



The San Francisco Bay Delta: Surrounded by the fields of California's Central Valley, where generations of farmers have toiled to feed a nation, a quiet battle for survival unfolds. See article on page 4. (Photo credit: <https://sjvsun.com/ag/its-time-for-equilibrium-in-calif-s-water-policies/>)

California Water and Infrastructure Report

For March 21, 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>

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A Note to Readers

Like the Biden administration, the Gavin Newsom administration in California is spending billions it does not have. Meanwhile, both administrations, with their green agendas and woke policies leave Americans homeless, drug addicted and without the basic infrastructure that an advanced industrial economy requires.

The first item this week focuses on California's tens of billions short on its proposed budget. Meanwhile, the State Water Board puts forward one policy after another that simply applies more and more conservation as the state's response to now virtually perpetual water crisis the state is in.

And, even though the state is number one in attempting the impossible, that is a zero-carbon economy, it is failing at that, and higher electricity costs in the state are about to undermine the cost difference between EV's and gas-powered vehicles.

Never mind that this winter and the last ensure water for at least this year without once again draining the reservoirs, and a adequate snowpack in the Sierra's and the Rockies ensures that the Colorado River reservoirs will not face a game-breaking crisis.

The section titled, "*California's War Against Agriculture, and the Population*," provides the details of the water policies, which are being fought against.

On the positive side, with more funding being made available for building the Sites Reservoir, a project proposed 50 years ago, construction will begin in 2026. The article, "*Sites Reservoir Aims to Reshape California's Water Landscape*," provides an excellent summary.

While the state maintains that it does want to promote the building of desalination plants, Newsome's Coastal Commission nixed the proposed large plant in Huntington Beach more than a year ago. Attempting to recover some credibility, this report, "*The potential for brackish desalination in California*," attempts to show that the state is serious.

This week's report on the Colorado River is a mixture of articles on the healthy snowpack and the ongoing tense negotiations among the seven states that receive water from the river on how to divide up the rationing required in the years ahead.

The final section, hi-lighting a most important principle about human creativity and determination is an excellent article, "*The Man-Made Miracle of SpaceX*."

California Budget Is Out Of Control

California audit finds state is broke: \$55 billion more owed than available

California currently faces a \$73 billion deficit for the 2024-2025 fiscal year.

By Kenneth Schrupp | The Center Square

March 21, 2024 7:16am

https://justthenews.com/nation/states/center-square/california-audit-finds-state-broke-55-billion-more-owed-available?utm_source=daily&utm_medium=email&utm_campaign=newsletter

California just filed its 2021-2022 audited financial [statement](#), 350 days past the filing deadline. In its filing, the state admits that COVID-era unemployment fraud cost the state \$29 billion that must be paid back to the federal government, and that in 2022, the state had \$256 billion more in liabilities than it had in unrestricted resources.

California currently faces a \$73 billion deficit for the 2024-2025 fiscal year, to which the Democratic legislature has responded with a [proposal](#) to cut this year's budget by \$2.1 billion and a proposal to spend \$12 billion, or half the state's rainy day fund. With the state reducing 2023 jobs growth from 325,000 to just 50,000, revenues are likely to be much lower than expected. With a significant expansion of benefits, including expanding taxpayer-funded MediCal to all illegal immigrants, and a major shift in illegal immigration from heavily-enforced Texas to California instead, state expenditures could end up being higher than expected.

Meanwhile the state legislature Has Other Priorities

California lawmakers explore treating happiness as a public policy issue

Nicole Nixon / CapRadio
March 17, 2023

<https://wamu.org/story/24/03/17/california-lawmakers-explore-treating-happiness-as-a-public-policy-issue/>

The California State Assembly's Committee on Happiness and Public Policy Outcomes, inspired by a blockbuster documentary, has had its first meeting. It was an event 11 years in the making.

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***Newsom and Democrats announce a plan to reduce the enormous budget deficit.
How? TBD***

https://www.latimes.com/california/story/2024-03-21/newsom-and-lawmakers-announce-plan-to-cut-at-least-12-billion-off-deficit-with-no-details?sfmc_id=6532a5a425b3640666ca92e4&skey_id=6db2331126616219987ac0f7ab0fc72e0d3e868746581fd84c4475ea3bf2772f&utm_id=34772649&utm_source=Sailthru&utm_medium=email&utm_campaign=NLTR-Email-List-California%20Politics&utm_term=Newsletter%20-%20California%20Politics

California's War Against Agriculture, and the Population

Last week we reported on the adopted policy of rationing water by the State Water Board. This week a state Supreme Court decision opened a new front by the state in that war.

First I include below one of the reports on the rationing policy, followed by articles on the court decision.

Finally, in this section, one response by one of the hundreds of water districts that will see their allocated water reduced from the court decision.

California weakens plan for mandatory cutbacks in urban water use, yielding to criticism

RACHEL BECKER

CALMATTERS

March 13, 2024, 8:47AM

The revised proposal grants water providers an extra five years for reducing outdoor irrigation. | <https://www.pressdemocrat.com/article/news/california-weakens-plan-for-mandatory-cutbacks-in-urban-water-use-yielding/?ref=recent>

The revised proposal grants water providers an extra five years for reducing outdoor irrigation. |

California policy protecting major rivers upheld in long-awaited court decision

By [Kurtis Alexander](#) March 18, 2024

https://www.sfchronicle.com/california/article/delta-river-water-court-19212221.php?utm_source=marketing&utm_medium=copy-url-link&utm_campaign=article-share&hash=aHR0cHM6Ly93d3cuc2ZjaHJvbmljbGUuY29tL2NhbGlmb3JuaWEvYXJ0aWNsZS9kZlWx0YS1yaXZlci13YXRlci1jb3VydC0xOTIxMjIyMS5waHA%3D&time=MTcxMDgxNzcwNjMzNw%3D%3D&rid=OWU3MmE4YmItMmFIMy00MGQ5LThiODAtODZhMTdhNDViM2Rk&sharecount=Nw

[%3D%3D](#)

A state policy that seeks to protect California's major rivers and creeks by cracking down on how much water is pumped out by cities and farms can move forward despite widespread opposition, the Superior Court has ruled.

The long-awaited decision on what's known as the Bay-Delta Plan denies 116 claims in a dozen separate lawsuits that seek to undo a 2018 update to the policy, most of which are from water agencies saying the [limits on their water draws](#) go too far.

The 160-page verdict, released Friday by Sacramento County Judge Stephen Acquisto, specifically notes that arguments made by San Francisco against the regulation fell short. The city, which gets most of its water from the Tuolumne River in and around Yosemite National Park, has claimed that regulators showed preference for safeguarding fish and wildlife instead of defending Bay Area water supplies, ratepayers and economic growth.

"This is a win for the (state water) board and the board's authority to help protect fish," Michael Lauffer, chief counsel for the State Water Resources Control Board, told the Chronicle.

The Bay-Delta Plan is intended, most fundamentally, to halt the decline of the Sacramento-San Joaquin River Delta. The region is the hub of the state's river flows and an ecological hot spot. However, decades of overpumping waterways from Fresno to the Oregon border has left less water flowing into the delta, undermining the estuary's ability to both supply water to communities and nurture wildlife, notably salmon runs. It also means less fresh water flowing into San Francisco Bay.

Friday's court ruling is widely expected to be appealed.

It's time for equilibrium in Calif.'s water policies

William Bourdeau is executive vice president of Harris Farms, owner of Bourdeau Farms, director of the Westlands Water District, and chairman of the [Valley Future Foundation](#).

An upcoming push by Federal water managers to choke off water to the Valley has a myriad of negative consequences, writes William Bourdeau for Sun View.

[by William Bourdeau](#)

March 18, 2024

<https://sjvsun.com/ag/its-time-for-equilibrium-in-calif-s-water-policies/>



Surrounded by the fields of California's Central Valley, where generations of farmers have toiled to feed a nation, a quiet battle for survival unfolds.

As a cultivator of this land, we stand at the crossroads of tradition and conservation, where every drop of water holds the promise of life and the threat of scarcity. In our quest to sustain the legacy of the

valley, we navigate an evolving maze of regulations that shape our destiny.

In this state, where the soil is as diverse as its people, agriculture forms the cornerstone of our economy and culture. Yet, the lifeblood of our fields—water—is entangled in a complex web of environmental, societal, and regulatory challenges.

The recent [tightening of water diversions](#), under the guise of protecting in some cases likely abundant Steelhead populations, underscores a troubling trend that risks the very foundation of our agricultural heritage.

This isn't merely about irrigation; it's about maintaining a lifeline for crops that millions depend upon.

The ramifications of reduced water allocations extend far beyond the boundaries of our farms. They ripple through the economy, diminishing food security and elevating prices at the grocery store.

Sites Reservoir Update

Sites Reservoir Aims to Reshape California's Water Landscape



(Credit: Sites Reservoir)

by [Staff Writer](#) | Mar 19, 2024

<https://www.environmentenergyleader.com/2024/03/sites-reservoir-aims-to-reshape-californias-water-landscape/>

Colusa County, California, could soon be home to the largest new reservoir in the state in 50 years.

In accordance with the Bureau of Reclamation's recommendation, Congress greenlit the allocation of \$205.6 million in federal funding for the [Sites Reservoir Project](#) under the [Water Infrastructure Improvements for the Nation Act](#) (WIIN Act). This act aims to enhance water infrastructure nationwide through grants. Notably, this allotment represents the largest single WIIN Act grant designated for a storage project.

Impact on California's Water Management

Known for its sprawling rice farms, almond orchards, and conservative politics, the county, with a mere 22,000 population, has its hopes pinned on this \$4.5 billion project that has been discussed since the 1950s. This project, led by the Sites Project Authority, can potentially alter the county's reputation and leverage it as a fundamental player in California's water management.

The reservoir, envisioned to be 13 miles long, 4 miles wide, and 260 feet deep, would store water diverted from the Sacramento River in wet years. This storage would then serve both cities and farms

around the state in dry years. The potential Sites Reservoir would rank as California's eighth-largest, four times the size of the Hetch Hetchy Reservoir in Yosemite National Park. It aims to supply water to 500,000 acres of Central Valley farmlands and 24 million inhabitants, including those in Silicon Valley, the East Bay, and Los Angeles.

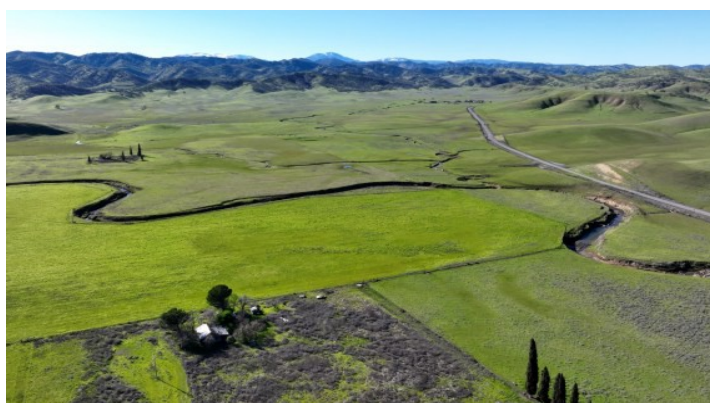
Plans for the groundbreaking have been set for 2026, with construction completion by 2032. This would make Sites the largest new reservoir in California since New Melones Lake's opening in 1979.

Sources of Funding

In 2023, Sites Reservoir secured \$30 million in funding from the Bureau of Reclamation under the Infrastructure Investment and Jobs Act. This latest investment brings the project's total federal contributions to \$439.3 million, including \$379.3 million from the WIIN Act and \$60 million from the Infrastructure Investment and Jobs Act. This sum covers the current estimated capital cost for the allocated 9% participation planned for Reclamation's use.

With the latest funding approval, the project now boasts more than 90% of its financial lining from various sources including a \$2.2 billion loan invitation from the U.S. Environmental Protection Agency (EPA), \$875 million from Proposition 1, a water bond approved by voters in 2014, and \$60 million from Biden's Bipartisan Infrastructure Act.

California's largest new reservoir project in 50 years gains momentum. \$205 million from Congress is latest boost for Sites Reservoir, but can it overcome opposition?



A drone view of the landscape near unincorporated Sites, Calif., on Thursday, March 14, 2024. Congress has awarded \$205 million to the Sites Reservoir, proposed to be constructed in rural Colusa County. The 1.5 million-acre-foot reservoir would be California's eighth largest at 13-miles long and would submerge some of the area shown. (Jane Tyska/Bay Area News Group)

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

PUBLISHED: March 17, 2024 at 6:00 a.m. | UPDATED: March 17, 2024 at 12:02 p.m.

<https://www.eastbaytimes.com/2024/03/17/largest-new-reservoir-project-in-50-years-in-california-gains-momentum/>

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REPORTS: The potential for brackish desalination in California

[Maven](#)

[Report](#)

March 18, 2024 0 84

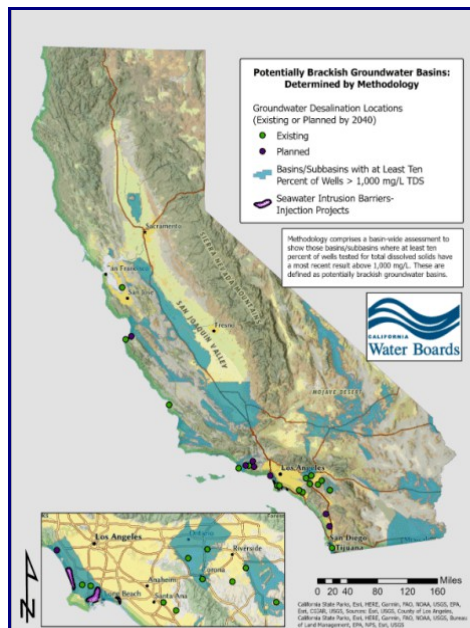
<https://mavensnotebook.com/2024/03/18/reports-the-potential-for-brackish-desalination-in-california/>

In 2017, [a nationwide assessment by the U.S. Geological Survey](#) found that [brackish](#) groundwater in the nation's [aquifers](#) is more than 800 times the amount currently used yearly. California's Coastal Basin and Central Valley aquifers contain close to 7 billion acre-feet of brackish water, which, if desalinated, could provide enough water for the state's needs for the next 160 years.

Brackish water has salts and other dissolved solids and must be desalinated to make it suitable for human use. However, since brackish water has a lower salinity than seawater, desalinating it requires less treatment, less energy, and creates less brine [discharge](#).

Governor Newsom's Water Supply Strategy's Action 1.2 targets expanding brackish desalination by 28,000 acre-feet by 2030 and 84,000 acre-feet by 2040. The Strategy directed the Department of Water Resources and the State Water Board to identify brackish desalination projects with the potential to be operational by 2030 and no later than 2040, and to determine the volume of water available for brackish groundwater desalination.

Last month, the Department of Water Resources released the report, [Projected Brackish Water Desalination Projects in California](#), and the State Water Resources Control Board released the report, [Water Available for Brackish Groundwater Desalination](#), in fulfillment of their charge.



The Department of Water Resources determined that in 2020, about 106,000 acre-feet of brackish water was desalinated for drinking water, representing two-thirds of the desalinated water produced and used in California. DWR's analysis determined that the state will easily meet the 2030 Water Supply Strategy goal, but few facilities are planned beyond that at this time.

Since brackish groundwater is less salty than seawater, brackish water desalination requires less treatment and energy and produces less brine than seawater desalination; optimizing existing water infrastructure for brine management could further reduce costs. Brackish desalination could be considered for other uses requiring less treatment, such as cooling water for power generation, irrigation, livestock watering, or aquaculture.

Pathetic Policy of the State on Climate Shows Failure

California isn't on track to meet its climate change mandates — and a new analysis says it's not even close

by [Alejandro Lazo](#) March 14, 2024

<https://calmatters.org/environment/climate-change/2024/03/california-climate-change-mandate-analysis/>

In summary

A new analysis concludes that unless California almost triples its rate of cutting greenhouse gases, the state won't meet its 2030 climate change target. Some emissions were rising.

California will fail to meet its ambitious mandates for combating climate change unless the state almost triples its rate of reducing greenhouse gases through 2030, according to a [new analysis](#) released today.

'It's crazy': How soaring PG&E rates are impacting California's electric car owners

By [Julie Johnson](#) March 11, 2024

<https://www.sfchronicle.com/climate/article/electric-cars-gas-pge-california-18598758.php?fbclid=IwAR0o6AXJW7rnKQSNkV00DnnVeNvG3Bd2z6nGGROAPfXwOAgF5HFhVEtwZd4>

California wants residents to buy [electric vehicles](#) to fight climate change, to the point of [ending the sale of new gasoline-fueled cars in 2035](#).

But after a 20% rate hike this year [by Pacific Gas and Electric Co.](#), charging a car — one of the single biggest items on electric bills — just got more expensive. And the trend is unlikely to let up anytime soon: [State regulators are considering further rate increases for PG&E this year](#).

The Colorado River

Weekend storms bump up Colorado's mountain snowpack to above-average levels

All major basins in the state are at or above their median historic snowpack levels for this time in the year, which is a positive signal for summer water supplies

[Shannon Mullane](#) 4:05 AM MDT on Mar 19, 2024

<https://coloradosun.com/2024/03/19/weekend-storms-colorado-mountain-snowpack-above-average-levels/>

All major river basins in Colorado are at or above their normal snowpack for this time of year thanks in part to recent storms that dumped 2 to 5 feet of snow on parts of the state.

This winter got off to a slow start, but as of Monday, the state's snowpack is above average at 109% of historic norm. The accumulation of snow in the mountains provides a vital source of water for Colorado and other Western states as it melts. The recent storms also covered this season's dust-on-snow events, which can hasten that snowmelt and leave water users and rivers in short supply in late summer.

“As far as snowfall: Really healthy totals, especially everywhere essentially east of the (Continental) Divide and into the I-25 corridor,” said Bruno Rodriguez, a meteorologist at the National Weather Service station in Boulder.

The storms dumped 3 feet to 4 feet — in some cases 5 feet — on the Front Range foothills. In the Denver metro area, snowfall varied significantly. Denver International Airport saw almost 6 inches and [canceled more than 800 flights](#).

In areas west of Denver, such as Boulder, Golden and Morrison, the snow reached 20 inches to 25 inches, Rodriguez said. Eldora Mountain Ski Resort, west of Boulder, counted 4 feet of snow, so much [that it closed Thursday and most of Friday](#).

Future of Lake Mead still unclear as negotiations flare



The Colorado River meanders within the Glen Canyon National Recreation Area near the Hite Crossing Bridge on April 22, 2023, in Hite, Utah. (L.E. Baskow/Las Vegas Review-Journal) [@Left_Eye_Images](#)

By [Alan Halaly](#) Las Vegas Review-Journal
March 19, 2024 - 2:02 pm

Colorado's chief river negotiator doesn't find the other side's proposal for basinwide water cuts after 2026 plausible, she told reporters Tuesday.

When it comes to updating how water from the Colorado River is allocated, the Upper Basin states — Colorado, New Mexico, Utah and Wyoming — [have been wrapped in a divisive battle](#) with the Lower Basin, which is composed of Nevada, California and Arizona.

Both parties agree that the “structural deficit,” meaning the 1.5 million acre-feet of water lost to evaporation and transport, should translate to cuts made by the Lower Basin states. However, a main point of contention lies in whether Upper Basin states also must bear the brunt of cuts past the structural deficit.

States such as Colorado are at the mercy of snowpack and climate change to determine water availability, said Becky Mitchell, Colorado state's Colorado River commissioner. That's a far cry from a state like California, she said, which enjoys more certainty thanks to Lake Powell and Lake Mead, the two largest reservoirs in the country.

Upper Basin states have estimated they suffer a 1.2 million acre-foot water shortage, on average, because of water loss to climate change.

"In short, our water users do not have security or certainty in their water supply because they absolutely have to live with what Mother Nature provides every year," Mitchell said. "In contrast, we have Lower Basin contractors who've been provided a high level of certainty in water deliveries and, in turn, have drawn down Lake Mead."

Tense negotiations to continue

AG ALERT: California agrees to lasting cuts to Colorado River use

[Ag Alert](#)

[News](#)

March 20, 2024 [0](#) 51

By Caleb Hampton, *Ag Alert*

<https://mavensnotebook.com/2024/03/20/ag-alert-california-agrees-to-lasting-cuts-to-colorado-river-use/>



California has agreed to make long-term cuts to the amount of water the state uses from the Colorado River, according to a proposed plan for managing the river released earlier this month by California, Nevada and Arizona.

The U.S. Bureau of Reclamation and the seven states in the Colorado River Basin, as well as 30 tribes and Mexico, are negotiating a plan to protect the river after a decades-long megadrought depleted flows and left key reservoirs Lake Mead and Lake Powell in danger of running dry.

Under the Lower Basin states' proposal, which would take effect after 2026 and potentially last decades, California would forfeit about 10% of its allocation in most conditions, with Nevada giving up 17% and Arizona 27%. Mexico, if it agreed, would reduce its use by 17%. The reductions would apply when a range of reservoirs along the river are between 38% and 58% full. They would conserve a total of about 1.5 million acre-feet of water per year.

"It's a matter of trying to thread the needle between ensuring that we have a long-term viable water supply in the Colorado River and respecting the water rights of the states and agencies," said Tina Shields, Imperial Irrigation District water manager, who has been involved in the talks about the river's future management.

The river supplies water to 40 million people in the West and irrigates more than 5 million acres of farmland.

California, the water rights of which are senior to those of other states, is entitled to the largest share of the river. The state is allocated 4.4 million acre-feet of water per year, about a third of the river's total supplies. Farmers in the Imperial Valley, who are entitled to 3.1 million acre-feet per year, use

most of the state's Colorado River water to irrigate alfalfa, winter vegetables and other crops.

If river reservoir levels were to fall below 38% full, it would trigger steeper cuts on a sliding scale. In that scenario, which would conserve up to 3.9 million acre-feet per year, Upper Basin states would also face reductions.

If reservoirs filled to 58% of capacity, Lower Basin states would face smaller cuts. At 68% full, no water reductions would be enforced. Lake Mead, the largest reservoir on the river and in the country, is currently 37% full, well below its historic average but not as low as a couple years ago.

Latest drought report good for Arizona, but water levels still a concern

The latest report from the U.S. Drought Monitor has some good news for Arizona.

Author: John Tanet

Published: 11:15 AM PDT March 15, 2024

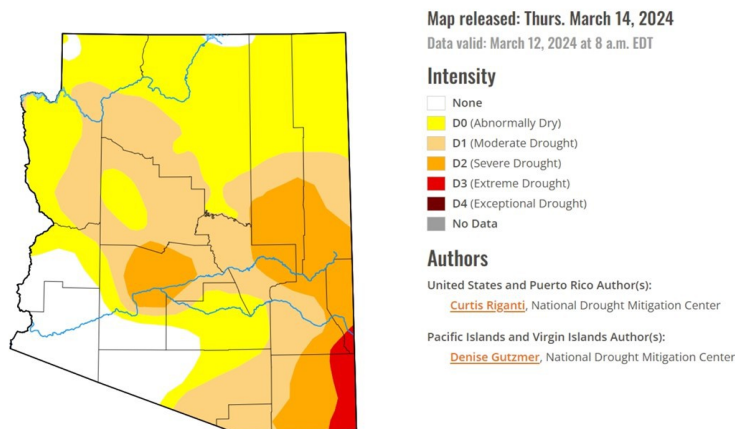
Updated: 12:24 PM PDT March 15, 2024

<https://www.12news.com/article/news/local/water-wars/arizona-us-drought-monitor-dry-conditions-water-reservoirs-down/75-14156948-8183-431b-a6ff-17ab5d09cb7f>

PHOENIX — After a brutally dry summer, Arizona is catching a little relief from the drought even as our water systems take a hit.

More of Arizona has gotten out of drought conditions, according to the latest report from the [U.S. Drought Monitor](#). Roughly 13.5% of the state — mostly southwestern Arizona — isn't facing a drought. That's a 5% increase from December.

Most of the Valley is still under a severe drought warning meaning that fire danger is high and there's little water for plants and wildlife. Extreme drought is still a concern in parts of Cochise, Graham and Greenlee counties.



Credit: U.S. Drought Monitor

U.S. Drought Monitor map of drought conditions in Arizona, released March 14, 2024.

Space X Makes History with Starship: Proving An Important Point About Human Creativity and Determination

The Man-Made Miracle of SpaceX

I was at the first launch of Starship. One year and three launches later, let me tell you about what it means for the future—and for America.

By [Max Meyer](#)

March 18, 2024

<https://www.thefp.com/p/man-made-miracle-spacex-starship>

Here's a story my future grandchildren are going to hear from me more than once: I was on South Padre Island on April 20, 2023, when SpaceX launched its Starship for the very first time from Boca Chica Beach. It will be essential that they hear it from me, though, because this is how it was reported by the press at the time:

- *Was the SpaceX launch really a “[success](#)”?*
- *[Elon Musk's Explosive Day](#): First SpaceX blew up a rocket. Then Musk blew up Twitter's verification system.*
- *[Elon Musk's Wealth Plunges \\$13 Billion as Drama Unfolds Across Empire](#): In the span of 24 hours, Tesla's earnings disappointed, a SpaceX rocket exploded, and Twitter purged legacy blue checkmarks.*
- *[It's No Surprise SpaceX Blows Up Rockets in Texas](#). That's Why It Came Here.*
- *[SpaceX's Starship blew up after launch](#)—it also caused “catastrophic” damage on the ground*
- *[SpaceX celebrated Starship's first launch](#). Some locals called it “truly terrifying”*

The energy on the island was euphoric that day—the fire warming our faces, the tremendous roar of 33 rocket engines, the cheers on the beach—which made reading such headlines all the more jarring.

Failure is, as those who've tried something hard know, a stone on the road to success. For SpaceX in particular, it was the company's keystone strategy for the past twenty years: learn from iterating quickly on failures until you can repeat success.

That strategy worked magnificently. Recall that in 2008, SpaceX was a fledgling company; its first three launch attempts, from 2006 to 2008, of its first rocket, Falcon 1, were all [failures](#). No private company had ever successfully launched a rocket before. But the lessons from those three failures enabled the SpaceX team to successfully launch the Falcon 1 on the fourth try. Sixteen years later, SpaceX Falcons are the most launched American rockets in history, with hundreds of consecutive successes. The Falcon 9 Full Thrust has been [launched 309 times](#)—with no failures. Zero.

So don't let any sour punditry confuse you. What happened in Texas last week is a man-made miracle—emphasis on man-made, because it took the men and women of SpaceX 20 years to build a sustainable company that could pull off such a feat.

SpaceX has won an effective monopoly on space launches in the West by making them much cheaper and more reliable thanks to reusable rockets. The company launches the outright majority of worldwide material to orbit—that's mostly [commercial satellites and cargo](#) for the International Space Station, though Elon Musk did once launch his personal Tesla Roadster sports car as well (it passed Mars in October 2020 and will swing past [Earth in 2047](#)). Outside of Russia and China, SpaceX accounted for over 99.9 percent of material sent to orbit at the end of 2023. The Falcon Heavy has achieved a cargo-cost-per-kilogram of [just \\$1,500](#), about a quarter of the closest Chinese competitor.