



PINAL COUNTY



AIR QUALITY INDEX

FORECAST

GOOD (0-50)	MODERATE (51-100)	UNHEALTHY FOR SENSITIVE GROUPS (USG) (101-150)	UNHEALTHY (151-200)	VERY UNHEALTHY (201-300)	HAZARDOUS (301-500)
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FOR WEDNESDAY, MAY 19, 2021

This forecast is updated by 10:00 a.m. Monday through Friday and as needed (AQI Forecast on [Twitter](#) – see tables below for location specific Twitters)

	Highest AQI value/Site in Pinal County	Highest AQI forecasted value (see tables below for forecasts by monitoring location)					
		YESTERDAY 5/17/21	TUE 5/18/21	WED 5/19/21	THU 5/20/21	FRI 5/21/22	SAT 5/22/21
OZONE	58 QUEEN VALLEY	55	70	60	50	50	60
PM _{2.5}	51 HIDDEN VALLEY	55	50	52	40	42	40
PM ₁₀	56** STANFIELD	55**	57**	65**	62**	65**	60**
HEALTH WATCH/ ADVISORY*		NONE	<i>LOCALIZED BLOWING DUST</i>				NONE

** Excludes the Hidden Valley Monitor, see Hidden Valley PM₁₀ table below



- Symbol for **High Pollution Watch (HPW)** – Issued when there is potential for a pollutant to exceed the federal health standard. Issued in advance (2 or more days) as a lookout for potential poor air quality (Above 100 AQI). As the date nears and the confidence in the forecast increases, the High Pollution Watch will be upgraded to a High Pollution Advisory.



- Symbol for **High Pollution Advisory (HPA)** – When it's imminent or there is a high probability for a pollutant to exceed the federal health standard.

[AQI and your health](#) | [Air Quality Guide for Ozone](#) | [Air Quality Guide for Particulates](#)

Discussion

Updated Tuesday, May 18, 2021

A see-saw in temperatures and breeziness will take place over the next several days. A departing upper level low currently over New Mexico will be replaced with high pressure for the middle of the week before another more vigorous upper level low pressure system moves in from the northwest late in the week and this upcoming weekend. This change in atmospheric pressure and air masses will lead to the breeziness and fluctuating temperatures. The afternoon highs will rise into the mid/upper 90s Wednesday and Thursday before dropping back into the 80s on Friday and this upcoming weekend.

The ozone levels are forecast to be in the good to low/mid moderate range on the AQI scale due to afternoon breeziness and transitional nature of this week's weather. Wednesday's ozone forecast is the highest of the week (low to mid-moderate range) due to the aforementioned high pressure (warmer temperatures). The forecasted ozone levels for late in the week are in the good AQI category due to the approaching upper level low and southwesterly winds along with the slightly below normal temperatures. The particulates are also forecast to be in similar ranges on the AQI scale this week with the breeziness and chances for localized blowing dust. Check back tomorrow for an updated air quality forecast. Forecaster: S. DiBiase.

[HOURLY MONITORING DATA](#) (Draft, preliminary data - subject to change)

[MONITORING NETWORK MAP](#) [YESTERDAY'S AQI LEVELS](#)

	Yesterday's Daily Maximum AQI @ Hidden Valley	HIDDEN VALLEY PM₁₀ AQI FORECAST					
SITE NAME	MON 5/17/21	TUE 5/18/21	WED 5/19/21	THU 5/20/21	FRI 5/21/21	SAT 5/22/21	SUN 5/23/21
Hidden Valley (Twitter: HV AQI)	64	65	60	65	45	50	45

	<u>AIR QUALITY FORECAST FOR PM_{2.5} (PARTICLES)</u>					
SITE NAME	TUE 5/18/21	WED 5/19/21	THU 5/20/21	FRI 5/21/21	SAT 5/22/21	SUN 5/23/21
Casa Grande (Twitter: CG AQI)	35	38	37	30	30	31
Hidden Valley (Twitter: HV AQI)	55	50	52	40	42	40

<u>AIR QUALITY FORECAST BY LOCATION FOR</u> OZONE						
SITE NAME	TUE 5/18/21	WED 5/19/21	THU 5/20/21	FRI 5/21/21	SAT 5/22/21	SUN 5/23/21
Apache Junction (Twitter: AJ AQI)	50	65	55	47	47	58
Casa Grande (Twitter: CG AQI)	49	55	50	45	45	55
Pinal Air Park (Twitter: PAP AQI)	49	55	50	45	45	55
Queen Valley	55	70	60	50	50	60

<u>AIR QUALITY FORECAST BY LOCATION FOR</u> PM₁₀ (PARTICLES)						
SITE NAME	TUE 5/18/21	WED 5/19/21	THU 5/20/21	FRI 5/21/21	SAT 5/22/21	SUN 5/23/21
Apache Junction (Twitter: AJ AQI)	20	24	25	35	35	25
Casa Grande (Twitter: CG AQI)	44	43	44	50	50	43
Eleven Mile Corner (Twitter: PC Housing AQI)	45	42	55	50	55	44
Eloy (Twitter: Eloy AQI)	43	42	55	50	55	44
Maricopa (Twitter: Maricopa City AQ)	44	45	55	55	55	45
Pinal Air Park (Twitter: PAP AQI)	33	36	37	44	44	41
San Tan Valley Twitter: Santan AQI)	36	35	36	45	45	40
Stanfield (Twitter: Stanfield AQI)	55	57	65	62	65	60

AIR POLLUTANTS IN DETAIL

PM₁₀ & PM_{2.5} (PARTICLES):

Description – The term “particulate matter” (PMS) includes both solid particles and liquid droplets found in air. Many manmade and natural sources emit PM directly or emit other pollutants that react in the atmosphere to form PM. Particles less than 10 micrometers in diameter tend to pose the greatest health concern because they can be inhaled into and accumulate in the respiratory system. Particles less than 2.5 micrometers in diameter are referred to as “fine” particles and are responsible for many visibility degradations such as the “Valley Brown Cloud” (see <http://www.phoenixvis.net/>). Particles with diameters between 2.5 and 10 micrometers are referred to as “coarse”.

Sources – Fine = All types of combustion (motor vehicles, power plants, wood burning, etc.) and some industrial processes. Coarse = crushing or grinding operations and dust from paved or unpaved roads.

Potential health impacts – PM can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases, such as asthma and chronic bronchitis.

Units of measurement – Micrograms per cubic meter (ug/m³)

Averaging interval – 24 hours (midnight to midnight).

Reduction tips – Stabilize loose soils, slow down on dirt roads and carpool.

O₃ OZONE:

Description – This is a secondary pollutant that is formed by the reaction of other primary pollutants (precursors) such as VOCs (volatile organic compounds) and NO_x (Nitrogen Oxides) in the presence of heat and sunlight. The ozone “season” generally occurs during the spring and summer months (April-October) when high temperatures and extended daylight hours create the conditions most conducive to ozone formation.

Sources – VOCs are emitted from motor vehicles, chemical plants, refineries, factories, and other industrial sources. NO_x is emitted from motor vehicles, power plants, and other sources of combustion.

Potential health impacts – Exposure to ozone can make people more susceptible to respiratory infection, result in lung inflammation, and aggravate pre-existing respiratory diseases such as asthma. Other effects include decrease in lung function, chest pain, and cough.

Unit of measurement – Parts per million (ppm).

Averaging interval – Highest eight-hour period within a 24-hour period (midnight to midnight).

Reduction tips – Curtail daytime driving, refuel cars and use gasoline-powered equipment as late in the day as possible.