# Wildfire News Update

October 7, 2021

***Alaska***

* [Shifts in Alaska’s landscape](https://www.scientificamerican.com/article/wildfire-is-transforming-alaska-and-amplifying-climate-change/) due to climate change have led to an earlier and longer wildfire season, creating a feedback loop that has the potential to turn the region into a net carbon contributor as fires dump greenhouse emissions into the air. Alaska receives little precipitation, but before the 1990s or so, fires would not burn deeply into the lower layers of duff, a thick layer of a vegetation which holds moisture and has insulated permafrost since the Pleistocene epoch. However, as sea and land ice melt, “the Arctic-boreal region as a whole is heating up 1.5 to four times faster than temperate zones”. Snowpack is coming in late and melting two weeks earlier, leaving duff dry for a greater portion of the year. “The thick duff layers across high altitudes store 30-40 percent of all the soil carbon on Earth” and are the primary contributor of carbon dioxide from Alaskan fires.

***California***

* [A partnered study](https://www.kcrw.com/news/shows/kcrw-features/smoke-story) between NPR’s California Newsroom and Stanford University’s Environmental Change and Human Outcomes Lab analyzed 10 years of data from the NOAA and counted the days of exposure to wildfire smoke at the zip code level. The study, called “Dangerous Air” showed “a startling increase” in exposure in areas ranging from the West all the way to Kentucky and West Virginia. The change from 2009-2013 to 2016-2020 was particularly acute in north California. For example, San Jose averaged 45 days in the latter period (a 400% increase). In the city of Willows, California, residents breathed an average of 91 days of smoke between 2016-2019 (a 38% increase). These numbers are striking as absolutely no amount of wildfire smoke exposure is safe and has numerous consequences on heart, lung, and brain health, especially for children.
* On September 23rd, while touring the burn area of the KNP Complex Fire in the Sequoia National Forest, Governor Gavin Newsom [signed a 2021 budget addendum](https://abc7news.com/knp-complex-fire-update-gavin-newsom-tulare-county-evacuations-sequoia-forest-wildfires/11040716/) which will allocate $15 billion dollars over the next 3 years to natural resource packages. $1.5 billion was appropriated towards wildfire and forest resilience, $536 million of which was already signed earlier this year in an early action package and $988 million of which is for the 2021-22 fiscal year. Funds will support fuel breaks, science-based management, and creation of resilient wildlands. This wildfire investment is the largest in state history and marks a prevention focused approach in preparation for the 2022 fire season. The $15 billion package also includes $5.2 billion to “drought response and long-term water resilience”, $3.69 billion to climate resilience, and $1.1 billion to sustainable agriculture. Detailed breakdown [here](http://ebudget.ca.gov/BudgetAddendum.pdf).

***Colorado***

* [A traveling entourage of 800 goats](https://www.insurancejournal.com/news/west/2021/10/04/635251.htm) has been hired by the Bureau of Land Management to help slow wildfires in Colorado. How do the goats help wildfires? They snack on grasses and weeds that could fuel wildfires while also improving the soil quality with their manure. Goats can be a clever method for wildland maintenance because sometimes dry conditions and proximity of properties and private land may not allow for a controlled fire.
* The use of computerized logging machines [to clear dead trees](https://coloradosun.com/2021/10/06/monarch-pass-wildfire-mitigation/) and partnerships with local lumber mills in the Monarch Pass (Rocky Mountains) could be a model for local efforts for fire mitigation. The Finnish machines, called harvesters, allow for hundreds of dead trees to be stacked in a matter of minutes and for access to steep terrain while avoiding erosion. While this project, a partnership between the Arkansas River Watershed Collaborative and the Forest Service, is funded by sales of timber, it is also part of a much larger wildfire protection plan for Chaffee county, which itself is funded by tax revenue and has attracted federal money.

***Other***

* Congress [passed bill H.R.5305](https://www.congress.gov/bill/117th-congress/house-bill/5305) on September 30th extending emergency assistance and funding to several federal organizations, including the NOAA, the Bureau of Land Management, and the Navy. This bill comes as a stopgap measure, saving the funding from expiring before the financial year 2022 started on October 1st. The funding includes $10 billion dollars to the Office of the Secretary, $565 million to the Navy, and $229 million to the National Park Service for recovery from wildfire, drought, hurricanes, and other natural disasters. Provisions focusing on wildfire include $750 million from the $10 billion mentioned which must be specifically used towards livestock producers’ losses from wildfire and drought, $20 million to the NOAA for wildfire research, prediction, and detection, $10 million to the Central Utah Project for fire remediation activities, and $210 million to the Bureau of Reclamation for drought ($200 million) and fire remediation and suppression ($10 million). Originally heard about this bill [here](https://www.sfchronicle.com/politics/article/California-to-get-billions-in-fire-drought-16500078.php) .
* Pacific Gas & Electric was [charged on September 24th](https://www.npr.org/2021/09/24/1040630538/pacific-gas-electric-manslaughter-charges-california-wildfire-zogg) with manslaughter after its equipment sparked and started the Zogg Fire, which killed four people and destroyed hundreds of homes. In March, a state investigation concluded that the fire was started because a tree that PG&E had slated for removal and that should have been removed, fell onto the company’s transmission line. The charges seek to hold PG&E to criminal liability for the fire and include enhanced charges for a firefighter who was paralyzed from the chest down by another falling tree.