



PINAL COUNTY



FORECAST

GOOD (0-50)	MODERATE (51-100)	UNHEALTHY FOR SENSITIVE GROUPS (101-150)	UNHEALTHY (151-200)	VERY UNHEALTHY (201-300)	HAZARDOUS (301-500)
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AIR QUALITY FORECAST FOR TUESDAY, MAY 21, 2019

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 SUN 5/19/19	TODAY MON 5/20/19	TOMORROW TUE 5/21/19	EXTENDED WED 5/22/19	EXTENDED THU 5/23/19
OZONE	58 PINAL AIR PARK	49 GOOD	47 GOOD	50 GOOD	60 MODERATE	50 GOOD
PM _{2.5}	36 HIDDEN VALLEY	50 GOOD	49 GOOD	49 GOOD	50 GOOD	47 GOOD
PM ₁₀	34** ELEVEN MILE CORNER	55** MODERATE	55** MODERATE	50** GOOD	52** MODERATE	50** GOOD
HEALTH WATCH/ ADVISORY*	NONE	SPOTTY BLOWING DUST	SPOTTY BLOWING DUST	NONE	NONE	NONE

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

PM₁₀ = Particles 10 microns and smaller; PM_{2.5} = Particles 2.5 microns and smaller

“Ozone Health Watch” means that the highest concentration of OZONE may approach the federal health standard.

“PM_{2.5} and/or PM₁₀ Health Watch” means that the highest concentration of PM_{2.5} and/or PM₁₀ may approach the federal health standard.

“High Pollution Advisory” (HPA) means that the highest concentration of OZONE, PM_{2.5} or PM₁₀ may exceed the federal health standard.

“DUST” means that short periods of high PM₁₀ concentrations caused by outflow from thunderstorms are possible.

Health message for Monday-Tuesday, May 20-21, 2019: Active children, adults and people with lung disease, such as asthma, should consider reducing outdoor activities.

Discussion

Updated Monday, May 20, 2019

The unsettled weather continues as a series of upper level low pressure systems move through the area this week. Breezy to gusty winds at times along with the slight chance for some rain and perhaps a rumble of thunder. The winds will pick up in intensity this afternoon and again on Tuesday with slightly stronger winds expected Tuesday afternoon (gusts 30-35 mph). While some spotty blowing dust is possible the next several days, the overall PM10 levels are expected to be in the upper good to low moderate range of the AQI scale mainly due to the ground stabilization from the rains received in the local area the past several months. The ozone levels are forecast to be in the good AQI category due to the periodic cloud cover, strong winds and unseasonably cool temperatures (low 70s today, upper 70s/low 80s on Tuesday). Check back on Tuesday for an updated air quality forecast.

Stay up to date with current air pollution levels by checking the near real-time PM₁₀, PM_{2.5} and ozone levels online at <http://www.pinalcountyz.gov/AirQuality/Pages/AirQualityReport.aspx>.

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 AIR QUALITY FORECAST				
SITE NAME	SUN 5/19/19	TODAY AQI FORECAST MON 5/20/19	TOMORROW AQI FORECAST TUE 5/21/19	EXTENDED AQI FORECAST WED 5/22/19	EXTENDED AQI FORECAST THU 5/23/19	EXTENDED AQI FORECAST FRI 5/24/19
Hidden Valley (Twitter: HV_AQI)	42	50	50	50	60	50

<u>AIR QUALITY FORECAST FOR</u> PM_{2.5} (PARTICLES)					
SITE NAME	TODAY AQI FORECAST MON 5/20/19	TOMORROW AQI FORECAST TUE 5/21/19	EXTENDED AQI FORECAST WED 5/22/19	EXTENDED AQI FORECAST THU 5/23/19	EXTENDED AQI FORECAST FRI 5/24/19
Casa Grande (Twitter: CG_AQI)	43	42	42	44	41
Hidden Valley (Twitter: HV_AQI)	50	49	49	50	47

AIR QUALITY FORECAST BY LOCATION FOR
PM₁₀ (PARTICLES)

SITE NAME	TODAY AQI FORECAST MON 5/20/19	TOMORROW AQI FORECAST TUE 5/21/19	EXTENDED AQI FORECAST WED 5/22/19	EXTENDED AQI FORECAST THU 5/23/19	EXTENDED AQI FORECAST FRI 5/24/19
Apache Junction (Twitter: AJ AQI)	25	22	25	27	23
Casa Grande (Twitter: CG AQI)	45	44	46	49	48
Eleven Mile Corner (Twitter: PC Housing AQI)	55	55	50	52	49
Eloy (Twitter: Eloy AQI)	43	42	42	47	45
Maricopa (Twitter: Maricopa City AQI)	45	44	45	48	44
Pinal Air Park (Twitter: PAP AQI)	36	34	35	37	34
San Tan Valley Twitter: Santan AQI)	50	49	50	52	50
Stanfield (Twitter: Stanfield AQI)	52	50	50	52	50

AIR QUALITY FORECAST BY LOCATION FOR
OZONE

SITE NAME	TODAY AQI FORECAST MON 5/20/19	TOMORROW AQI FORECAST TUE 5/21/19	EXTENDED AQI FORECAST WED 5/22/19	EXTENDED AQI FORECAST THU 5/23/19	EXTENDED AQI FORECAST FRI 5/24/19
Apache Junction (Twitter: AJ AQI)	49	47	50	60	50
Casa Grande (Twitter: CG AQI)	47	46	48	52	50
Pinal Air Park (Twitter: PAP AQI)	49	47	49	55	49

* The symbols used for the Health Watch/Advisory are shown below



- Symbol for Health Watch (HW)



- Symbol for High Pollution Advisory (HPA)

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.