



P I N A L • C O U N T Y



AIR QUALITY INDEX

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 SATURDAY-MONDAY, MAY 27-29, 2017

This forecast is updated by 1:00 p.m. Monday through Friday and as needed (AQI Forecast on [Twitter](#) – see tables below for location specific Twitters)

Valid for areas within Pinal County Arizona

	Highest AQI value/Site in Pinal County	Highest AQI forecasted value (see tables below for forecasts by monitoring location)				
		YESTERDAY THU 5/25/17	TODAY FRI 5/26/17	TOMORROW SAT 5/27/17	EXTENDED SUN 5/28/17	EXTENDED MON 5/29/17
OZONE	67 APACHE JUNCTION	70 MODERATE	80 MODERATE	85 MODERATE	75 MODERATE	70 MODERATE
PM _{2.5}	22 CASA GRANDE	50 GOOD	55 MODERATE	55 MODERATE	60 MODERATE	55 MODERATE
PM ₁₀	54** STANFIELD	70** MODERATE	60** MODERATE	65** MODERATE	60** MODERATE	62** MODERATE
HEALTH WATCH/ ADVISORY*	NONE	NONE	NONE	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 Friday-Monday, May 26-29, 2017: Active children, adults and people with lung disease, such as asthma, should consider reducing outdoor activities.](#)

Discussion

Updated Friday, May 26, 2017

We have a quiet holiday weekend in store weather-wise with abundant sunshine on tap. High pressure will build into the area over the next several days as afternoon high temperatures rebound from the low 90s today up to the triple digits by Monday and Tuesday. After today the winds will subside through the first half of Memorial Day before a pressure gradient sets up near the four-corners and results in breezy easterly to southeasterly winds Monday night and lasting into Tuesday. The PM₁₀ levels will be mainly good with only Stanfield and Hidden Valley locations reaching the moderate AQI category. The PM_{2.5} levels will be in the good to low moderate range the next several days. The ozone levels will be on the rise this weekend before dropping back a bit on Monday and Tuesday due to the aforementioned breezy conditions. 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	THU 5/25/17	TODAY AQI FORECAST FRI 5/26/17	TOMORROW AQI FORECAST SAT 5/27/17	EXTENDED AQI FORECAST SUN 5/28/17	EXTENDED AQI FORECAST MON 5/29/17	EXTENDED AQI FORECAST TUE 5/30/17
Hidden Valley (Twitter: HV AQI)	23	65	75	75	85	80
HEALTH WATCH/ADVISORY*		None	None	None	None	None

AIR QUALITY FORECAST FOR
PM_{2.5} (PARTICLES)

SITE NAME	TODAY AQI FORECAST FRI 5/26/17	TOMORROW AQI FORECAST SAT 5/27/17	EXTENDED AQI FORECAST SUN 5/28/17	EXTENDED AQI FORECAST MON 5/29/17	EXTENDED AQI FORECAST TUE 5/30/17
Casa Grande (Twitter: CG AQI)	45	46	44	44	43
Hidden Valley (Twitter: HV AQI)	50	55	55	60	55

AIR QUALITY FORECAST BY LOCATION FOR
PM₁₀ (PARTICLES)

SITE NAME	TODAY AQI FORECAST FRI 5/26/17	TOMORROW AQI FORECAST SAT 5/27/17	EXTENDED AQI FORECAST SUN 5/28/17	EXTENDED AQI FORECAST MON 5/29/17	EXTENDED AQI FORECAST TUE 5/30/17
Apache Junction (Twitter: AJ AQI)	32	28	25	35	35
Casa Grande (Twitter: CG AQI)	45	43	43	47	48
Eleven Mile Corner (Twitter: PC Housing AQI)	49	48	45	50	52
Maricopa (Twitter: Maricopa City AQ)	50	48	47	49	49
Pinal Air Park (Twitter: PAP AQI)	42	40	38	45	45
San Tan Valley Twitter: Santan AQI)	46	44	43	49	50
Stanfield (Twitter: Stanfield AQI)	70	60	65	60	62

AIR QUALITY FORECAST BY LOCATION FOR OZONE

SITE NAME	TODAY AQI FORECAST FRI 5/26/17	TOMORROW AQI FORECAST SAT 5/27/17	EXTENDED AQI FORECAST SUN 5/28/17	EXTENDED AQI FORECAST MON 5/29/17	EXTENDED AQI FORECAST TUE 5/30/17
Apache Junction (Twitter: AJ_AQI)	70	80	85	75	70
Casa Grande (Twitter: CG_AQI)	55	65	65	50	48
Pinal Air Park (Twitter: PAP_AQI)	55	65	75	55	50

* 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” (PM) 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 billion (ppb).

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.