

# MONTHLY AIR QUALITY REPORT FOR FEBRUARY 2010

#### AOI COLOR SCALE

GOOD	MODERATE	UNHEALTHY FOR SENSITIVE GROUPS	UNHEALTHY
0-50	51-100	101-150	151-200

## Calendar of maximum AQI values & their corresponding color for February 2010\*

\*Preliminary data

#### SAMPLE POLLUTANT REPORTING BOX

1	O3	CO
(day of month)	PM10	PM2.5

	SU	N		МО	N		TU	ES		WE	D		TH	U		FRI		SAT			
			1	36	15	15 <sub>2</sub>		17	3	32	15	4	36	11	5	38	14	6	33	17	
			1	33	51	2	38	39	3	32	35	۲	35	37	3	33	47	U	28	40	
7	37	07	8	36	14	9	37	13	10	35	13	11	31	10	12	35	13	13	35	16	
,	09	16	O	26	32		27	30	10	28	31	11	23	43	12	26	60	15	26	64	
14	37	17	15	42	19	16	40	17	17	42	16	18	38	14	19	42	17	20	35	07	
	24	47	13	40	39	10	43	37	1,	50	47	10	44	40	.,	48	29		23	28	
21	36	07	22	40	07	23	39	09	24	37	10	25	38	11	26	39	15	27	37	17	
	09	19	22	12	17	23		31		22	33		39	37		34	31		33	27	
28	31	07																			
20	08	19																			
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## Calendar of High Pollution Advisories and Health Watches issued during February 2010

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_				1				2				3				4				5				6			
7				8				9				10				11				12				13			
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14				15				16				17				18				19				20			
17				13				10				1,				10				1)				20			
21				22				23				24				25				26				27			
21				11				23				27				23				20				21			
28																											
20				_																_							

#### **LEGEND**

### HIGH POLLUTION ADVISORIES

**A** = PM-10 High Pollution Advisory **B** = PM-2.5 High Pollution Advisory **C** = Ozone High Pollution Advisory

### **HEALTH WATCHES**

D = PM-10 Health Watch E = PM-2.5 Health Watch **F** = Ozone Health Watch

## Calendar of Meteorological Conditions observed in Metro Phoenix during February 2010

			N	иог	J	TUE					W	/ED			Т	ΗU			FI	રા		SAT					
				1				2				3		В		4				5				6		В	
				1		E		2				3				۲				3				O			
7	A	В	C	8				9				10		В		11			C	12			C	13			
_ ′				O		E		,				10				11				12		E		13			
14				15				16				17				18				19				20		В	
1-7				13				10		E		17				10				1)				20			
21		В	C	22	A	В	C	23				24				25				26				27		В	C
21				22				23				2 '				23				20				2,			
28	A	В	C												_												
20																											
	_     -																										

#### **LEGEND**

**ELECTROMETEORS** 

A = Thunderstorm

**HYDROMETEORS** 

 $\mathbf{B} = \text{Rain/Drizzle/Hail/Snow}$   $\mathbf{D} = \text{Blowing Dust}$ 

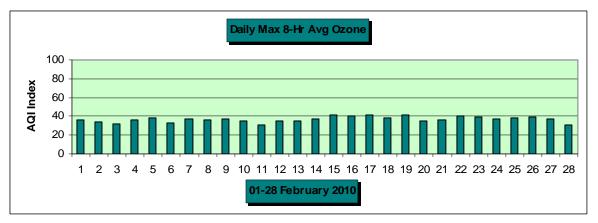
C = Fog

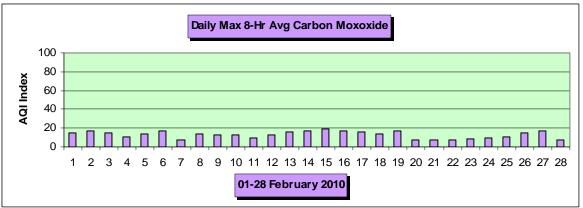
LITHOMETEORS

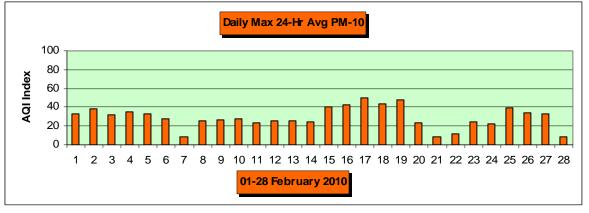
 $\mathbf{E} = \text{Haze (vsby } < 10\text{SM)}$ 

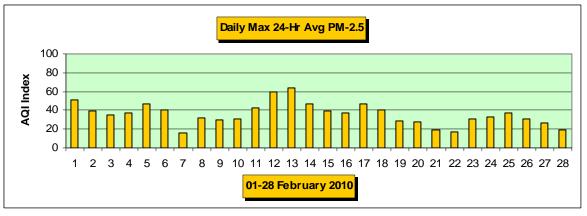
 $\mathbf{F} = \mathbf{Smoke}$ 

Exceedance days during FEB 2010-Total= 0 <u>Date</u> Max AQI **Pollutant** Site/s  $\frac{\textbf{Health Watches issued during FEB 2010-}}{\text{Total=}} \quad 0 \quad \underline{\textbf{Date}}$ Max AQI **Pollutant** Site/s **High Pollution Advisories issued during FEB 2010-**Total= 0 <u>Date</u> Max AQI **Pollutant** Site/s **Concentration Recap:** Days in the Good category: 25 Days in the Moderate category: 3 Days in the Unhealthy for Sensitive Groups category: 0 Days in the **Unhealthy** category: 0 Total Forecast Days: 28



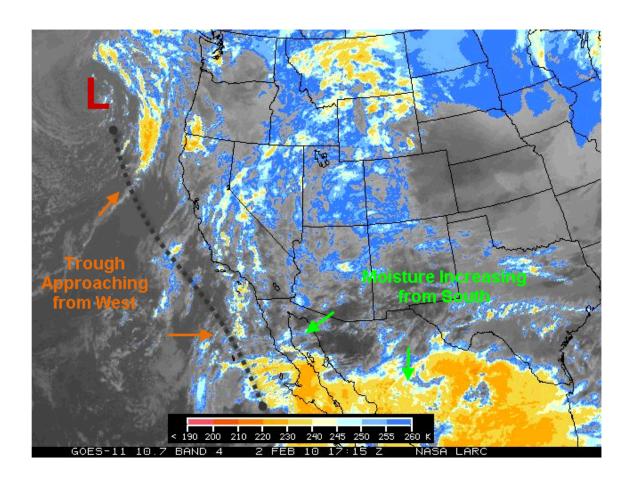




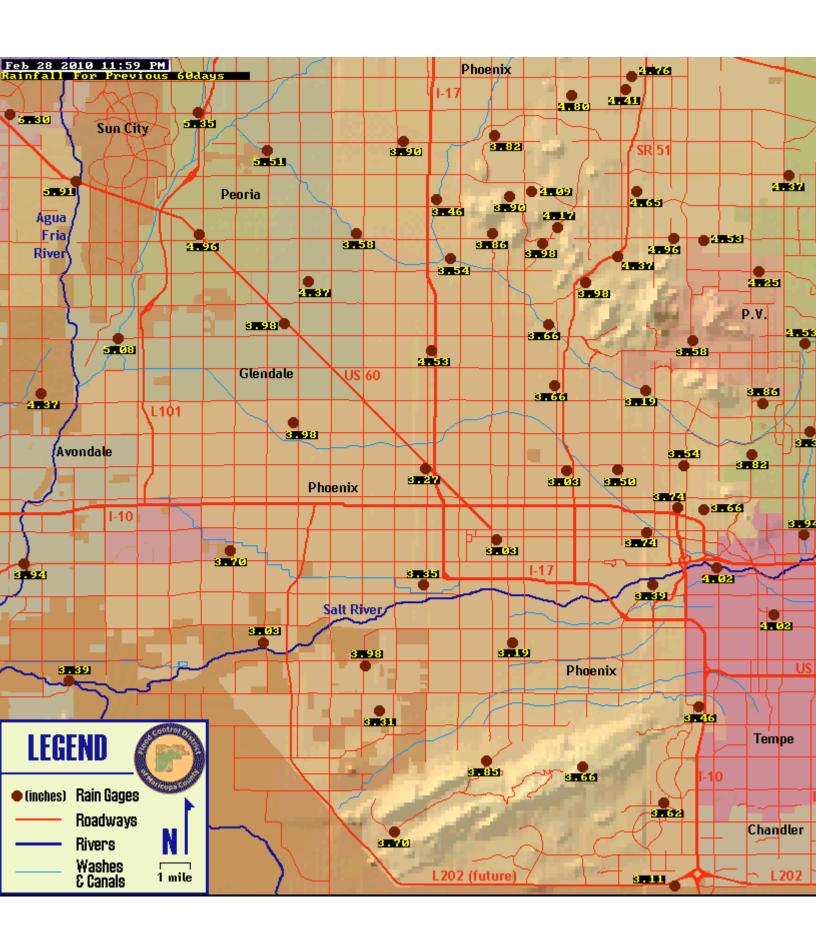


#### **Narrative:**

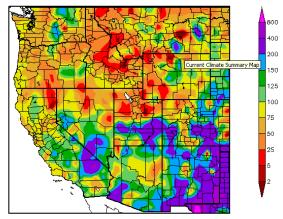
Valley air quality during the month of February 2010 was nothing short of spectacular. This was in large part due to the continuing presence of a moderate to strong El Nino pattern that was responsible for a very active storm track over the southwest U.S. No less than six upper level trough and frontal passages occurred during the month and all were precipitation producers for the metro area. The graphic below illustrates the synoptic situation on February 2 that culminated in a light rainfall episode on the 3rd. This pattern was typical for many of the February weather systems.



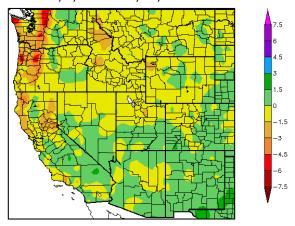
These periodic rainfall events helped keep local PM-10 (coarse particle) levels in the good range of the Air Quality Index the entire month – something not seen for many years. In fact, the moderate range of the AQI was only reached on three days during the month and that by PM-2.5 (fine particles) on days characterized by a ridge aloft, less than favorable dispersion, and mostly light or calm winds. The following graphics further illustrate the extent of rainfall over the Phoenix area since the first of the year and for the entire region during the month of February. -Reith



Percent of Normal Precipitation (%) 2/1/2010 - 2/28/2010



Departure from Normal Precipitation (in) 2/1/2010 - 2/28/2010



Precipitation (in) 2/1/2010 - 2/28/2010

