



Seen in a long exposure photograph, the Park Fire burns along Highway 32 in the Forest Ranch community of Butte County, Calif., on Thursday, July 25, 2024. (AP Photo/Noah Berger)

California Water and Infrastructure Report

For August 1, 2024

(With expanded coverage of all the Western States)
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>

<https://www.facebook.com/CaliforniaDroughtUpdate>

A Note to Readers

Just three topics are covered this week, in addition to the *U.S. Drought Monitor* for California.

The first, under the title, “*The Presidential Campaign and California Water,*” will run when articles are available from now until the Presidential election.

The second section this week highlights the continuing explosive wildfire environment throughout the

west. In California alone: “Through July 30, a total of 629,581 acres burned in wildfires in California.” And, “this year’s total is four times the average of the prior 10 years — 152,481 acres. And it represents the second-most acres burned statewide through July 30 in any year since 1995, when the National Interagency Fire Center began tallying daily totals.

A chart that shows the historic number of fires for this date in California since 1995 illustrates that.

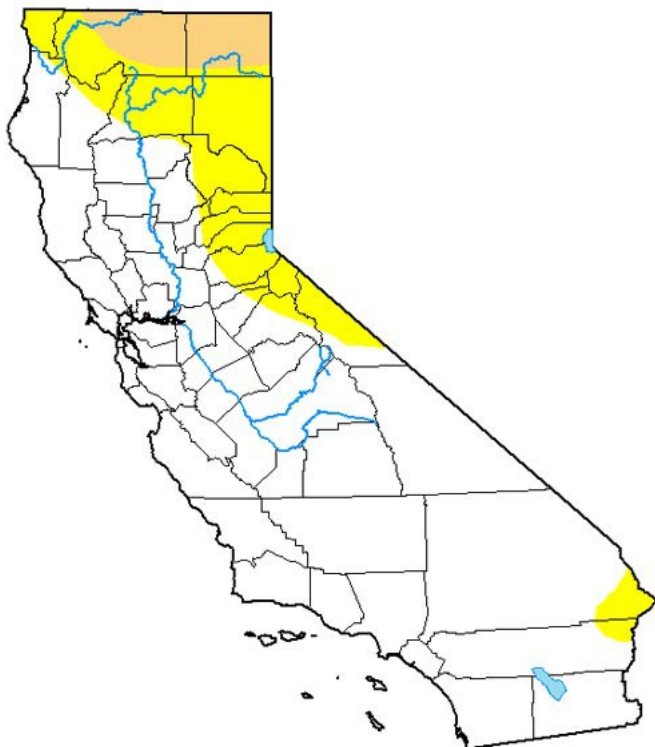
“Though these regions are no strangers to fire, experts say the pace at which some of the blazes have intensified [is shocking](#). As thousands flee under evacuation orders, firefighters are flooding in to help, but they’re struggling to contain the fires amidst a unique climate-fueled cocktail of conditions.”

The last section this week is the **Feature**, and it is the full report by Michael Carr, titled, “*Physical Economy and Technology Report for July 26, 2024.*”

The U.S. Drought Monitor for California

July 30, 2024

U.S. Drought Monitor California



July 30, 2024

(Released Thursday, Aug. 1, 2024)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	78.78	21.22	4.44	0.00	0.00	0.00
Last Week 07-23-2024	78.80	21.20	4.44	0.00	0.00	0.00
3 Months Ago 04-30-2024	97.32	2.68	0.00	0.00	0.00	0.00
Start of Calendar Year 01-02-2024	96.65	3.35	0.00	0.00	0.00	0.00
Start of Water Year 09-26-2023	94.01	5.99	0.07	0.00	0.00	0.00
One Year Ago 08-01-2023	74.43	25.57	6.52	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Lindsay Johnson
National Drought Mitigation Center



droughtmonitor.unl.edu

The Presidential Campaign and California Water

With the presidential election less than 100 days away, when articles are available I will run them under the topic above. Unfortunately, the first article below is behind a pay wall, so we have just the opening paragraphs of it.

The third article is from an environmentalist source, so take that into account when reading it.

Kamala Harris' slow flow in California water wars

By *Camille von Kaenel* | 07/31/2024 01:06 PM EDT

<https://www.eenews.net/articles/kamala-harris-slow-flow-in-california-water-wars/>

The now-presidential candidate has a thin record on water and agriculture despite coming from the nation's biggest farming state.

SACRAMENTO, California — Vice President Kamala Harris' record on water and agriculture is remarkably thin for someone hailing from the state with the biggest agricultural industry in the country.

Her California roots would theoretically give her unique insight into agriculture in the West, where water supply is farmers' top priority in a way it isn't in the rest of the country. But an ambitious statewide politician like her could afford to steer mostly clear of the [high-risk, low-reward](#) century-old water wars — and did — because only a small voting bloc in the Central Valley really made them a priority.

As California's attorney general, she oversaw routine representations of the state water regulator and defended California water law from preemption, but left no political wake like she did on other environmental causes — namely her investigation of Exxon Mobil. Later, she ceded most of the heady policymaking to the late Sen. Dianne Feinstein, a [colossus of water politics](#), during her stint as California's junior senator, longtime agricultural observers said.

“Something as complicated as California water just wasn't going to be something she was going to tackle when she was there,” said Cannon Michael, a melon and tomato farmer and chair of the San Luis & Delta Mendota Water Authority, which supplies water to 1.2 million acres of irrigated farmland in the Central Valley. “She's sort of a blank slate in terms of what she would do about water.”

The farmers who love JD Vance

By [DEBRA KAHN](#)

07/31/2024 07:06 PM EDT

https://www.politico.com/newsletters/politico-nightly/2024/07/31/the-farmers-who-love-jd-vance-00172175?mc_cid=563fb6f573&mc_eid=8466c94ced

‘WEIRD LIKE HIM’ — Republican vice presidential nominee JD Vance has had a rough week. But you wouldn't know it from today's fundraiser in Coalinga, Calif., where he got a warm reception from California's farming community.

California Republicans were quick to brush off his positions on [“childless cat ladies”](#) — and eager to turn Democratic messaging on its head by rallying behind the embattled Ohio senator.

“We're weird like him,” said Barbara Hallmeyer, a retired high school drama teacher and a California Republican Party delegate attending the fundraiser.

Vance's greeting is a measure of Trump's continuing grip on the farm vote and among rural voters, whom he won by a large margin in 2020, according to exit polls. But it's also a sign that, despite worries in some quarters of the party that Vance is a liability to the ticket, key elements of the GOP base remain supportive even after a wave of negative press coverage surrounding his provocative statements.

In the immediate aftermath of Vance's nomination, top Republicans on the House and Senate Agriculture Committees argued that Vance's Appalachian upbringing will enable him [to connect with voters from rural areas](#).

Vance didn't mention his troubles at Harris Ranch, a beef-processing behemoth and adjacent hotel that serves as a political watering hole and an oasis for weary I-5 drivers despite the steady miasma surrounding it that's [earned it the unwanted sobriquet](#) 'Cowschwitz.'

"It does smell like cows," Hallmeyer conceded. "Others say it smells like money."

Vance's story of a hard-scrabble upbringing resonated with the farmer-heavy crowd, who've faced steadily dwindling water deliveries to the arid Central Valley and a long-nurtured sense of grievance against the state's Democratic leaders whom they blame for diverting too much of it to endangered fish species.

"We are an endangered species," said William Bourdeau, a co-host of the event and a vice president at Harris Farms.

Bourdeau said he originally thought the crowd of roughly 150 attendees wouldn't be able to match Vance's haul in Silicon Valley on Monday, where Vance touted deregulation and drummed up antipathy to SEC Chair Gary Gensler.

But they ponied up at relatively similar levels, he said, without disclosing specific dollar figures.

It's a reminder that for groups like pistachio and melon farmers, the water wars are what they really care about. Most farmers here have no fondness for the current Democratic administration, despite Vice President Kamala Harris' California roots and despite [the Biden White House's outreach to rural America](#) through financial support for climate-friendly farming strategies and the fact that [farm income rose under Biden](#) in his first three years in office.

"Joe Biden and Kamala Harris, they don't care about us," said Steve Samra, a grower of pistachios, corn, tomatoes and cotton who dismissed Vance's troubles as a media concoction.

Vance discussed the region's water situation in general terms and the need to maintain food security, according to one attendee.

It would take a lot to loosen Trump's grip on the Central Valley. Despite trade policies that harmed many farmers, residents here fondly remember his appointment of David Bernhardt, a veteran lobbyist for the region's largest water supplier, Westlands Water District, as Interior secretary, and the former president's vocal support for the agricultural industry even before that."

How Kamala Harris and Donald Trump Compare on Climate Change

Harris has said, "the urgency of this moment is clear." Trump has called climate change a "hoax"

By [Yale Climate Connections](#)

[July 31, 2024](#)

<https://impakter.com/how-kamala-harris-and-donald-trump-compare-on-climate-change/>

With President Joe Biden's exit from the 2024 presidential race, Vice President Kamala Harris appears likely to secure the Democratic Party's nomination for president.

As vice president, Harris cast the tiebreaking vote in the passage of the Biden administration's signature achievement on climate change, the Inflation Reduction Act.

As Yale Climate Connections contributor Barbara Grady previously [reported](#), "The most far-reaching climate law in history, the Inflation Reduction Act is catalyzing a transition in the U.S. economy toward cleaner energy and cleaner transportation – a shift the [International Energy Agency](#), the U.N. Intergovernmental Panel on Climate Change, and others say must happen for the world to reduce emissions of heat-trapping gases to the levels scientists say would avert the most catastrophic and irreversible climate chaos."

Harris has made clear throughout her career that she views climate change as a significant threat. Speaking at the 2023 [United Nations climate summit in Dubai](#), she [told leaders](#), "Across our world, communities are choked by drought, washed out by floods, and decimated by hurricanes. Wildfire smoke darkens our skies, and rising seas threaten the lives and livelihoods of millions of people. The urgency of this moment is clear. The clock is no longer just ticking, it is banging. And we must make up for lost time."

In contrast, Trump has falsely called climate change a hoax. During his term as president, as Grady reported, "he overturned an estimated [100 environmental regulations](#) and pulled the U.S. out of the Paris Agreement. He shrank the EPA and required that the words 'climate change' be removed from its website. On the campaign trail this time, he has repeatedly said one of his top priorities is to boost oil and gas production and free up more public land to '[Drill, baby, drill.](#)'"

The Fire This Time



Seen in a long exposure photograph, the Park Fire burns along Highway 32 in the Forest Ranch community of Butte County, Calif., on Thursday, July 25, 2024. (AP Photo/Noah Berger)

[wildfire news](#)

California's Largest Wildfire of 2024 Devastates Communities and Structures

Latest Update: July 31, 2024

The Park Fire, California's largest wildfire of the year, has grown to **over 353,000 acres** by Sunday morning, making it the seventh largest in state history. It has destroyed at least **134 buildings** and prompted **evacuations** in **Butte** and **Tehama counties**. **Paradise** is currently under an **evacuation warning**. Current **containment** is at **12%**.

INSIDE CLIMATE NEWS: Supercharged by climate change, Western megafires explode simultaneously

[Inside Climate News](#)

July 31, 2024

<https://mavensnotebook.com/2024/07/31/inside-climate-news-supercharged-by-climate-change-western-megafires-explode-simultaneously/>

Heat waves and “flash droughts” fuel intense fires in California, Oregon and Canada.

By Kiley Price, *Inside Climate News*

This article originally appeared on [Inside Climate News](#), a nonprofit, independent news organization that covers climate, energy and the environment. It is republished with permission. Sign up for their newsletter [here](#).

In western North America, wildfire season is in full swing—and well on its way toward setting records. Over the past two weeks, infernos have been tearing through parts of California, Oregon and Canada, leaving scorched trails in their wake.

Though these regions are no strangers to fire, experts say the pace at which some of the blazes have intensified [is shocking](#). As thousands flee under evacuation orders, firefighters are flooding in to help, but they're struggling to contain the fires amidst a unique climate-fueled cocktail of conditions.

Big Fires Everywhere: Across the western U.S. and Canada, a series of heat waves, droughts and strong winds boosting the growth of fires this season.

Charred Towns: The intense nature of these fires has made them extremely difficult to fight. In California, around [4,800 firefighters have been deployed](#) to the Park Fire, but only around 14 percent is contained so far. Four counties are under evacuation orders as the blaze scorches residents' cars, homes and belongings, [CBS News reports](#). Firefighters have had better luck containing the large Durkee fire in eastern Oregon, [with a little help from a recent rainstorm](#), but not before it burned through swaths of rangeland.

Meanwhile, in Canada, much of Jasper has been reduced to charred piles of wood and rubble. Jasper's mayor, Richard Ireland, said the destruction is “almost beyond comprehension” and could have long-term consequences for the town's economy, which depends on tourism. About 20,000 tourists and 5,000 residents [fled](#) the idyllic mountain resort town last week.

It's not just Canada's economy that could suffer in the face of wildfire-related destruction: A forthcoming report by economic analysis group IMPLAN finds that wildfires could cost the U.S. economy nearly \$90 billion this year, [Heatmap News reports](#).

California wildfires off to explosive start, burning 30 times as many acres as all of last year

Hannah Fry, Jon Healey

Wed, July 31, 2024 at 3:00 AM PDT·3 min read

<https://www.yahoo.com/news/california-wildfires-already-charred-30-100004278.html>

Summer isn't even half over in California, and wildfires have already scorched more than 763,000 acres, straining firefighting resources, forcing evacuations and destroying homes.

The total dwarfs the average amount burned over the last five years. As of Wednesday morning, 4,665 fires have charred through more than a dozen counties spanning from Siskiyou to San Diego.

The most recent, the [Nixon fire](#) in Riverside County, continues to burn out of control. As of Wednesday morning, it was only 5% contained, according to the California Department of Forestry and Fire Protection.

Last year's wildfire season was unusually tame, but there were still 3,746 infernos that burned 25,932 acres — an area nearly the size of San Francisco. In 2022, 7,477 wildfires burned 331,358 acres, according to Cal Fire data.

The Park fire — which started a week ago in Butte County and has spread to Plumas, Shasta and Tehama counties — is by itself larger than all the fires in 2022. The fifth-largest wildfire in the state's history, it has scorched almost 390,000 acres and remains only 18% contained, Cal Fire reported Wednesday.

Two wet winters back to back fed grasses and other vegetation that then dried out during intense heat waves this summer. Those bone-dry grasses are fodder for explosive wildfire growth when paired with above-average temperatures and strong winds.

This story originally appeared in [Los Angeles Times](#).

California experiencing most severe start to wildfire season in 16 years-- Abundant vegetation and heat waves contribute to most acres burned since 2008

By [Paul Rogers](#) | progers@bayareanewsgroup.com | Bay Area News Group

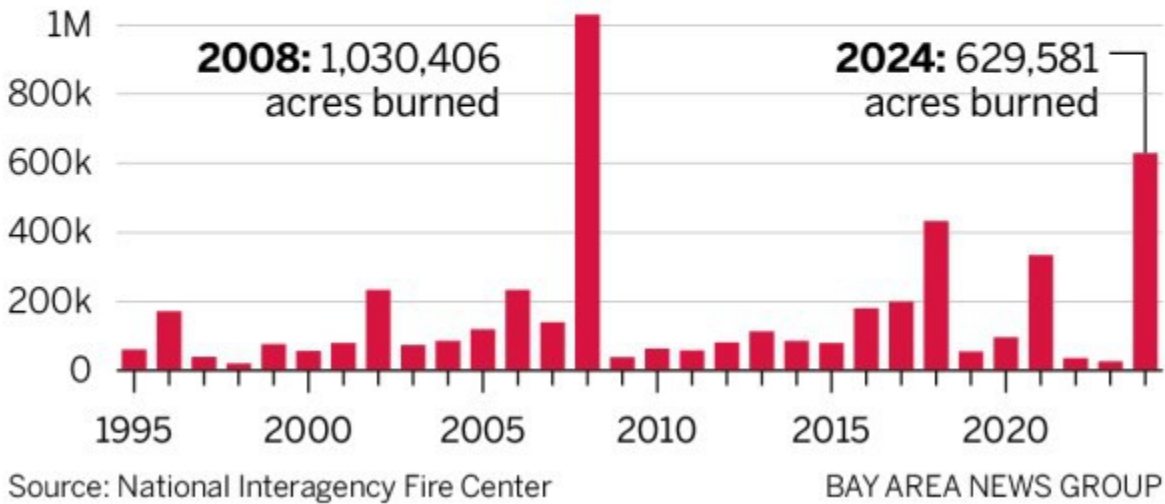
UPDATED: July 31, 2024 at 5:01 p.m.

https://www.mercurynews.com/2024/07/31/california-experiencing-most-severe-start-to-wildfire-season-in-16-years/?utm_email=452034416564659205A55473A5&lctg=452034416564659205A55473A5&active=no&utm_source=listrak&utm_medium=email&utm_term=https%3a%2f%2fwww.mercurynews.com%2f2024%2f07%2f31%2fcalifornia-experiencing-most-severe-start-to-wildfire-season-in-16-years%2f&utm_campaign=bang-mult-nl-pm-report-nl&utm_content=curated

A HISTORIC CALIFORNIA WILDFIRE SEASON

After two relatively mild years in a row, California is off to its most severe wildfire season in 16 years.

Total acres burned in California by July 30 from 1995-2024



Through July 30, a total of 629,581 acres burned in wildfires in California — an area twice the size of the city of Los Angeles — according to the National Interagency Fire Center’s daily reports. The center’s numbers are lower than Cal Fire’s totals, because its daily reports count only grass fires larger than 300 acres and timber fires larger than 100 acres..

By comparison, this year’s total is four times the average of the prior 10 years — 152,481 acres. And it represents the second-most acres burned statewide through July 30 in any year since 1995, when the National Interagency Fire Center began tallying daily totals.

Feature

Physical Economy and Technology Report for July 26, 2024

By Michael Carr

<https://www.prometheanaction.com/physical-economy-and-technology-report-for-july-26-2024/>

The Republican National Convention adopted President Trump's short, 16-page platform dedicated to the forgotten men and women of America. Much of it reflects "common sense" and Trump's Agenda47 program. It's implementation will begin the revival of our economy, but it is simply a first step.

Posts in today's report:

- Republican National Convention Adopts Platform for Real Growth
- Pat Ruckert: Logging Can Minimize Forest Fire Damage
- Some Fusion Updates

- A Dual-Mode Ramjet Was Developed and Tested by GE Aerospace in Less Than 11 Months
- American Maglev: Another Scalp for British Empire Environmentalists
- NASA Announces Cancellation of VIPER Moon Rover Mission

Republican National Convention Adopts Platform for Real Growth

The Republican National Convention adopted President Trump's short, 16-page platform dedicated to the forgotten men and women of America. Much of it reflects "common sense" and Trump's Agenda47 program. It's implementation will begin the revival of our economy, but it is simply a first step. Promethean Action will soon release documentation on the follow-on measures that will be required to truly Make America Great Again. In the meantime, we encourage you to read the platform and Brian Lantz's new book on the subject listed below.

[2024 Republican Party Platform | The American Presidency Project](#)

 [The American Presidency Project](#)



Click below to get Brian Lantz's new book.

https://www.amazon.com/What-Trusts-Agenda47-Can-U-S/dp/B0D8V9LPLJ/ref=sr_1_1?ref=prometheanaction.com



Fighting a forest fire in Oregon. November 30, 2014. Photo Cole Barash / US Forestry Service / flickr

For some time, long-time Lyndon LaRouche collaborator, Pat Ruckert, has been compiling the "California Water and Infrastructure Report." He uses this medium to expose suicidal "environmental operations" and to support those people fighting to keep and develop productive activities in the West. His reports will now become a regular included feature of the Promethean Action Physical Economy and Technology Report. In this posting, Pat highlights a significant article in *Ag Alert* by Edward Ring which details the way that a revival of scientific logging can preserve Western forests and grow the water supply.

- <http://www.californiadroughtupdate.org/California-Water-and-Infrastructure-Report-July-11%2C-2024.pdf>

COMMENTARY: Logging can protect forests, increase water supplies

By Edward Ring, Ag Alert Practical solutions to California's energy and water shortages will always have a better chance of being implemented if they adhere

MAVEN'S NOTEBOOK | California Water News CentralAg Alert



Some Fusion Updates

Here are some of the latest developments in fusion energy breakthroughs and research. Techcrunch.com reports that Commonwealth Fusion Systems is selling core magnet tech to the University of Wisconsin. The company is shipping a pair of its specialized magnets to the University of Wisconsin-Madison. Next, fusion energy companies are uniting to accelerate production of commercial power. A recent ITER (International Thermonuclear Experimental Reactor) workshop brought together CEOs and senior scientists from private fusion startups. The workshop discussed combining technologies from magnetic and laser fusion experiments which could accelerate the development of practical fusion power.

Fusion pioneer Commonwealth Fusion Systems is selling core magnet tech to the University of Wisconsin | TechCrunch

Fusion power may still be a few years away, but one startup is laying the groundwork for what it hopes will become a bustling sector of the economy.

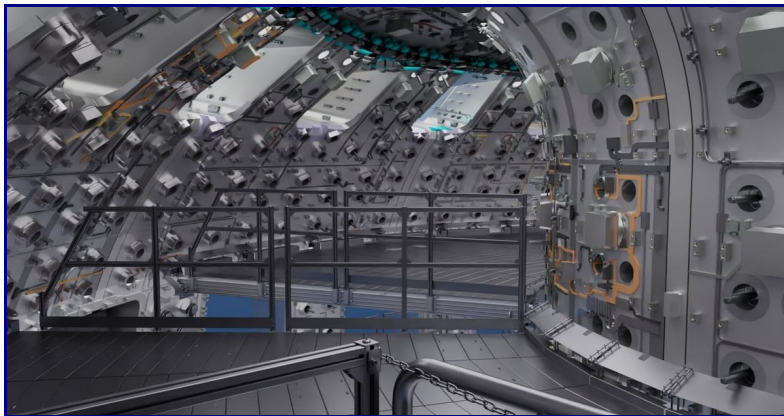
TechCrunchTim De Chant



[Fusion energy companies unite to accelerate commercial power](#)

[A recent ITER workshop bringing together almost 50 CEOs and senior scientists from private fusion startups suggests that combining the technologies from magnetic and laser fusion experiments could accelerate the development of practical fusion power.](#)

[New AtlasITER](#)



[A Dual-Mode Ramjet Was Developed and Tested by GE Aerospace in Less Than 11 Months](#)

A dual-mode ramjet was developed and tested in less than 11 months by GE Aerospace. It features rotating detonation combustion (RDC) in a supersonic flow stream.

- <https://interestingengineering.com/innovation/ge-aerospace-hypersonic-dual-mode-ramjet>

[GE Aerospace Demonstrates Hypersonic Dual-Mode Ramjet with Rotating Detonation Combustion | GE Aerospace News](#)
[footer logo](#)

American Maglev: Another Scalp for British Empire Environmentalists

The proposed building of a Japanese-designed superconducting passenger maglev rail line in the American Northeast Corridor has been studied to death. It will take the intervention of the new Trump Administration to revive this basically dead project. Even in Japan, the opening of the maglev line from

Tokyo to Nagoya has been delayed by environmental obstructionists, so that it is not likely to offer service before 2034. By contrast, in China, work is quickly proceeding on passenger maglev in very low pressure tunnels.

- https://www.bayjournal.com/news/pollution/not-so-fast-maryland-high-speed-train-project-hits-skids/article_332ae686-fdbf-11ee-ae7a-8bb4a47e0084.html

'Commuting 400 kms in around half an hour': China's latest maglev development could change how cities work

China has the world's fastest train but it wants to push speeds even higher. It has recently run a train through a low-vacuum tube at speeds of more than 600 kph — but the designers want it to ultimately reach a blistering 4,000 kph.



ABC News Michael Li and Toby Mann

JR Tokai gives up on 2027 maglev target date for opening

JR Tokai gave up the 2027 goal as the Shizuoka Prefectural Government has declined to approve tunnel drilling work due to environmental concerns.

The Japan Times The Japan Times



NASA Announces Cancellation of VIPER Moon Rover Mission

NASA has cancelled its VIPER rover mission to the Moon after a cost overrun that could not be avoided. NASA currently has terrible budget rules which forces missions to be cancelled after a 30% cost overrun. The VIPER mission was fully constructed and waiting to be tested and flown. Additionally, NASA is still contracted and required to pay Astrobotic to fly a NASA payload, so instead of just flying the rover that was almost ready to go, they are instead flying "ballast" to the moon. Meanwhile, NASA solicited ideas from private industry to make use of the existing rover without NASA putting out any further outlay on the project! This is completely backward. Government must fund such research programs.



The VIPER Moon rover in Houston. It's mission was just cancelled!