

California Water and Infrastructure Report

Formerly, the "California Drought (and Flood) Update"

For November 22, 2018

by Patrick Ruckert

Published weekly since July, 2014

An archive of all these weekly reports can be found at both links below:

http://www.californiadroughtupdate.org

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"The fires, he emphasized, are the result of a process of 20 years of major neglect: 'Because you had the deregulation of the energy program, with Enron, and you had the bankruptcy of the state; and then you had practically what was a color revolution with Schwarzenegger [2003-2011] ... who brought in a hard-core greenie and austerity program, 'that cut all the fire infrastructure, "'so anything that you wouldn't use except under emergency circumstances, was cut out of the budget for good.'"

A Note To Readers

A happy Thanksgiving to all.

Now to set the tone for this week's report, immediately below this introduction is an item designed to be totally provocative. And the above quote is from that item.

Then the remainder of the report, after a short item on the weather and drought, examines several areas related to our wildfires that really have emerged as a serious discussion after President Trump provoked it with his tweets. Like him and, or, his tweets, or not, he has opened the debate on forest management and much more. That includes, not just forest management practices, but also what to do about the electrical power companies responsibility for the fires, building codes for houses in forested areas, the role of climate change and more.

I intoduce the section on the role of the electrical utilities with this paragraph: "To be followed up on in a later report is the story that began with the Enron criminal enterprise of electrical power

deregulation of the 1990s. While the criminals from Enron did go to jail, the damage they wrought on California and other states has not ever been repaired or compensated. That bunch of criminals cost the state itself \$30 billion. It cost ratepayers about \$80 billion in California alone. And it did bankrupt PG&E. Perhaps PG&E could have begun hardening its equipment and putting some lines underground years ago had not the Enron scam done so much damage."

So, read on, my friends.

The Hell that Fascist Greenie Austerity Has Wrought in California

Nov. 19 (EIRNS)—In remarks to the Nov. 17 gathering in New York in which Schiller Institute President Helga Zepp-LaRouche was the featured speaker, California LaRouche PAC leader Michael Steger laid out a grim picture of the devastation in California—not only the terrible forest fires, but the complete breakdown of infrastructure and public policies that any future-oriented government would have maintained.

"It's been 20 years of economic insanity that we warned has been a fascist policy, directly from the British, through [former Governor Arnold] Schwarzenegger, which has led to this," Steger said. Schwarzenegger was "backed by the Rothschilds, and this is exactly the kind of policy you get: an epidemic in homelessness, typhus, the fires.... We've obviously got to save California, we've got to save the country."

Steger pointed out that these policies are responsible for the outbreak of typhus (a rickettsial bacteria, in this case spread by fleas) in Los Angeles; an entirely different disease, typhoid (Salmonella typhi, is spread person to person by infected feces and urine, and via contaminated food and water.

"If people don't know, typhoid is largely spread by human feces not being disposed of properly. So it's not like 'Skid Row,' it's like 'Skid Block,' all over Los Angeles. There's a homeless epidemic, which then leads to a typhoid epidemic. You've what they call ... 'Poop Squads'.... They're paying people like \$90,000 a year to deal with human waste on the streets. And that's more than they pay the social workers to deal with the homeless."

According to the Foundation for Economic Education, Los Angeles officials report they now receive 1,900 cleanup calls per month for feces removal, due to the growth of homeless camps. This situation, Steger said, is hard to imagine when the state was the leading industrial and scientific state, 50 years ago.

The rampaging forest fires give expression to this, he underscored. The huge "Camp Fire," as it's known, started, and is so bad "that we've had 'red alert' smoke in the Bay Area. It's now been 10 days straight." The fires, he emphasized, are the result of a process of 20 years of major neglect: "Because you had the deregulation of the energy program, with Enron, and you had the bankruptcy of the state; and then you had practically what was a color revolution with Schwarzenegger [2003-2011] ... who brought in a hard-core greenie and austerity program" that cut all the fire infrastructure, "so anything that you wouldn't use except under emergency circumstances, was cut out of the budget for good."

The Drought and the Weather

Rain breaks 200-plus day dry spell for Oakland, San Jose, Mountain View

http://www.ktvu.com/news/rain-breaks-200-plus-day-dry-spell-for-oakland-san-jose-mountain-view

Nov 21 2018

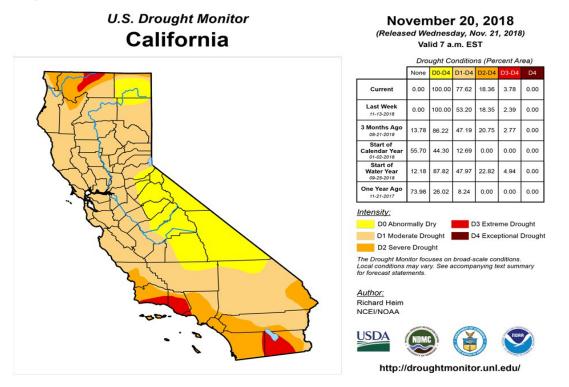
OAKLAND, Calif. - The rain sprinkling over the Bay Area ends a long stretch of dry weather, bringing relief to firefighters battling wildfires in Butte County and a sigh of relief for residents tired of the smoky air choking the skies.

The last time it rained at least .10 inch in the region was on Oct. 3, 48 days ago. But that precipitation really only hit Napa and Santa Rosa in the North Bay, according to KTVU meteorologist Steve Paulson.

But the last time it rained that much in the rest of the Bay Area was much longer than that.

Data from the National Weather Service shows that Oakland hasn't seen .10 of an inch of rain for 223 days, and San Jose and Mountain View haven't had rain for 218 days.

U.S. Drought Monitor



Now to the Fires and the Serious Discussion that the President Has Begun

California Wildfires Seen Costing Insurers Up to \$13 Billion

By <u>Katherine Chiglinsky</u> November 19, 2018 <u>https://www.bloomberg.com/news/articles/2018-11-19/california-wildfires-seen-costing-insurers-up-to-</u> <u>13-billion</u>

The Camp and Woolsey fires that have ravaged towns and killed dozens could cost insurers between \$9 billion and \$13 billion.

Those estimates include the damage to properties and cars, as well as the cost to cover business interruption, according to an <u>estimate</u> Monday from risk modeler RMS. That makes this the second wildfire season in a row where insured losses could top \$10 billion.

A point made by many is that the forests of California are about 56% Federal National Forests or National Parks, 43% are privately owned land, and only about 1% of the forests are on state owned land. Here is a map of the National forests in the state:



President Donald Trump:

"There is no reason for these massive, deadly and costly forest fires in California except that forest management is so poor."

President Donald J. Trump Urges Congressional Action

The President issued the following statement on November 20, 2018. Only the headlines of the three sections are included in this excerpt from the document. That is followed by an excerpt from an interview with Governor Jerry Brown.

President Donald J. Trump Urges Congressional Action to Improve Forest Management and Help Prevent Wildfires

Issued on: November 20, 2018

<u>https://www.whitehouse.gov/briefings-statements/president-donald-j-trump-urges-congressional-action-improve-forest-management-help-prevent-wildfires/</u>

"With proper Forest Management, we can stop the devastation constantly going on in California." President Donald J. Trump.

NEED FOR IMPROVED FOREST MANAGEMENT: Improving forest management is critical to addressing the wildfires that are devastating communities and ecosystems across the country.

LEGISLATIVE ACTION: Congress can help prevent further wildfire devastation by passing a Farm Bill that includes robust fire protection and forest management provisions.

PROTECTING OUR COMMUNITIES: Passing the Farm Bill will help to build on efforts launched by the Trump Administration to improve forest management.

Brown says Trump's promise not to cut funding to California is a "big, big win"

By Holly Rosenkrantz CBS News

November 18, 2018

<u>https://www.cbsnews.com/news/jerry-brown-on-face-the-nation-calls-trumps-promise-to-not-cut-funding-to-california-for-wildfires-a-big-big-win/</u>

California Gov. Jerry Brown says President Trump assured him he will not cut federal funding to California to deal with the state's deadly wildfires in what the governor called a "big, big win." On Saturday, Brown and the president toured damage from the <u>Camp Fire</u> that killed dozens of people, with nearly 1,300 more still unaccounted for. The governor also said economic impact of the fires will be "tens of billions" of dollars.

"The president not only has signed a presidential declaration giving California substantial funding, but he said and pledged very specifically to continue to help us, that he's got our back," Brown said on "Face the Nation" Sunday. "And I thought that was a very positive thing."

"I certainly raised it," Brown said about climate change. "But I didn't feel that that was where we needed to go. We need the money, we need federal help and we need a collaborative and cooperative spirit and we're getting that.

Forest Management

Next are some examples of excerpted articles addressing the question of forest management.

Transcript: California Gov. Jerry Brown on "Face the Nation," Nov. 18, 2018

https://www.cbsnews.com/news/transcript-california-gov-jerry-brown-on-face-the-nation-nov-18-2018/

MARGARET BRENNAN: As you- as you, say the president did acknowledge that he said climate change might be a factor, "a little bit" but he primarily blamed forest management as the cause here. Is California to blame here for its own problems?

GOV. BROWN: Well where Paradise is, of course, is surrounded by federally managed land. These are national forests. They are not state parks and they're not private property by Californians so it is the federal government. And the fact is that managing the forest is part of it. They are a lot denser than they were 200 years ago. But on top of that, we have this five year drought. We have reduced rainfall. We have the dryness that turns vegetation and bushes and houses and trees into- literally into timber. So it was ready to explode.

Gov. Jerry Brown proposes easing logging rules to thin forests

By <u>Bay Area News Group</u> and <u>Paul Rogers</u> | PUBLISHED: August 23, 2018

https://www.santacruzsentinel.com/2018/08/23/gov-jerry-brown-proposes-easing-logging-rules-tothin-forests/?

fbclid=IwAR0gQ3_qIpbyn31QVGa5w2R3cEg5CVGnV3NFTKpTAv0yNuCAdH_DfacERUc

Faced with the worst summer fire season in 10 years, Gov. Jerry Brown is proposing broad new

changes to California's logging rules that would allow landowners to cut larger trees and build temporary roads without obtaining a permit as a way to thin more forests across the state.

Trump hammered for California wildfire claims – but Gov. Brown has also backed new forest management measures

By Andrew O'Reilly | Fox News

November 20, 2018

https://www.foxnews.com/politics/trump-hammered-for-california-wildfire-claims-but-gov-brown-hasalso-backed-new-forest-management-measures

Trump over the last week has been slammed for calling California's forest management a "big problem" and suggesting that California officials needed to do a much better job, while downplaying any larger effect from climate change in promoting abnormally dry conditions and dead trees and creating fuel for fire.

"There is no reason for these massive, deadly and costly forest fires in California except that forest management is so poor," Trump tweeted earlier this month. "Billions of dollars are given each year, with so many lives lost, all because of gross mismanagement of the forests."

Brown, who frequently has been at odds with the president over a number of issues, rebuked Trump's criticism of the state and the president's focus on forest management over climate change. Brown's spokesman, Evan Westrup, said in a statement that the governor's "focus is on the Californians impacted by these fires...not on the president's inane, uninformed tweets."

But as recently as last August, California's outgoing Gov. Jerry Brown proposed similar changes to the state's logging rules that would allow large landowners to topple larger trees and build temporary roads as a way to thin the forests across the Golden State and possibly prevent some widespread wildfires.

Under Brown's proposal – which was supported by the logging industry in the state but opposed by more than a dozen environmental groups - landowners would be permitted to cut trees up to 36 inches in diameter, a jump from the current 26 inches, on properties that are 300 acres or less without getting a timber harvest permit and would also be able to build roads up to 600 feet long. The landowners must also prove that the intent for both cutting down trees and building the roads was to thin forests to reduce fire risk.

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Trump was right: California's forests have been grossly mismanaged

By Joe Denham

November 16, 2018 06:01 AM

https://www.fresnobee.com/opinion/readers-opinion/article221683150.html

President Trump was right about forest management.

Why do I care? I have spent a great deal of my life caring for the land. I spent two years working as a

firefighter for the U.S. Forest Service. I spent two years working as a firefighter for Cal Fire (then it was the California Department of Forestry and Fire protection, before the word forestry became politically incorrect). I have worked as a river guide for the San Joaquin River Parkway. I have worked as a forester under contract to PG&E. In addition to other studies I have a forestry degree from Reedley College.

Trump is right. We do have a management problem on the state, federal level and local levels (in that order). This can be broken down into six key areas where we have failed: Access, logging, grazing, endangered species, water quality and air pollution.

• Access: There has long been a push to block access and create wilderness areas. This makes access more difficult during emergencies. This stops firewood scavenging in the national forests. Firewood collection creates mini fuel breaks along any open forest road. Only dead and down trees are legal to collect.

• Logging: If we never logged and we allowed the natural fire cycle to occur, we wouldn't have to log now. Over the last century, we prevented the natural fire cycle. This wasn't a problem until recently because logging thinned the forest as fire used to. Logging died at the hands of the misguided environmentalists in this state over the last 30-40 years. Fuels have accumulated. Logging thins forests and prevents wildfires from becoming catastrophic.

• Grazing: Grazing has been opposed for many suspect environmental reasons. Grazing thins brush. Grass fires are easy to fight and stay small. Brush fires are hard to fight and grow large quickly. In this way fire climbs to larger and larger fuels until it races through the crowns of the trees, leaving behind something eerily reminiscent of a nuclear blast.

• Endangered species: The constant "discovery" of "subspecies" by scientists whose funding and careers depend on finding them is dubious at best. Often good management practices are halted at the order of a court when one of the "subspecies" is "discovered" on a parcel of land.

• Water quality: Water quality is frequently used to halt grazing, logging, access, and other effective management tools.

• Air pollution: Air districts have a narrow window of air quality in which controlled burns are allowed. It would be much better to allow a little more air pollution from controlled burns then to wait for massive wildfires with extreme air quality problems.

The following three articles, for space reasons, are severly excerpted. They do have much in them of interest:

Explainer: Blame climate, but crowded forests also fuel California fires

Nichola Groom

<u>https://www.reuters.com/article/us-california-wildfires-forest/explainer-blame-climate-but-crowded-forests-also-fuel-california-fires-idUSKCN1NJ1G6</u>

November 14, 2018

In fact, few disagree that California's increasingly dry and overgrown forests are, effectively, large-scale tinderboxes.

"California's forests are reaching a breaking point," the Little Hoover Commission, an independent state oversight agency, wrote in a report earlier this year.

The report outlined recommendations such as increased prescribed burning and dedicating more money and jobs toward forest management — measures the state is already adopting.

The U.S. Forest Service's practice of fire suppression has been an issue across many Western states. Although the Forest Service had changed that practice in the 1970s, a massive fire in Yellowstone National Park in 1988 caused the practice of letting fires burn where possible to be scrolled back. I

Yet the Little Hoover Commission report found poor management policies for the last century have left forests vulnerable to fires.

"The costs of long neglecting and mismanaging forests have become an unsustainable burden in California," the report said.

How Misguided Environmentalism Is To Blame For California's Wildfires

By <u>Krystina Skurk</u> November 16, 2018

<u>http://thefederalist.com/2018/11/16/misguided-environmentalism-blame-californias-wildfires/?</u> <u>fbclid=IwAR2FdUEPQW_P14HGGH8A5N4Oz88F4rT8Fvo6HwYdd9JyZEvQg5ZPLOX7Ht4#.W_Fo0</u> <u>6cifFx.facebook</u>

The federal government owns <u>45.8 percent</u> of California's land, while 4 percent is owned by the state and 51 percent is privately owned. CAL FIRE manages both state and private land. Part of the reason it is so difficult to manage California forests is the bureaucratic milieu. The Forest Service manages <u>193 million</u> acres of land, has 28,000 employees, and has an annual outlay of \$7 billion a year, according to a 2017 Analytical Perspective from the budget of the U.S. government.

For decades, environmental protection schemes have usurped common sense. For example, most fire ecologists say that the surest way of preventing massive forest fires is to use prescribed burns. <u>The</u> <u>California Environmental Protection Agency</u> states that "prescribed burning is the intentional use of fire to reduce wildfire hazards, clear downed trees, control plant diseases, improve rangeland and wildlife habitats, and restore natural ecosystems."

Prescribed burns keep forests healthy by burning up the underbrush that accumulates on the forest floor and by thinning trees. Yet for decades the Forest Service has suppressed most fires. According to a California Department of Forestry and Fire Protection <u>executive summary</u>: "Land and fire management have in many cases increased fire hazard. In some shrub types, fire suppression appears to have shifted the fire regime away from more, smaller fires toward fewer, larger fire."

Blaming climate – ignoring incompetence

By <u>Paul Driessen</u>

November 19th, 2018

<u>http://www.cfact.org/2018/11/19/blaming-climate-ignoring-incompetence/?</u> <u>mc_cid=d7739addf0&mc_eid=c8a719ee5b</u>

Resorting to "manmade climate change" has become the favorite, most politically expedient tactic for deflecting attention away from the abject, ideological, even criminally incompetent forest management practices demanded by politicians, regulators, judges and environmentalists in recent decades.

The hard, incontrovertible reality is that California is and always has been a largely arid state, afflicted on repeated occasions by prolonged droughts, interspersed with periods of intense rainfall, and buffeted almost every autumn by powerful winds that can whip forest fires into infernos.

43% of California timberlands are privately owned, 1% are state owned, and all of them are governed by state laws, regulations and regulators. The remaining 56% are federally owned and managed, largely by preservation-oriented, change-resistant bureaucrats, subject to constant litigation by environmentalists.

The Broader Picture: Wild-land urban interface, drought, climate and dead trees

Living on the Edge: Just as coastal communities must learn to live with hurricanes, communities that edge up against forests are going to have to learn to live with fire.

By James B. Meigs

Nov 20, 20183:40 PM

https://slate.com/technology/2018/11/camp-fire-disaster-causes-urban-wildland-interface.html

The Camp Fire is generally referred to as a forest fire or, to use the term preferred by firefighting professionals, a wildfire. As the name suggests, wildfires are mostly natural phenomena—even when initially triggered by humans—moving through grasslands, scrub, and forest, consuming the biomass in their paths, especially litter and deadwood.

But the photos tell a different story. Within Paradise itself, the main fuel feeding the fire wasn't trees, nor the underbrush Trump suggested should have been raked up. It was buildings. The forest fire became an infrastructure fire.

At first glance, the cause of the Camp Fire seems obvious: Sparks from a power line ignited a brush fire, which grew and grew as high winds drove it toward the town (there were also <u>reports of a possible</u> <u>second ignition point</u>). And yet, like almost every disaster that kills large numbers of people and damages communities, the causes of the tragedy in Paradise are more complex than it first appears. The failure of the power line was the precipitating factor, but other factors came into play as well: zoning laws and living patterns, building codes and the types of construction materials used, possibly even the forestry management practices Trump inelegantly referenced.

A number of environmental, political, and economic trends converged in Butte County in just a few hours on Nov. 8 to spark this fire. But the tragedy was the result of many longer-term decisions, decades in the making.

Paradise sits in the picturesque foothills of the Sierra Nevada range. Its streets bump up against the intermingle with undeveloped wildland."

Why California's Wildfires Are So Destructive, In 5 Charts

By Christie Aschwanden, Anna Maria Barry-Jester, Maggie Koerth-Baker and Ella Koeze

Nov. 16, 2018

https://fivethirtyeight.com/features/why-californias-wildfires-are-so-destructive-in-5-charts/

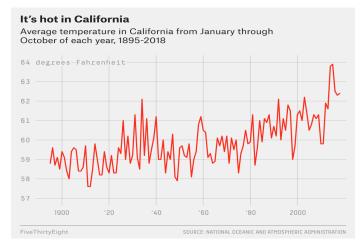
Fires aren't rare in California, and no one thing causes them. But the fires this season have grown to

be big and destructive because a confluence of environmental changes, several related to climate change, have made the state more vulnerable. Those changes include drought, higher-than-average temperatures and population growth near wilderness areas, all of which have created favorable fire conditions, exacerbated the blazes and made them more costly.

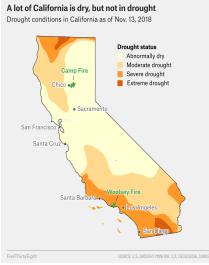
Here's a look at how some of these factors have raised the fire risk in California.

First, it's hot, even by California standards.

Rising temperatures affect fires in a variety of ways. Most obviously, <u>hotter temperatures dry out the</u> <u>plants</u> that fuel fires. Drier plants equals better kindling, which equals bigger, hotter fires. But the relationship between hotter days and bigger fires isn't just about temperature — it's also about <u>when in</u> <u>the year</u> the hotter days happen. Spring is coming earlier <u>in California and across the United States</u>, which means a longer, balmier growing season. (This year, winter in Southern California ended <u>a full</u> <u>two weeks earlier than average</u>.) That, in turn, produces even more plant material for the abnormally hot summer weather to dry out later.



Precipitation also matters, and this year, California has gotten less than usual.



This year, though, California is dry. That doesn't mean all of it is in a drought, though. While California experienced intense droughts throughout much of the 2000s, most of the state hasn't technically been in a drought emergency, as declared by the governor, <u>since April 2017</u>. Still, almost the entire state is abnormally dry, and <u>a particularly dry autumn</u> is part of what allowed strong

downslope winds to spread fire so quickly in early November.

Drought has also led to unprecedented tree mortality in California, largely because of the spread of <u>bark beetle populations</u> that thrived as trees weakened. That's left a lot more fuel around when fires do start.

Fire danger is particularly severe in areas where human development meets forests and other naturally fire-prone landscapes, which are highlighted in the chart below. Wildfire experts call this the wildland-urban interface (or WUI, pronounced "woo-wee").

The risk of devastating fires is high in these areas for several reasons. First, fire is a natural feature of these wilderness landscapes, but as development encroaches, fires can no longer be allowed to burn naturally without the town being at risk of burning. As natural fires are suppressed, there's a buildup of fuel, coupled with an increased chance that a fire will be ignited by human activities.

California fires: Why there will be more disasters like Paradise

By <u>Paul Rogers</u> | <u>progers@bayareanewsgroup.com</u> Bay Area News Group November 19, 2018 <u>https://www.mercurynews.com/2018/11/19/california-fires-why-there-will-be-more-disasters-likeparadise/</u>

"Climate change is not the cause of these fires," said Park Williams, a climate scientist at Columbia University's Lamont–Doherty Earth Observatory in New York. "But the warmer atmosphere is causing most fires to be harder to contain. They are burning bigger and hotter."

The numbers are stark. California has warmed roughly 3 degrees Fahrenheit since 1980 during the autumn months of September, October and November. Rainfall in those months has fallen by about one-third over the same time. And the result has been a state increasingly on fire.

From 1980 to 1990, roughly 300,000 to 400,000 acres a year burned in California. Last year, 1.4 million acres burned. This year, so far, 1.8 million acres — an area six times the city of Los Angeles — of federal, state and private land has been incinerated. Similar trends are afoot in other Western states.

Put another way, <u>15 of the 20 largest fires in California history have occurred since 2000.</u> Four of the five largest have happened since 2012. And the two all-time biggest in terms of acres burned — the Mendocino Complex Fire centered in Lake County this summer and the Thomas Fire in Ventura and Santa Barbara counties last December — both happened in the last 12 months.

Earlier this year, California lawmakers passed a bill that promises \$1 billion in state funding over the next five years in grants to cities, counties, fire departments and nonprofit groups to thin overgrown forests around towns, cut fuel breaks and conduct controlled burns to restore some natural balance.

Another challenge is population growth.

From 1990 to 2010, there was a 41 percent increase in the number of houses in America's "wild landurban interface" — the area where homes and forests meet, and where wildfire problems are most pronounced, according to <u>a study last year led by the University of Wisconsin</u>. One in three Americans now lives in those fire-prone areas.

Add to that California's 2012-2017 drought, which killed 129 million trees, mostly in the Sierra Nevada and its foothills. That left enormous amounts of dead vegetation, primed to burn.

Electrical Power Companies and Fires

To be followed up on in a later report is the story that began with the Enron criminal enterprise of electrical power deregulation of the 1990s. While the criminals from Enron did go to jail, the damage they wrought on California and other states has not ever been repaired or compensated. That bunch of criminals cost the state itself \$30 billion. It cost ratepayers about \$80 billion in California alone. And it did bankrupt PG&E. Perhaps PG&E could have begun hardening its equipment and putting some lines underground years ago had not the Enron scam done so much damage.

High-Voltage Lines Did Start the `Camp Fire': What To Do

Nov. 20 (EIRNS) -- New reports in broadcast media in California conform to one key aspect of. LaRouche PAC leader Mike Steger's "why it happened" report on the huge destruction by the California fires: aboveground high-voltage power lines in dried-out forests. After years of deliberate neglect during the Schwarzenegger governments (2003-11) and climate shamming by Jerry Brown, the solutions are long overdue and require Federal credit help.

The PG&E utility company has confirmed it had two very short power failures on the morning the Camp Fire was ignited (Nov. 8), both within a very short distance of its starting location. State Police helicopter video was taken of the very beginning of this "vegetation fire," showing it burning directly beneath high-voltage power lines. Moreover, PG&E had notified customers late on Nov. 7 that it was even considering turning off power due to fire-hazard conditions, although it did not do so.

But not mentioned in the news media reports, which are acquiring a tendency to scapegoat PG&E, is the actual issue: The lines should be buried when they traverse forest areas. After fires in 2017, state legislation was passed – Bill 901 -- permitting PG&E to take steps including burying power lines or heavily insulating them, and to surcharge its customers to pay for it. The company said it was opting to replace 5,400 overhead power lines with strongly insulated wire, to preventsparking. However, it has begun neither option thus far.

After such devasting neglect of fire-protection measures and slashing of fire-fighting resources in California, acting fast now to bury or insulate high-voltage -- even only in vegetation-fire-danger areas -- might be expected to require \$20 billion. This is based on Louisiana's \$70 billion estimate for burying the entire power grid of that state to protect against hurricanes, according to the website for industry publication **New Civil Engineer**.

That clearly requires PG&E being able to borrow long term at low interest from a national credit institution. Again, as in Hurricane Harvey ("What Would Jesse Jones Do?"), this is exactly what the Reconstruction Finance Corporation did under President Franklin Roosevelt. And while at it, FDR's Works Progress Administration (WPA) would have employed large numbers of skilled and unskilled workers to build terraces and berms to prevent deadly landslides in the rains that are coming to California this week. Such critical infrastructure needs abound, unmet, across the nation.

Utilities cause hundreds of fires every year. Here's where they were and how many

By Michael Finch II November 20, 2018 03:00 AM

https://www.modbee.com/news/state/california/article221924560.html

As the Camp Fire burns in Butte County, public attention is transfixed on the risk many Californians face when it comes to wildfires. Thousands of people who live in the so-called wildland-urban interface — the border between rural areas and cities — have been affected in recent years as the same scenario plays out with stunning familiarity.

Regulators sought solutions for this problem once before and in 2014 began requiring utility companies to report when there is a fire incident on one of their power lines. Over a four-year period, there have been 2,009 such incidents reported — many of them small.

The data, obtained from the California Public Utilities Commission, show that PG&E experiences significantly more fire incidents than other large utilities in the state. One reason could be the nature of its service area which includes many of the state's rural counties in the north. But the frequency is still stark when compared to others, including Southern California Edison which serves a customer base similar in size to PG&E's.

Pacific Gas & Electric (PG&E) reported 1,552 fire incidents from its equipment between 2014-2017. Fire investigators have found the company's infrastructure at fault for some of California's worst fires in that last three years.

Southern California Edison reported 347 such incidents in the same time period.

San Diego Gas & Electric reported 110 incidents in the same period of time.

Power lines keep sparking wildfires. Why don't California utility companies bury them?

By Tony Bizjak, Sophia Bollag And Dale Kasler

November 16, 2018

https://www.modbee.com/news/state/california/article221707650.html

Cal Fire investigators this summer said they believe at least 17 major wildfires in Northern California last year were caused by problems with power lines.

State regulators point out that overall, only about 10 percent or less of the state's wildfires are triggered by power line issues. But they acknowledge the state's 176,000-mile system of overhead electrified lines has played a role in igniting some of the biggest and most destructive fires in recent years.

So why not bury the problem?

One California utility company plans to do that. San Diego Gas & Electric officials said next year they will begin converting 20 miles of overhead wires to underground in a high fire-risk area around Cuyamaca Rancho State Park and the town of Campo, where the U.S. Department of Homeland Security Border Patrol has a station.

Officials at PG&E, which serves much of Northern California, said they are working on a test project that would put power lines underground along the Bohemian Highway in Sonoma County where thousands live among densely wooded hillsides.

The state's top electricity safety regulatory official, Elizaveta Malashenko of the California Public Utilities Commission, said running power lines underground is far from a panacea. And, in most cases, it's simply not worth the cost, she said.

"Underground is about 10 times more expensive than overhead," said Malashenko, who is the PUC safety and enforcement division director. "If we were to underground (throughout) California, all our

rates would go up ten times."

But Malashenko and others acknowledge the cost of undergrounding in some areas may be viewed more favorably if the financial and human costs of fires continue to mount in California.

PG&E-friendly wildfire bill being prepared by state lawmakers in wake of lethal Butte County inferno

By <u>George Avalos</u> | Bay Area News Group November 21, 2018

https://www.chicoer.com/2018/11/21/pge-friendly-wildfire-bill-being-eyed-by-state-lawmakers-inwake-of-lethal-butte-county-inferno/

The idea behind the anticipated legislative framework would be to ensure that financial liabilities arising from any destructive wildfires in 2018, like the Camp Fire in Butte County, don't destabilize a big utility, such as PG&E.

Gov. Jerry Brown in September signed SB 901, a sweeping bill designed to remedy California's past, present and future wildfire ailments, brushing aside criticism that the measure was a bailout for PG&E, which faces a troubling mountain of liabilities linked to infernos that torched the Wine Country and other regions in October 2017.

That bill created a smoother path for state regulators and PG&E to pass on costs to the company's customers with higher monthly power bills. SB 901 requires the powerful state Public Utilities Commission to set up a stress test to determine the maximum amount that a utility and its shareholders can bear, without crossing into bankruptcy. SB 901 contained a narrowly worded provision to include the Wine Country firestorms, a number of which have been deemed to be caused by PG&E equipment.

The new legislation would appear to remedy what's now viewed as a flaw in SB 901, which applied primarily to liabilities from fires in 2017 as well as potential blazes occurring in 2019 and years after that, but didn't specifically apply to fire catastrophes in 2018.

Camp Fire damages could top \$7 billion. Will PG&E get more protection?

By Dale Kasler

November 21, 2018 09:43 AM

https://www.modbee.com/news/state/california/article222020640.html

An insurance risk consultant has pegged financial damages from the Camp Fire at \$7.5 billion to \$10 billion, as a Democratic assemblyman prepares legislation that could provide additional protection for beleaguered utility PG&E Corp. from some of the potential liabilities.

Assemblyman Chris Holden, D-Pasadena, chairman of the Utilities and Energy Committee, is preparing to introduce legislation that would extend financial protections for PG&E and other utilities beyond what <u>was provided in SB 901</u>, which was signed into law in September by Gov. Jerry Brown.

Among other things, the law says the Public Utilities Commission must take into account the company's financial state when deciding how much of the costs must be shouldered by ratepayers, as opposed to the utility's shareholders. But that provision only applies to the 2017 fires.

The company filed for bankruptcy in 2001, when its finances were bled dry during the energy crisis.