/A



Lost output per resident is approximately \$765, *less than 2% of median household income for residents.*



Lost output per business calculations show that the average county establishment lost approximately \$16,500, or *around 1% of Sonoma County's annual gross metro product.*

KINCADE FIRE

\$620 million total economic loss

(About 2% of total output in Sonoma County)



3.3 weekdays of lost productivity, and 1.64 weekends of lost output per resident



374 homes destroyed;
Average value of \$678,700 +
additional 50% for personal property

60 properties
damaged;
\$34,000 average loss



Minimal vehicle
damage

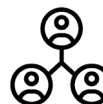
POWER SHUTOFFS

\$105 million total economic loss

(About 0.33% to 1% of total output in Sonoma County)



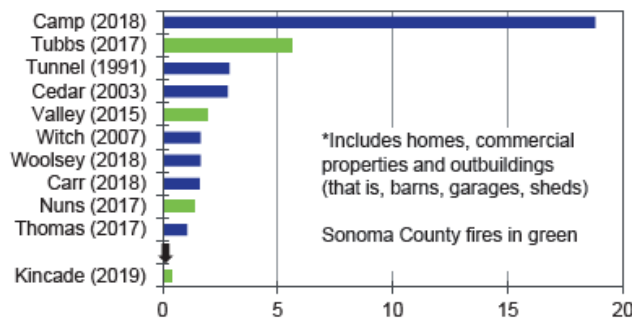
The average affected resident experienced a disruption by any single shutoff is 2.5 days.



Affected almost 195,000 residents total, or 39% of the county, throughout the four events

OTHER RECENT DISASTERS

Structures* destroyed in most destructive California wildfires, this



Sources: CAL FIRE, Moody's Analytics

The **2017 Tubbs Fire** destroyed more than 5,600 structures with an estimated loss of \$7.5 to \$9.7 billion.

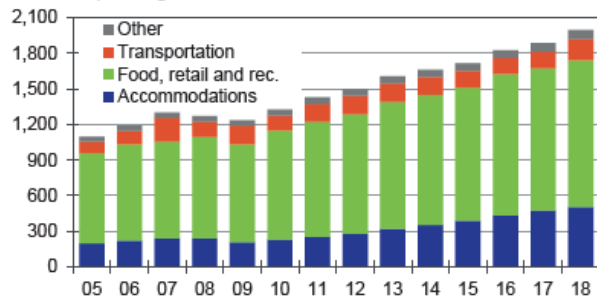
The **2019 Russian River flood** in February 2019 affected 2,600 properties, with an estimated cost of \$155 million in damages.

The **2019 Kincade Fire** did not make Top 10 for number of structures destroyed by California wildfires.

EXTERNALITIES

TOURISM

Tourism spending, \$ mil



Sources: Visit California, Dean Runyan Associates, Moody's Analytics

Tourism spending increased 4.4% in 2018, following trend from 2010.



Hotel occupancy increased in June and decreased in September and October for the past two years, indicating a **change in peak tourist numbers** during harvest.



Rise in tourism-related job growth in 2018, reversing the declining trend from the closing months of 2017.

POPULATION



In 2018, Sonoma County's population fell by almost 0.7%, the sharpest drop in a half-century.



Driving factors such as unemployment rate gap, housing affordability, and cost of living are more significant factors to explain net domestic migration and population changes in Sonoma County.

METHODOLOGY

Estimates of negative exogenous shocks focus on property damage and lost output, and are dependent on property prices, median home values, and county-level nominal GDP. Power shutoff assumptions were compiled by GIS software ESRI, PG&E, and the Economic Development Board's Business Impact Survey in October 2019. Kincade Fire estimates followed similar broad methodology for power shutoffs. Industry assumptions were made through historical precedent and economic intuition.

The four power shutoff events exclude the power shutoffs overlapping the Kincade Fire to avoid double counting economic loss from the fire.

*Structures include homes, commercial properties, and outbuildings (barns, garages, sheds, etc).



Moody's
ANALYTICS