

WILDLAND FIRE REPORT 2024

arizona department of
forestry and fire management



ABOUT US

The Department of Forestry and Fire Management (DFFM) provides fire protection to 22-million acres of State and private lands. DFFM responds and provides suppression assistance on Federal and Tribal jurisdictions through cooperative agreements.

Besides suppression duties, the agency supports prevention, education and outreach opportunities, along with Public Affairs. DFFM includes a Forestry division, provides grants administration, and houses the Office of the State Fire Marshal.

Every division works in alignment with the agency's vision: to provide an Arizona whose diverse landscapes are healthy and whose people are protected from the threat of fire.

FIRE DIVISION:

- *5 District Offices: Northern, Northeastern, Central, Northwestern, and Southern Arizona*
- *Maintains in-house fire command and wildland firefighting capabilities, including 11 - Type 2 Wildland Fire Inmate Hand Crews (approximately 240 personnel), and 1 - Type 2-IA Hand Crew (20 personnel). DFFM also has 8 engines: 5 - Type 6 and 3 - Type 3*
- *Established Aviation program to include a UAS platform*
- *Through cooperative agreements, DFFM has access to 2,700 fire department/district wildland firefighters and 3,000 pieces of equipment*
- *Arizona Dispatch Center*

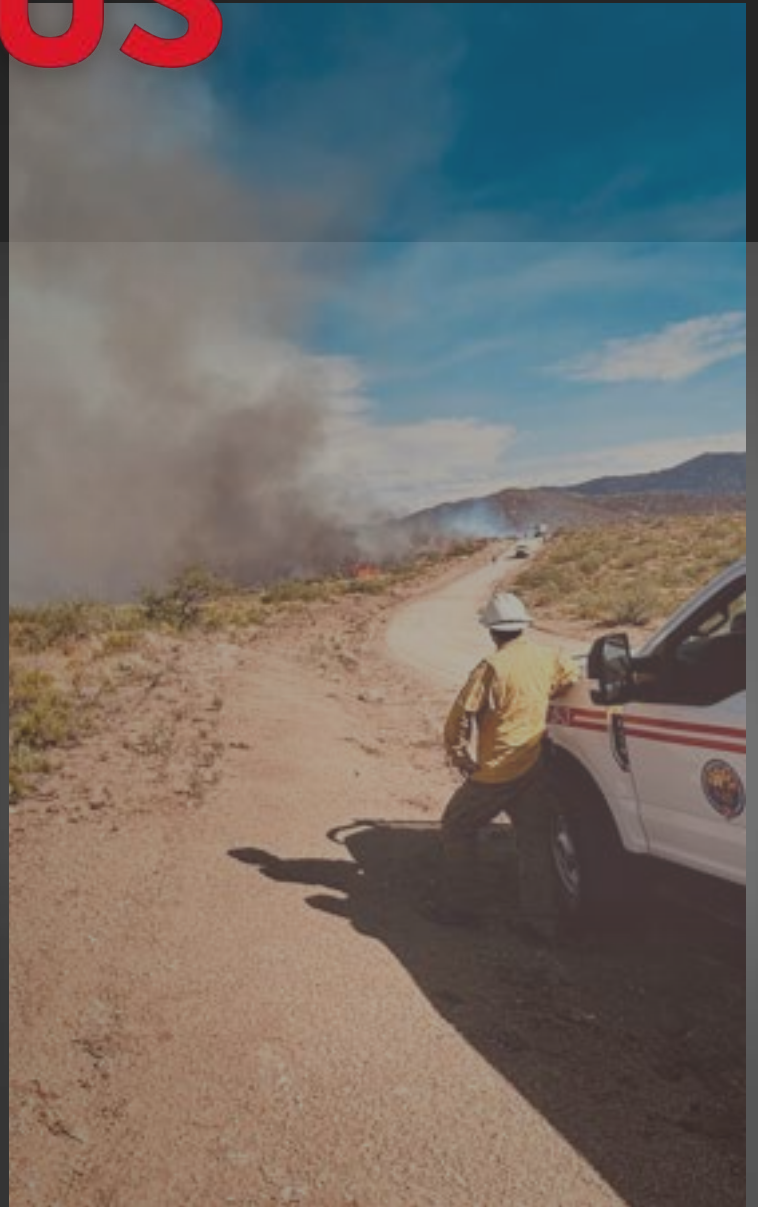


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WILDLAND DIVISION

AGENCY & FINANCIAL OVERVIEW

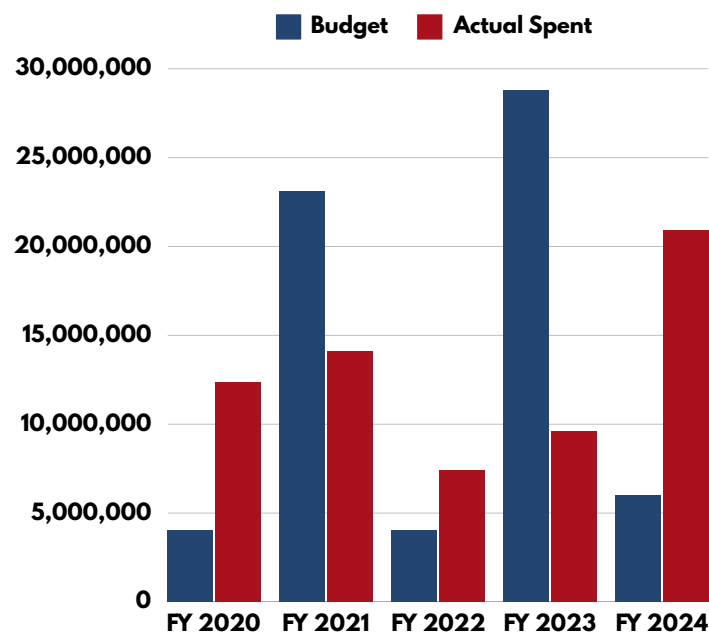


FIGURE 1.

The Arizona Department of Forestry and Fire Management's wildland fire budget for Fiscal Year 2024 was allocated at nearly \$6 million. This funding included the annual statutory budget of \$3 million and a one-time funding of \$2.8 million.

Every year the agency gets \$3 million in statutory wildland fire funding. However, over the last few years, the Governor's Office provided DFFM with supplemental funding due to increasing wildland fire costs, larger and longer incidents, along with rising costs for aviation, cooperating fire department expenses, including their personnel and equipment.

Suppression Budget vs. Actuals Spent

FY 2020: \$4,000,000
Actual Spent: \$12,345,841*
FY 2021: \$23,100,000
Actual Spent: \$14,079,397*
FY 2022: \$4,000,000
Actual Spent: \$7,384,375*
FY 2023: \$28,800,000
Actual Spent: \$9,603,266*
FY 2024: \$6,000,000
Actual Spent: \$20,877,607

Active Employees

FY 2020: 88
FY 2021: 127
FY 2022: 134
FY 2023: 184
FY 2024: 225

*Budget: Actuals spent fluctuate from prior years reporting as the agency continues to receive cooperator wildland fire invoices.

EXECUTIVE SUMMARY

ARIZONA'S YEAR ROUND FIRE SEASON: CONTINUAL HOT AND DRY CONDITIONS FUEL FIRE ACTIVITY

2024 Overview:

Ample precipitation between the winter of 2023 and spring of 2024 was a driving factor behind significant fuel loading across parts of Arizona, especially in areas notorious for wildfires. The 2023/2024 winter and spring moisture coupled with above average spring temperatures contributed to an early start to Arizona's 'fire season' in the central and southern parts of the state. However, decent snowpack levels across Northern Arizona kept fire activity to a minimum through most of the summer. A delayed, and uneventful monsoon season, plus warm fall temperatures kept fire activity steady and crews busy well into the fall and early winter.

2024 Outlook:

For 2024, state and federal fire behavior analysts predicted above normal activity across most of the central and southern parts of Arizona. Areas at risk for high fire activity included parts of the Mogollon Rim, across the Tonto National Forest, throughout the Sonoran Desert landscapes, the Catalina Mountains in Southern Arizona, and into Cochise County. Fire behavior analysts suggested that due to the abundance of fine fuel; grass, brush, and invasive species – an increase in activity was possible in these areas. In addition, they warned that above average temperatures and windy conditions, and terrain in some cases, could influence fire behavior making fires challenging to contain. Another concern was areas within lower elevations, including in Maricopa and Pinal Counties that had more than double the fuel loading from years prior due to past winter and spring rains.



Radio Check for the Phoenix Crew

The 2024 outlook included a potentially earlier start to the 'fire season' and by May – the state would see steady activity as seasonally hot and dry conditions move into the area.

A Hot and Arid Arizona:

It's no surprise – Arizona continues to experience significant drought conditions year after year and those conditions again spilled into 2024. The persevering drought has led to extremely dry grass and brush and overspread, nuisance invasive species, providing ample fuel for wildfires.

In Pinal County, for example, fire activity spiked in April, primarily in the southwest part of the county, and remained steady – daily, over the next few months.

EXECUTIVE SUMMARY

ARIZONA'S YEAR ROUND FIRE SEASON: CONTINUAL HOT AND DRY CONDITIONS FUEL FIRE ACTIVITY

A Hot and Arid Arizona cont.:

In Pinal County, from January to May 2024, firefighters responded to 85 fires, on State, Federal, and Tribal lands. Most, if not all, were determined to be human-caused due to debris burning, welding, and grinding. Those 85 fires burned nearly 2,500 acres. In 2023, for instance, between January and May, Pinal County had 18 reported fires that burned 87 acres. A Department of Forestry and Fire Management fire behavior analyst correlated the spike in activity to measurable precipitation in the area over the last few years causing an influx of grass and brush – specifically, in areas like Hidden Hills and Thunderbird Farms. The spike in activity prompted the county to begin issuing citations to residents caught violating the county's burn ban.

2024 Outlook vs. Reality:

In total for 2024, 2,162 wildfires burned throughout Arizona on State, Federal, and Tribal lands – up 15% compared to 2023. Those 2,162 fires burned approximately 282,000 acres – an increase of about 33% as compared to the prior year. In 2023, 1,831 fires were reported for a total of 188,000 acres burned.



Constant drought conditions led to extremely dry vegetation providing ample fuel for fires. The lack of moisture and in some areas, continuity of grass and brush, intensified the fire hazard over the summer months and into the fall.

And then there was the non-soon. The 2024 monsoon season was a no-show for most of the state which contributed to fire activity well into October. Per the National Weather Service, September and October were some of the hottest months in Arizona for the region. Just one of many factors contributing to the fall fire season.

Arizona 2024

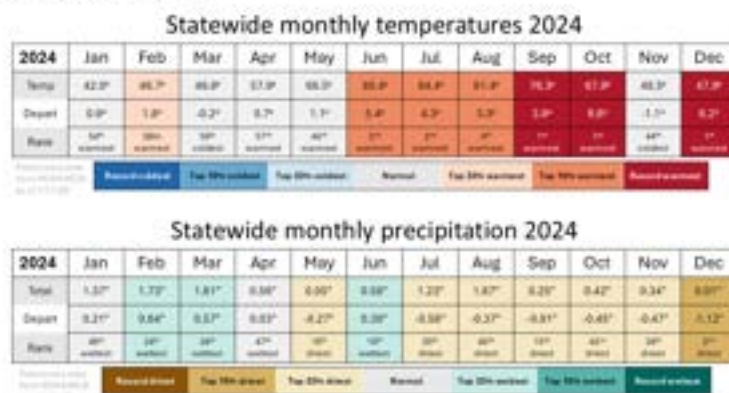


FIGURE 2*

Figure 2 shows monthly temperatures and monthly precipitation amounts for 2024.

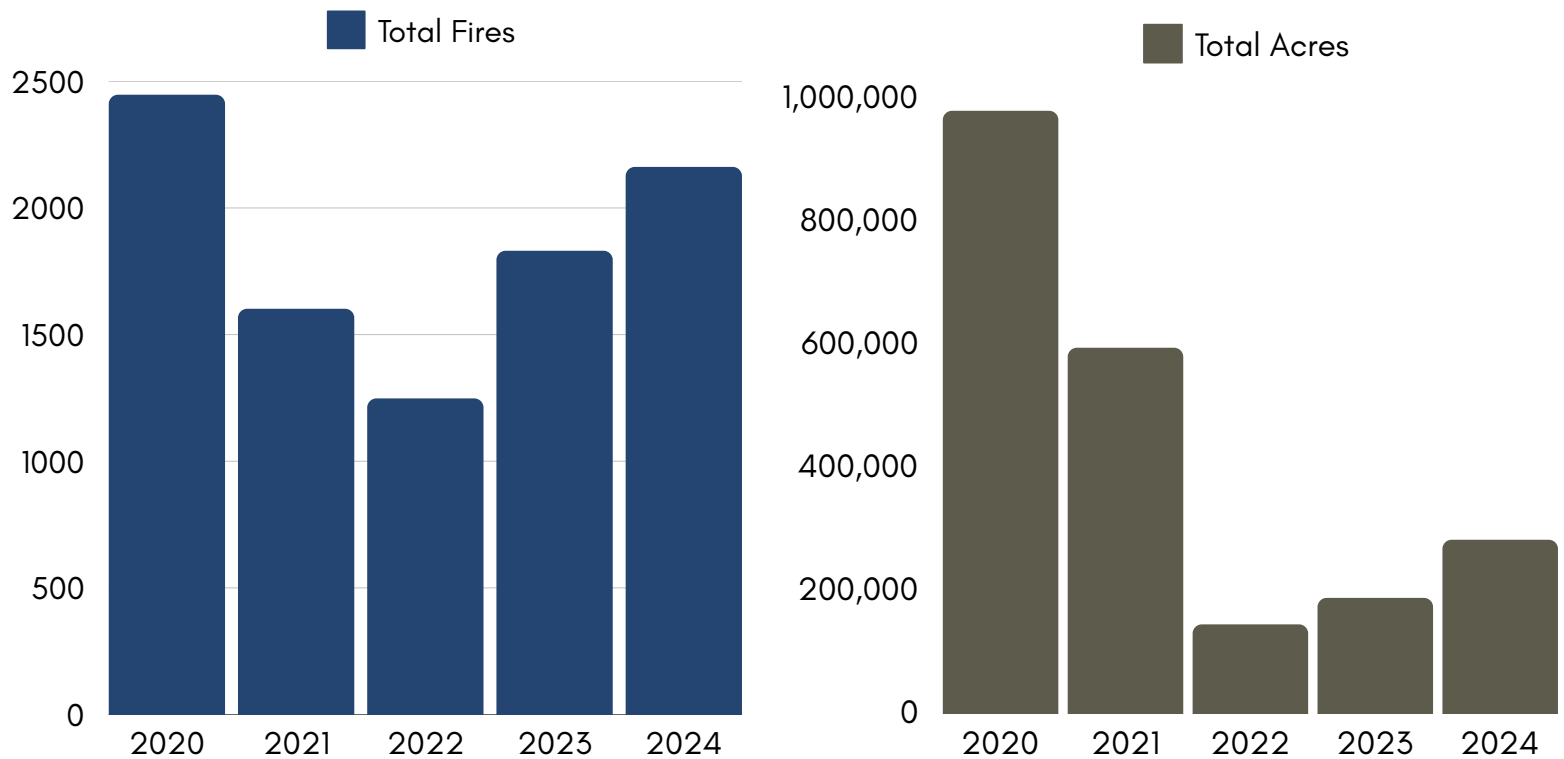
September, October, and December 2024 were the hottest recorded temperatures since record keeping started.

Meanwhile, some 2024 summer months were in the top 33% driest months on record, including the monsoon timeframe of June 15 – September 30.

*Data provided by the Arizona State Climatology Office.

2024 WILDLAND FIRE DATA

Total Fires vs. Acres Burned



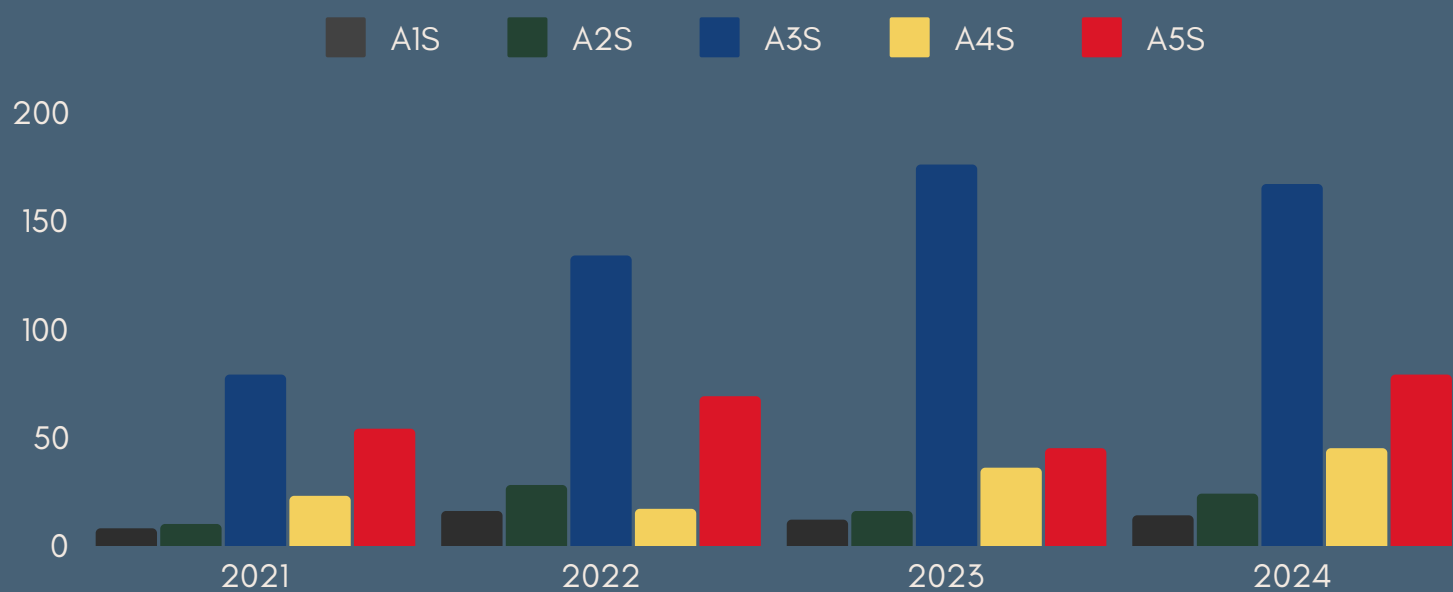
IN 2024, RESOURCES RESPONDED TO 2,162 FIRES. THOSE FIRES BURNED 282,507 ACRES.

OF THOSE 2,162 FIRES - 1,428 WERE DETERMINED TO BE HUMAN-CAUSED.

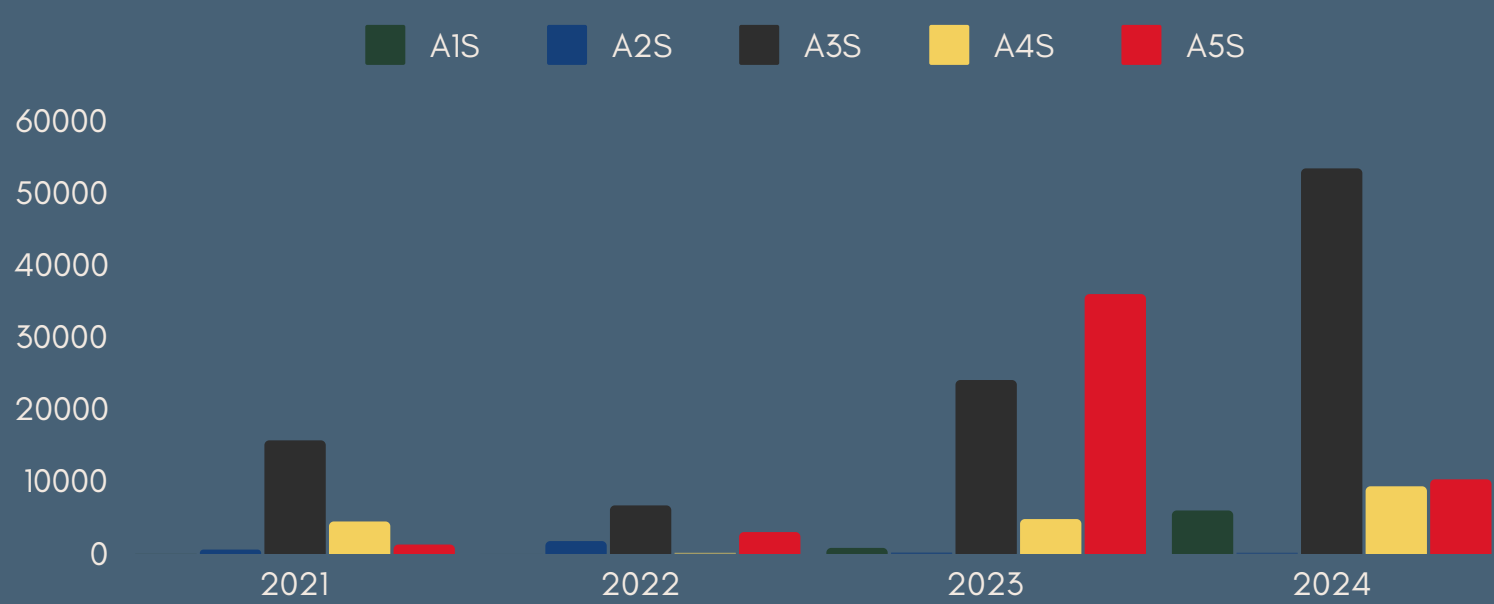
NUMBERS REFLECT ALL LAND JURISDICTIONS; STATE, FEDERAL, AND TRIBAL RESPONSE AREAS

2024 WILDLAND FIRE DATA

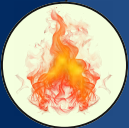
2021-2024 State Fires by District



2021-2024 State Acres Burned by District



NOTABLE FIRES



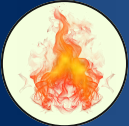
Rose Fire

- June 12, 2024
- 5 mi. southeast of Wickenburg
- 166 acres
- State Jurisdiction
- Caused by Railroad



Boulder View Fire

- June 27, 2024
- 5 mi. east of Carefree
- 3,711 acres
- State Jurisdiction
- Human Caused - Under investigation



Freeman Fire

- July 11, 2024
- 14 mi. northwest of Oracle
- 32,568 acres
- State Jurisdiction
- Lightning



West Fire

- August 28, 2024
- 13 mi. north/northwest of Payson
- 15,074 acres
- Tonto National Forest Jurisdiction
- Lightning

**FREEMAN FIRE: 2024'S
LARGEST AT 32,568 ACRES**

FIRE MANAGEMENT ASSISTANCE GRANTS

The Fire Management Assistance Grant Program, otherwise known as FMAG, is a program under FEMA that provides financial assistance to states in the event of a wildfire. FMAG's apply only to specific, wildfire-related costs associated with an incident – and when applicable.

In order to apply for a FMAG, the incident must meet certain criteria. For example, population size, community risk and/or threat, among other stipulations determine if an agency will be eligible for federal funding support.

If and when a grant is approved, FEMA provides **up to** a 75% reimbursement of state fire suppression costs. The state agency is then responsible for the remaining percentage.

In 2024, the Arizona Department of Forestry and Fire Management requested four FMAGs for: the Boulder View, Shake, Simmons, and Rose Fires. However, the Rose Fire was determined to be caused by BNSF and 100% of fire suppressions costs were covered by the railroad. Therefore, DFFM pulled the initial FMAG request.



Increased fire activity due to firing operations on the Boulder View Fire northeast of Scottsdale, Arizona



DFFM's Yuma Crew on the Waterman Fire outside of Congress, Arizona

2024 DFFM Fire Management Assistance Grants:

***Boulder View Fire, North Scottsdale**

DFFM Fire Cost: \$956,419

FMAG Request: Unknown at this time

***Shake Fire, Kearny**

DFFM Fire Cost: \$179,239

FMAG Request: Unknown at this time

***Simmons Fire, Kearny**

DFFM Fire Cost: \$740,223

FMAG Request: Unknown at this time

Many cooperator and federal invoices including for aircraft remain outstanding. 2024 FMAGs not processed at time of report release.

2023 DFFM Fire Management Assistance Grants

Diamond Fire, North Scottsdale

DFFM Fire Cost: \$785,571

FMAG Request: \$568,928

Reimbursed: 72%

AVIATION

The 2024 season was another busy one for aircraft. The Arizona Department of Forestry and Fire Management contracted seven Single Engine Air Tankers (SEATs) for the season due to the concern over potentially higher than normal fire activity. The aircraft were housed and staged at two bases - in Marana at the Marana Regional Airport and northwest of Phoenix, in Wickenburg, at the Wickenburg Municipal Airport. DFFM stages aircraft with logistics in mind to provide for faster response efforts. These two airports are located in areas with the high probability of fire activity. The department worked one Air Attack platform out of Mesa's Falcon Field Airport.

In 2024, DFFM contracted with its federal partners for use of the Large Air Tankers (LATs) and Very Large Air Tankers (VLATs), when requested for incident support. The heavy aircraft were based within the Prescott and Phoenix-areas and utilized by the State, the US Forest Service, Bureau of Land Management, and Tribal agencies.

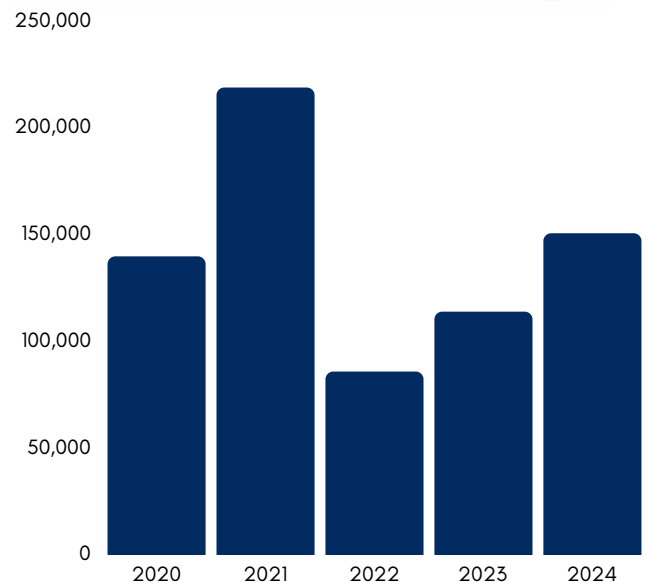
In total, DFFM's SEATs supported 70 fires statewide, more than double the amount of incident support from 2023. DFFM's aircraft delivered 150,000 gallons of retardant to support State, USFS, BLM, and Bureau of Indian Affairs wildfires. Of those 150,000 gallons, 94,560 gallons were dropped on DFFM-managed incidents.

This year, in addition to using fire retardant, the department tested Blaze Tamer 380, a fire suppression product similar to standard retardant. Blaze Tamer is a water enhancer that develops into a gel-like substance, used like retardant, but marketed to slow a fire quicker than typical retardant. The product is non-toxic and engineered to be up to three times more effective for fire suppression work. The department's use of Blaze Tamer garnered attention from wildland fire agencies nationwide for its effectiveness within Arizona's diverse landscapes. DFFM was one of the first wildland fire agencies in the west to test the product. SEATs used the Blaze Tamer on 12 incidents, 11 of which were state-managed incidents. Of those 12 fires, aircraft dropped 39 loads of Blaze Tamer for a total of 27,825 gallons.

Along with SEATs, DFFM also supported an Air Attack (AA) platform. DFFM's AA was provided through Safford Aviation and based out of Falcon Field in Mesa. The AA platform flew 35 fires for a total of 185 hours. DFFM's single AA platform covers the entire state and is also utilized by federal and tribal counterparts upon request.



2024 Retardant Usage



2024 vs. 2023:

2024: 150,365 gallons delivered
2023: 113,656 gallons delivered
Up - 24% from 2023

The gallons used were delivered to State, Federal, and Tribal incidents.

AVIATION

the drone program

Another component of the Department's Aviation Division is the Unmanned Aircraft Systems (UAS) program. The Department of Forestry and Fire Management owns four UAS, or drones, which are utilized for fire suppression and prescribed fire work. There have been continuous improvements to the systems to extend range and altitude of the equipment to operate Beyond Visual Line of Sight (BVLOS) which makes these tools an asset on fires and project work. The expansion of BVLOS increases the safety of ground operations as it provides a different aspect of situational awareness – to get ahead of boots on the ground, and provide for better reconnaissance of fire activity and overall suppression. The agency's UAS platforms can perform where large aircraft cannot fly and can also assist with mapping missions.

In 2024, the UAS program continued improvements to drone systems to extend the range and altitude of the equipment to operate farther and higher. Those improvements, in turn, assisted in transmitting live video and data to fire command and crew on the ground. The live video feeds proved very useful on some state fires in 2024. This technology can be a cost saving measure as the drones can be used in place of recon aircraft when accessibility is a concern, during times they may be unavailable, or at night when manned aircraft cannot fly. Additionally, the UAS can provide inflight wind charts which help operations on the ground.

Coming in 2025, DFFM's UAS pilots are working on infrared mapping capabilities to assist with locating heat sources on incidents. DFFM's UAS program stays ahead of the ever changing technology to more efficiently and effectively use the platforms in a variety of situations and missions.

In 2024, DFFM's UAS platforms supported 12 state incidents including, the Sandhill, Rose, Shake, Hillside, Freeman, Thompson, Bull, Waterman, Table, Flood, Gate, and Simmons Fires.

Unmanned Aerial Platforms Response:

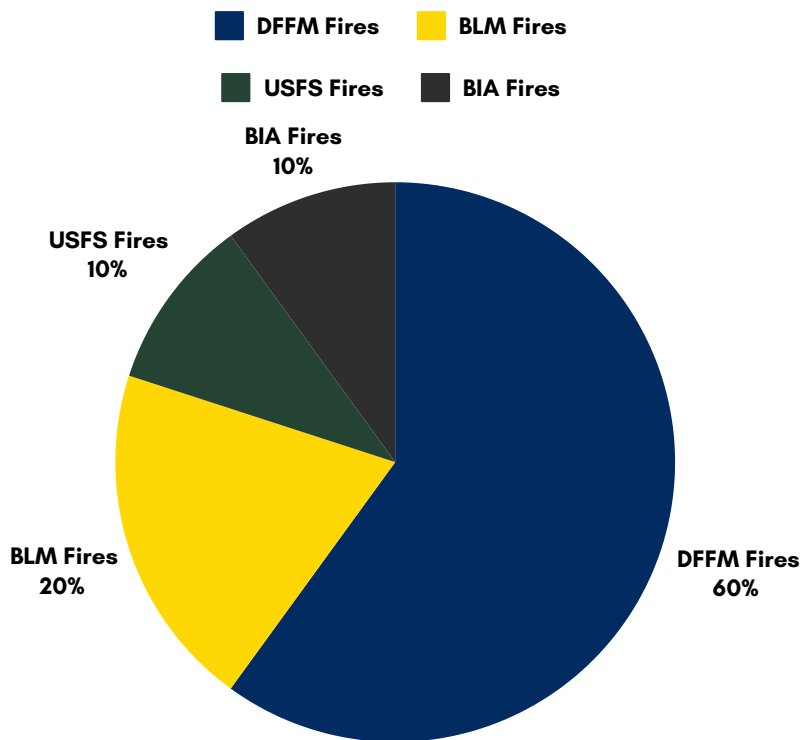
- **11 - Hours of Flight Time on Active Fire Suppression Missions**
- **12 - State Jurisdiction Fires**
- **1 - BLM Fire/Assist**
- **1 - Use for Investigational Purposes on Rose Fire near Wickenburg**



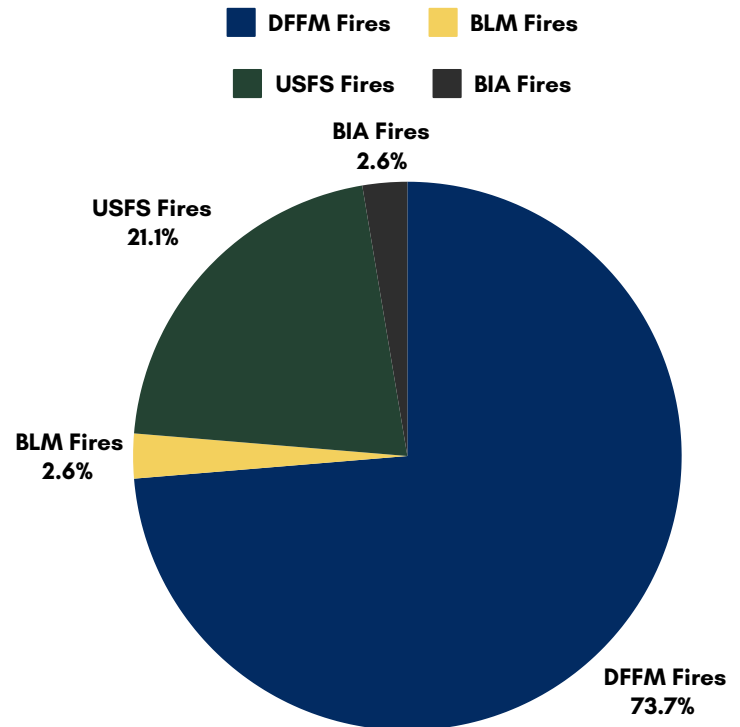
AVIATION

by the numbers

State Single Engine Air Tanker Response



State Air Attack Response



***2024 Helicopter Totals:**

Flight Hours - 65.6

Water Support - 145,531 gallons

Supported Incidents - 12

DPS Assist - 1 : Romero Fire

***State Incidents Only**

PUBLIC INFORMATION

Public information plays a vital role for the department as a whole and even more so, during critical incidents. The Public Information shop is responsible for a myriad of tasks including, public education and outreach, marketing, information gathering and sharing, social media content production, website development, and wildfire information distribution. Agency information is distributed through a variety of channels including, PIO and agency press conferences, media releases, interviews, video production, and social media updates.

Every year, the Public Information Division plans and organizes the annual Wildfire Outlook Briefing with the Governor. This is a yearly event that allows the department's executive leadership along with federal and local partners the opportunity to discuss the upcoming fire season and discuss resource needs and availability with the Governor and the media.

In 2024, the Public Information Division unveiled a new prevention campaign - **'Stop Wildfires Before they Spark.'** The marketing campaign ran from April through July at Arizona gas stations and on highway billboards. The 'gas station takeovers' included utilizing gas pump televisions to air short, public service announcements. They also included ice boxes wrapped with prevention messaging and **'Stop Wildfires Before they Spark'** videos playing within some Circle K locations. In addition, billboard messages were placed on heavily traveled highways to promote the same message. In total, the gas station takeovers proved successful with more than 14 million impressions* while the billboard campaign data reported approximately 3 million impressions*.



Smokey Bear at a Gas Station Takeover Location in Casa Grande, AZ

The PIO shop also produced a statewide, roadside fire safety campaign at rest areas across the state. The agency purchased kiosks at more than 15 Arizona Department of Transportation-owned rest areas and installed fire-safety messaging within those kiosks.

The Public Information Division also collaborates and supports the Prevention Division throughout the year at public and community outreach events. The two shops work together to produce agency marketing campaign materials and organize larger scale, statewide events. New in 2024, DFFM reinstated the safety day events at two of Arizona's busier rest areas. The one-day events at Sunset Point and Texas Canyon Rest Areas included DFFM, the US - Forest Service, the Bureau of Land Management, the Arizona Department of Public Safety, and the Arizona Department of Transportation. The agencies spent both days talking to drivers about roadside safety. The events were well received by the traveling public and gained media attention.

The Arizona Department of Forestry and Fire Management's social media pages are a critical component for providing fire information. The agency utilizes Facebook, X, and Instagram to communicate critical fire details to the public and the media. The agency's Facebook page has 62,000 followers while the X page has nearly 29,000 followers.

The Public Information Office supported multiple incidents in 2024, including the Rose Fire near Wickenburg, the Boulder View Fire, northeast of Carefree, and the Freeman Fire, north of Oracle.



Department Wildfire Prevention Messaging at Arizona Rest Areas

PUBLIC INFORMATION

In the News...



**AZ Dept. of Forestry and
Fire Management
YouTube:**

[2024 Arizona Wildfire
Season Outlook](#)



InMaricopa:

[Wildfires Tripled This Year in
Pinal County – Here's Why](#)



Associated Press:

[Wildfire that Burned 15
Structures Near Arizona Town
was Caused by Railroad,
Investigators Say](#)



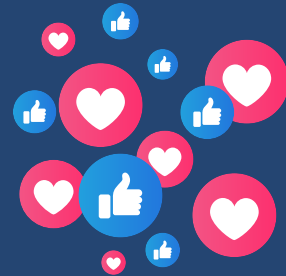
Payson Roundup:

[The Ins and Outs of Road
Closures](#)

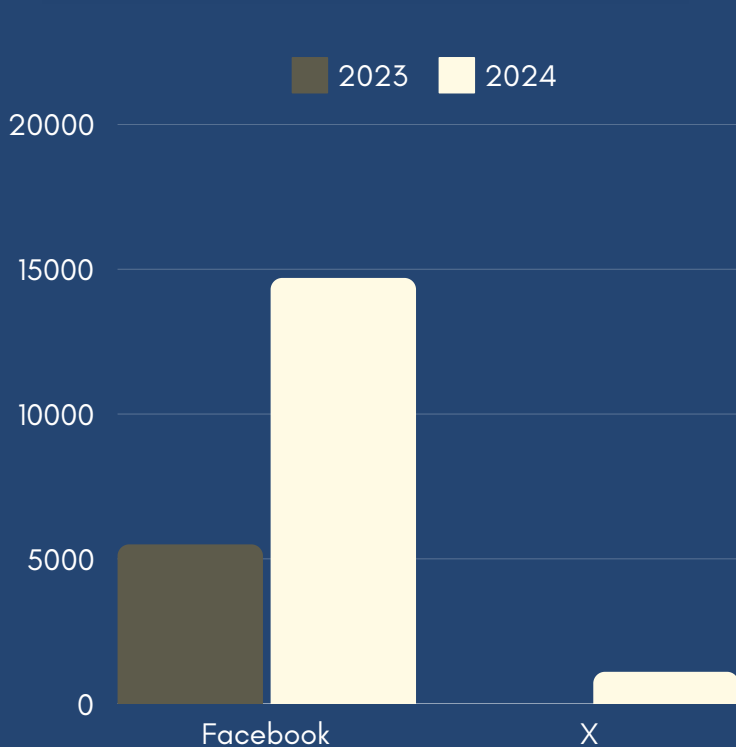


PUBLIC INFORMATION

Social Media plays a major role for the Department. It's one of the main channels for critical information sharing. The agency has multiple accounts including: Facebook, X, Instagram, and YouTube.

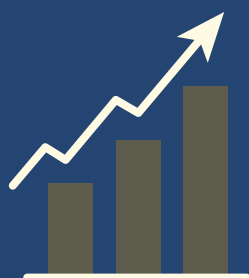
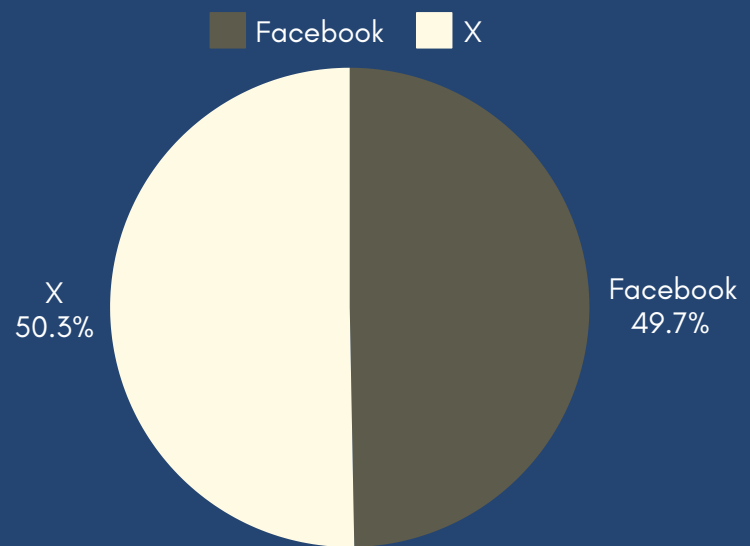


2024 vs. 2023 Follower Growth



No data to report for X in 2023.
Instagram analytics not reported. Data only goes back 90 days.

2024 Engagement Rate



2024 Facebook Wins:

14,700 New Follows - up 169% vs. 2023
3.2 million Reach - up 731% vs. 2023

PREVENTION

by the numbers

The Prevention Division plays a crucial role in educating Arizonans and safeguarding communities against the threat of wildfires. Their responsibilities encompass a range of activities, all aimed at mitigating the risk and impact of wildfires throughout the state.

Education and Outreach:

Educating the public about wildfire risks and prevention methods is the Prevention shop's primary focus. Through community events, Firewise USA programs, workshops, and school visits, the Prevention Division ensures that residents are informed and prepared to handle potential wildfire threats. The Division supports multiple large scale events throughout the year including, the Arizona Game and Fish Outdoor Expo and Public Safety Day in Tucson.

2024:

- **280 - Events**
- **3,785 - People reached**
- **34 - Smokey Bear 80th Birthday library events**

Firewise USA Program:

The Arizona Department of Forestry and Fire Management is the state liaison to the National Fire Protection Association's (NFPA) Firewise USA program. Firewise USA encourages communities to take proactive measures in reducing wildfire risks. It promotes proactive work to create defensible space and provides for neighbor collaboration. Prevention Captains work to help communities, homeowners associations, and neighborhoods achieve Firewise USA status.

2024:

- **18 Firewise USA assessor courses**
- **Trained 146 new Firewise USA assessors**
- **Established 27 new Firewise USA communities**
- **1st in the Southwest for new Firewise USA communities**
- **180 Firewise USA communities**

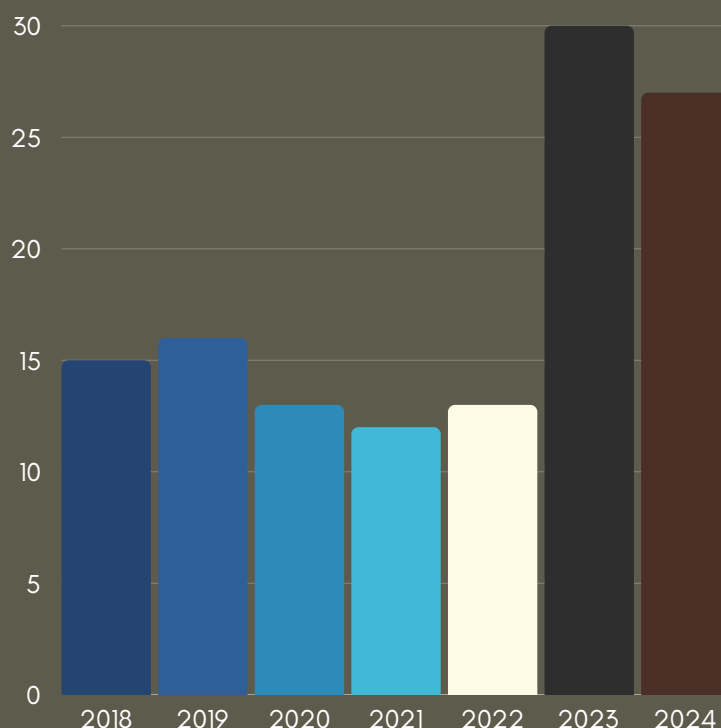
Community Wildfire Protection Planning:

In 2024, and through the federal Community Wildfire Defense Grant, the Prevention Division was earmarked nearly \$4 million in funding to support a critical fuels reduction project for the Hualapai Mountain-area to support and safeguard the community of Pine Lake in Mohave County. Fuels mitigation project planning is currently underway.

News Release: Arizona Community Wildfire Defense Grant Earmarked Funding



New Firewise USA Communities Per Year:



IN CONCLUSION

Outlook Turned Reality

Drought stressed vegetation, an abundance of fine fuel carry over, along with dry conditions across the state and prolonged hot temperatures played major roles in the 2024 wildfire season – **see figure 3**. Due to those factors, the state saw a significant increase in the number of fires and acres burned across Arizona. While the central portion of the state – Maricopa, Gila, and Pinal Counties were a hotbed for fires. Northern Arizona did see it's fair share of fires once summer temperatures prevailed and the snow pack dissipated. The 2024 seasonal outlook included a potential for high fire activity in southern Arizona, but that was not the case. Fire activity in that area of the state stayed fairly quiet with resources catching most fires within the initial attack period. A weak monsoon season and unseasonably warm fall temperatures pushed fire activity well into October. In December, the state was seeing the effects of prolonged warm and dry conditions when the 8,300-acre Horton Fire sparked along the Mogollon Rim, outside of Payson, and within the Tonto National Forest. The fire's complexity required assistance from a Southwest Area Complex Incident Management Team.

Pinal County Spiked in Activity

The state dealt with numerous wildfires early on in Pinal County to the tune of 84 in a span of one month, from April to May. In 2023, between April and May, firefighters responded to 17. For 2024, Pinal County had a 54% increase in wildfires as compared to the previous year. Firefighters responded to 194 fires that burned more than 36,000 acres. In 2023, 87 fires burned nearly 5,000 acres. Fire behavior analysts attribute the significant spike in activity to fine fuel carryover from prior years and continuity of that vegetation – primarily southwest of the town of Maricopa, in far southwestern Pinal County. In July, in Pinal County, the Freeman Fire, north of Oracle went nearly 20,000 acres in one operational period, fueled by erratic winds and significant fuel loading. It took crews about a week to fully suppress the more than 32,000 acre fire – and the state's largest for 2024.

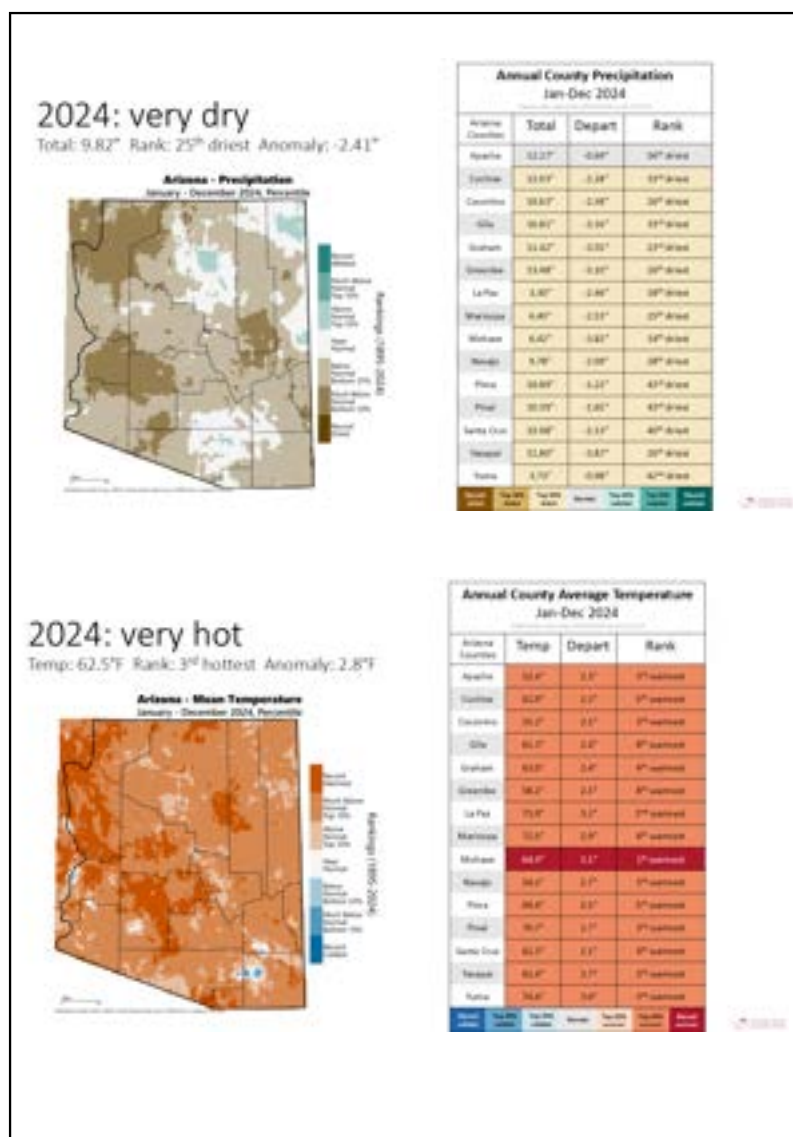


FIGURE 3*

Figure 3 shows a monthly breakdown of both dry and hot rankings for the state.

2024 was the 25th driest and the 3rd hottest on record.

IN CONCLUSION

Resource Shifts

For the second year in a row, the Arizona Department of Forestry and Fire Management utilized staged or prepositioned task forces to assist with faster initial attack and overall suppression. The task force resources spent two weeks on their assignments and traveled across the state engaging with fire suppression efforts.

And new to 2024 - House Bill 2751. In May, Governor Katie Hobbs signed the new legislation into effect allowing the state to enter into a compact agreement to support wildfires operations and suppression. Thanks to that legislation, the state of Arizona is now part of the Great Plains Interstate Fire Compact that currently includes the states of New Mexico, Colorado, Kansas, Nebraska, North and South Dakotas, Wyoming, and the Province of Saskatchewan. By entering into the compact, Arizona can now bypass the national mobilization process and go direct with another state within the compact. This gives the state more flexibility and accessibility when it comes to resource ordering. Plus, the state does not have to rely so heavily on federal resources for availability. The Department of Forestry and Fire Management briefly tapped into the compact with requests for overhead along with a Type 2 hand crew out of South Dakota. Compact resource allocation will be relied on heavily in 2025 to circumvent the financial and personnel challenges federal agencies are faced with.

In 2024, Southwest Area Incident Management Teams were called to provide management support on multiple fires including the Watch Fire on the San Carlos Apache Tribe, outside of Globe; the Preacher and West Fires, northwest of Payson; and the Black Fire within the community of Tonto Basin. In 2023, no Type 1 - or now, Complex Incident Management Teams, were utilized on any Arizona incidents.

2025 Potential

For 2025, the initial outlook looks bleak. The lack of precipitation over the winter months, including very poor snowfall totals in the high country and unseasonably warm temperatures could provide a catalyst for an early start to Arizona's 'fire season.' Early forecasts predict 2025 to be a carbon copy of 2024 with warm temperatures arriving earlier than normal and staying hotter for longer periods of time. The early spring forecast predicts very windy conditions and coupled with extreme drought conditions, can fuel human-caused starts. While some precipitation is forecast for late spring of 2025, it could be too little to late.

There is no fire season in Arizona anymore.

Arizona Department of Forestry and Fire Management



1100 W. Washington, Ste. 500
Phoenix - AZ - 85007

602-771-1400
dffm.az.gov



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