# PUBLIC INFORMATION STATEMENT NATIONAL WEATHER SERVICE FLAGSTAFF AZ 1000 AM MST SUN JAN 10 2010

...YEAR IN REVIEW FOR NORTHERN ARIZONA FOR 2009...

# ...TEMPERATURE AND PRECIPITATION OVERVIEW...

2009 DATA AND DEPARTURES FROM NORMAL FOR SELECTED CITIES:

	MAX	DEP	MIN	DEP	PCPN	DEP
	TEMP	NORM	TEMP	NORM	TOTL	NORM
BAGDAD	75.0	-1.9	45.7	-3.1	14.40	-4.78
BETATAKIN	62.2	+0.2	39.4	+1.3	7.41	-4.58
CANYON DE CHELLY	67.9	-1.2	38.0	+0.1	6.08	-3.09
TUZIGOOT(COTTONWOOD)	79.4	+0.3	48.2	+0.9	7.48	-5.25
FLAGSTAFF	61.9	+0.7	31.6	+0.5	11.65	-9.02
GANADO	66.0	+1.5	35.1	+2.1	4.27	-6.52
GRAND CANYON S RIM	63.5	+0.0	32.3	+0.0	5.74	-10.52
GREER	59.6	+1.4	30.7	+0.8	15.66	-6.85
HOLBROOK	72.4	+0.5	40.5	+2.7	3.15	-5.20
PAGE	70.9	+0.9	48.6	+1.8	4.18	-2.23
PRESCOTT	71.5	+2.1	42.0	+4.7	7.77	-11.12
SAINT JOHNS	70.3	+0.1	37.6	+1.7	4.18	-6.98
SEDONA	76.7	+1.2	49.3	+3.1	11.71	-6.12
SELIGMAN	72.5	+1.3	37.8	+1.8	6.77	-4.79
TUBA CITY	70.9	+0.6	43.2	+3.0	3.02	-3.39
WILLIAMS	63.9	+0.1	37.9	+3.1	14.61	-6.95
WINSLOW	72.8	+2.0	39.2	-0.3	2.81	-4.86

## 2009 SNOWFALL TOTALS AND DEPARTURES FROM NORMAL FOR SELECTED CITIES:

	2009 TOTAL(IN)	NORMAL(IN)	DEP NORM
ALPINE	79.4	88.2	-8.8
BETAKAKIN	19.8	50.7	-30.9
CANYON DE CHELLY	15.5	6.0	+9.5
FLAGSTAFF	83.4	108.6	-25.2
GRAND CANYON N. RIM	66.0	136.7	-70.7
GRAND CANYON S. RIM	65.5	44.3	+21.2
GREER	31.8	91.6	-59.8
HAPPY JACK	52.2	87.5	-35.3
HEBER	9.0	37.9	-28.9
JEROME STATE PARK	4.5	17.1	-12.6
MCNARY	76.2	88.2	-12.0
PAYSON	8.0	24.0	-16.0
SELIGMAN	17.2	12.4	+4.8
WILLIAMS	76.1	69.2	+6.9

## ...SIGNIFICANT WEATHER EVENTS...

#### FEBRUARY SNOWSTORMS...

...A PAIR OF STRONG WINTER STORMS BROUGHT HEAVY SNOW AND STRONG WINDS TO NORTHERN ARIZONA IN MID-FEBRUARY. THE SECOND OF THE TWO SYSTEMS WAS THE STRONGEST AND PRODUCED THE HEAVIEST SNOWFALL TOTALS...

FOUR DAY SNOWFALL TOTALS FROM THE PAIR OF STORMS INCLUDED:

FLAGSTAFF AIRPORT29	INCHES.
TONTO VILLAGE24	INCHES.
BELLEMONT24	INCHES.
MCNARY16	INCHES.

## MARCH WINDSTORMS...

...A SERIES OF STRONG BUT DRY TROUGH WITH SIGNIFICANT WIND AND BLOWING DUST EVENTS OCCURRED THROUGHOUT THE MONTH OF MARCH. FIVE MAJOR WIND EVENTS OCCURRED ACROSS NORTHERN ARIZONA ON MARCH 4TH...5TH...22ND...26TH ...AND 29TH. THE STRONGEST SYSTEM ARRIVED ON MARCH 22ND AND BROUGHT WITH IT A POWERFUL COLD FRONT THAT PRODUCED TREE DAMAGE AND SOME LOST SHINGLES TO STRUCTURES AROUND THE STATE. SOME POWER OUTAGES OCCURRED IN CHINLE AND CHINO VALLEY FROM THIS STORM.

PEAK WIND GUSTS REPORTED TO THE NATIONAL WEATHER SERVICE FROM THE MARCH 22ND STORM INCLUDED:

ST. JOHNS70	MPH.
LEUPP67	MPH.
FLAGSTAFF AIRPORT64	MPH.
WINSLOW64	MPH.
SHOW LOW60	MPH.
WINDOW ROCK59	MPH.
GRAND CANYON59 1	MPH.
PRESCOTT59	MPH.
PETRIFIED FOREST58	MPH.
SEDONA55	MPH.
CHINO VALLEY55	MPH.
PAGE52	MPH.

# RECORD GROWING SEASON FOR FLAGSTAFF...

THE FINAL FREEZE RECORDED AT FLAGSTAFF AIRPORT DURING THE SPRING OF 2009 WAS ON APRIL 30TH. THE NEXT FREEZING TEMPERATURE WAS NOT REACHED UNTIL THE MORNIN OF OCTOBER 1ST...A SPAN OF 153 DAYS. THIS LENGTH OF TIME SURPASSED THE PREVIOUS RECORD OF 146 DAYS SET BACK IN 1940.

#### THE DRY MONSOON...

AN UNUSUAL LARGE SCALE PATTERN DISRUPTED THE NORMAL FLOW REGIME THAT WOULD ALLOW MONSOON MOISTURE TO BE PUSHED ACROSS ARIZONA FROM JULY THROUGH SEPTEMBER.

ARIZONA WOULD EITHER EXPERIENCE DRY SOUTHWEST FLOW...OR BE LOCATED UNDERNEATH A CAPPING SUBTROPICAL RIDGE MOST OF THE TIME. THIS RESULTED IN MUCH BELOW AVERAGE PRECIPITATION FOR THE TYPICAL JUNE 15TH THROUGH SEPTEMBER 30TH MONSOON SEASON ACROSS NORTHERN ARIZONA.

SELECTED CITIES AND THEIR RAINFALL TOTALS FOR THE 2009 MONSOON AND THEIR RANKING AMONGST THE DRIEST MONSOONS OF ALL TIME:

CITY	2009 MONSOON RAINFALL	DRIEST RANKING
BELLEMONT	3.53"	1ST
FLAGSTAFF	2.87"	2ND
WINSLOW	1.04"	2ND
BAGDAD	2.02"	4TH
PAGE	0.93"	бТН
SELIGMAN	2.77"	8TH
PRESCOTT	4.34"	10TH
SEDONA	4.43"	12TH

#### SEDONA FLASH FLOOD...

LOCALLY HEAVY RAIN FROM STRONG THUNDERSTORMS OCCURRED OVER SEDONA ON SEPTEMBER 10TH. RADAR-ESTIMATED RAINFALL AMOUNTS OF ONE TO TWO INCHES PROMPTED THE ISSUANCE OF A FLASH FLOOD WARNING AT 208 PM MST. THE FIRST REPORTS OF RISING WATER AND FLOODING WERE RECEIVED AT 220 PM MST...WITH ADDITIONAL REPORTS ARRIVING THROUGH THE AFTERNOON. A RECORD RAINFALL TOTAL FOR THE DATE WAS MEASURED IN SEDONA TOTALING 2.5". FLASH FLOODING AT THE TLAQUEPAQUE ARTS AND CRAFTS VILLAGE AND LOS ABRIGADOS CAUSED EXTENSIVE DAMAGE. VEHICLES THAT WERE PARKED THERE WERE WASHED INTO THE VILLAGE...WITH SOME CARS STACKED ATOP ONE ANOTHER AS A RESULT OF THE FORCE OF THE FAST MOVING FLOOD WATERS.

# DECEMBER WINTER STORM...

A MAJOR WINTER STORM BROUGHT BLIZZARD CONDITIONS AND SEVERE THUNDERSTORMS TO PORTIONS OF NORTHERN ARIZONA DECEMBER 8TH AND 9TH. THE STORM BROUGHT WITH IT STRONG WINDS AND SNOWFALL TOTALS RANGING FROM 18 INCHES TO OVER 2 FEET OVER THE MOUNTAINS. WINDS ALONG AND AHEAD OF THE COLD FRONT CAUSED WIDESPREAD BLOWING AND DRIFTING OF SNOW AS WELL AS SOME PROPERTY AND TREE DAMAGE...AND POWER OUTAGES.

IN ADDITION...A LINE OF SEVERE THUNDERSTORMS WHICH WAS ESTIMATED TO BE CAPABLE OF PRODUCING WIND GUSTS IN EXCESS OF 80 MPH MOVED THROUGH NORTHERN GILA COUNTY AROUND MIDNIGHT.

SOME STORM TOTAL SNOWFALL AND WIND GUST REPORTS RECEIVED BY THE NATIONAL WEATHER SERVICE INCLUDED:

ARIZONA SNOWBOWL21 TO 32 INCHES
FLAGSTAFF
WILLIAMS20 INCHES
BELLEMONT19 INCHES
GRAND CANYON SOUTH RIM18 INCHES
MCNARY16 INCHES
PINETOP
HEBER8 INCHES

WINDOW ROCK
CHINO VALLEY
PRESCOTT74 MPH.
BELLEMONT70 MPH.
MINGUS MOUNTAIN
TWO GUNS69 MPH.
WINSLOW69 MPH.
CAMP VERDE66 MPH.
WINDOW ROCK56 MPH.
SAINT JOHNS56 MPH.
SEDONA54 MPH.
FLAGSTAFF53 MPH.

## A DRY 2009...

ALTHOUGH MOST LOCATIONS IN NORTHERN ARIZONA RECEIVED ABOVE NORMAL PRECIPITATION IN DECEMBER...THE LONG TERM PRECIPITATION DEFICIT REMAINED LARGE...AND MOST OF NORTHERN ARIZONA CONTINUES TO EXPERIENCE D2 AND D3 (SEVERE AND EXTREME) INTENSITY DROUGHTS.

WITH THE END OF THE YEAR PASSING SEVERAL LOCATIONS IN NORTHERN ARIZONA IN 2009 EXPERIENCED THEIR TOP TEN DRIEST YEAR OF ALL TIME.

SELECTED CITIES AND THEIR 2009 PRECIPITATION TOTALS AND THEIR RANKING AMONGST THE DRIEST YEARS ON RECORD:

CITY	2009 TOTAL	DRIEST RANKING
WINSLOW	2.81"	2ND
BELLEMONT	12.36"	2ND
FLAGSTAFF	11.65"	4TH
BAGDAD	9.41"	5TH
PAGE	4.51"	6TH
SELIGMAN	6.77"	8TH
PRESCOTT	10.31"	10TH

### ... WEATHER EXTREMES FOR NORTHERN ARIZONA IN 2009...

SELECTED CITIES HOTTEST...COLDEST...WETTEST...AND SNOWLEST DAYS OF 2009:

CITY	HOTTEST(T)	COLDEST(T)	WETTEST(IN)	SNOWIEST(IN)
ALPINE	84 ON 8/22	2 ON 12/17	0.85 ON 7/3	6.3 ON 12/25
BELLEMONT	91 ON 7/17	-18 ON 12/10+	1.27 ON 12/7	16.9 ON 12/7
CANYON DE CHELLY	98 ON 7/13	3 ON 12/28	0.48 ON 2/10	10.0 ON 2/10
CASTLE HOT SPRINGS	111 ON 7/27	33 ON 12/26	2.70 ON 12/7	0.0
FLAGSTAFF	93 ON 7/17	-6 ON 12/25	1.75 ON 12/7	20.1 ON 12/
GRAND CANYON S RIM	94 ON 7/18	-14 ON $12/11$	1.05 ON 12/7	18.0 ON 12/8
PAGE	105 ON 7/18	19 ON 12/11	1.84 ON 5/22	1.0 ON 12/22

PRESCOTT	102 ON 7/17	9 ON 12/4	2.12 ON 12/8	1.0 ON 12/23
SEDONA	106 ON 7/19	26 ON 12/4	2.50 ON 9/10	4.0 ON 2/10
WINSLOW	103 ON 7/19	8 ON 12/27	0.47 ON 5/22	N/A

+ OCCURRED ON MULTIPLE DATES

PLEASE SEND QUESTIONS OR COMMENTS TO W-FGZ.WEBMASTER@NOAA.GOV