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AREA FORECAST DISCUSSION

NATIONAL WEATHER SERVICE LAS VEGAS NV  
547 AM PDT MON JUL 4 2011

.SYNOPSIS...MONSOON MOISTURE WILL KEEP CHANCES FOR THUNDERSTORMS OVER MUCH OF THE MOJAVE DESERT AND SOUTHERN GREAT BASIN THROUGH THE WEEK. ISOLATED POCKETS OF HEAVY RAIN COULD LEAD TO LOCALIZED FLASH FLOODING. TEMPERATURES WILL BE NEAR TO SLIGHTLY ABOVE NORMAL WHILE HIGHER HUMIDITY WILL MAKE IT FEEL QUITE UNCOMFORTABLE...ESPECIALLY IN THE LOWER DESERTS.

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.UPDATE...INCREASED POPS THIS MORNING ACROSS SOUTHERN CLARK COUNTY AS LOOKS LIKE WIDESPREAD AREA OF RAIN SHOWERS OVER EASTERN SAN BERNARDINO COUNTY WILL HOLD TOGETHER AS IT MOVE NORTHWARD.

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.PREV DISCUSSION...  
400 AM PDT MON JUL 4 2011

.SHORT TERM...MOTHER NATURE'S FIREWORKS DISPLAY HAS MAINLY COME TO AN END EARLY THIS MORNING. RADAR DETECTS AN AREA OF SHOWERS ALONG AND SOUTH OF INTERSTATE 40 IN EASTERN SAN BERNARDINO AND SOUTHERN MOHAVE COUNTIES. HOWEVER...COOLING TOPS NEAR PARKER AND FAR SOUTHEAST SAN BERNARDINO COUNTY SUGGEST MORE THUNDERSTORMS TO COME. SATELLITE SHOWS THE PORTION OF THE FORECAST AREA NORTH OF INTERSTATE 15 IN CALIFORNIA AND NEVADA UNDER PARTLY CLOUDY SKIES.

FOR TODAY...AN INVERTED TROUGH OVER THE LOWER COLORADO RIVER VALLEY WILL MOVE WEST ACROSS SOUTHERN CALIFORNIA ADVECTING MOISTURE WESTWARD. AS MOISTURE MOVES WEST...THETA-E PAINTS AN AXIS ALONG THE SAN DIEGO AND SAN BERNARDINO COUNTY MOUNTAINS. SOUTHEASTERLY STEERING FLOW WILL MOVE STORMS FROM THE MOUNTAINS NORTHWARD INTO THE WESTERN MOJAVE DESERT THIS AFTERNOON AND EVENING. BOTTOM LINE...HAVE INCREASED POPS OUT WEST. DIFFICULT TO DETERMINE WHAT WILL OCCUR ELSEWHERE AFTER BOUNDARY LAYER IN MOHAVE AND SOUTHERN CLARK COUNTY WAS WORKED OVER SO WELL YESTERDAY. EASTERN THIRD OF THE AREA WILL START OUT UNDER MOSTLY CLOUDY SKIES WITH EMBEDDED SHOWERS. THIS WILL DELAY THE ONSET OF SURFACE HEATING SO DAYSHIFT WILL LIKELY BE KEYING ON DIFFERENTIAL HEATING BOUNDARIES OR REMNANT OUTFLOW BOUNDARIES FOR INITIAL CONVECTIVE INITIATION. LIKE YESTERDAY...STEERING FLOW WILL MOVE STORMS THAT DEVELOP OVER CENTRAL ARIZONA NORTHWESTWARD INTO MOHAVE COUNTY.

FOR TUESDAY AND WEDNESDAY...HIGH REMAINS CENTERED OVER EASTERN ARIZONA MEANING LITTLE CHANGE IN THE AIR MASS...THEREFORE LITTLE CHANGE WAS MADE TO THE FORECAST. TEMPERATURES ARE MORE DIFFICULT TO PINPOINT DUE TO INCREASED CLOUD COVER AND STORMS.

.LONG TERM...THE MAIN ISSUE IN THE EXTENDED WILL BE THE EXTENT OF DRYING THAT IS ABLE TO MATERIALIZE AS AN UPPER LEVEL TROUGH SWINGS THROUGH THE PAC NW THURSDAY INTO FRIDAY NIGHT. AS FAR AS THURSDAY AND FRIDAY GO...MEAN RELATIVE HUMIDITY IN THE 700-500 MB LAYER (MID-LEVELS) IS SHOWN TO BE AROUND 60 PERCENT OR GREATER OVER MOST OF THE AREA ON THE ECMWF AND GFS AND THE GFS FORECASTS PWATS OF AN INCH OVER THE SOUTHERN TWO-THIRDS OF THE AREA. GIVEN THAT THE MOISTURE WILL BE THERE I OPTED TO INCREASE POPS IN THE THURSDAY-FRIDAY PERIOD...INCLUDING THURSDAY NIGHT IN THE NW CWFA WHEN THE TROUGH AXIS AND SOME ASSOCIATED VORTICITY MAY HELP TO KEEP

CONVECTION GOING THROUGH THE NIGHT. OVERALL THOUGH THIS FAR OUT IT WILL BE HARD TO JUDGE WHAT AREAS SEE MORE DEVELOPMENT AS SOME PLACES MAY BE WORKED OVER TRENDING DOWN ACTIVITY IN SOME SPOTS WHILE OUTFLOW OR CONVERGENCE BOUNDARIES ENHANCE IT IN OTHERS. BY SATURDAY AND ESPECIALLY SUNDAY IT APPEARS WESTERLY FLOW WILL STRENGTHEN OVER THE WESTERN HALF OF THE AREA AS ANOTHER TROUGH AXIS SWINGS TOWARDS THE WEST COAST. THIS SHOULD GRADUALLY SPREAD DRIER AND MORE STABLE AIR INTO THE AREA AND TRIM BACK THE COVERAGE OF STORMS THE FURTHER WEST ONE GOES. FURTHER EAST OF LINCOLN AND ESPECIALLY MOHAVE COUNTIES ACTIVITY WILL HAVE AN EASIER TIME DEVELOPING AS MID-LEVEL MOISTURE REMAINS SUFFICIENT. BY NEXT MONDAY AND TUESDAY THE ECMWF AND GFS BOTH SHOW AN UPPER LOW DEVELOPING NEAR THE CALIFORNIA COAST AND INCREASE SOUTHERLY FLOW AGAIN ACROSS OUR AREA. AS A RESULT WE HAVE KEPT IN POPS THROUGH THE PERIOD IN THE EASTERNMOST AREAS AS IT LOOKS LIKE THEY WILL NEVER REALLY DRY OUT. TEMPS WERE KEPT AROUND NORMAL FOR HIGHS AND DAY TO DAY VARIATIONS WILL BE DRIVEN BY CLOUD COVER AND HOW MOIST IT GETS. THE MAIN THREATS IN STORMS WILL BE LOCALLY HEAVY DOWNPOURS TRIGGERING POTENTIAL FLASH FLOODING AND POOR DRAINAGE FLOODING AND GUSTY/ERRATIC WINDS.

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.AVIATION...FOR MCCARRAN...AWAY FROM ANY THUNDERSTORMS OR THUNDERSTORM OUTFLOW BOUNDARIES WINDS WILL MAINLY BE SOUTH TO SOUTH-SOUTHWEST AT 6-12 KTS. CLOUD COVER WILL MAINLY BE SCT-BKN AOA 8K FEET THROUGH MONDAY EVENING. WHILE THERE COULD BE SOME THUNDERSTORMS AROUND AND IN THE LAS VEGAS VALLEY AGAIN TODAY...THE ATMOSPHERE MAY BE A BIT WORKED OVER AND THUS THE CONFIDENCE IN ACTIVITY IS MODERATE AT BEST. HOWEVER...OUTFLOW FROM THUNDERSTORMS COULD CREATE GUSTY AND ERRATIC WINDS NOT SHOWN IN THE TAF AT THIS TIME AND IF NEEDED THE TAF WILL BE AMENDED FOR THESE SHOULD THEY DEVELOP. TSRA WILL ALSO BE POSSIBLE IN ALL OF THE APPROACH CORRIDORS TODAY. THE THREAT OF TSRA WILL CONTINUE THROUGH AT LEAST THURSDAY IN AND AROUND THE VALLEY AND AS WELL AS ALL OF THE APPROACH CORRIDORS. CIGS AND VSBY WILL BE REDUCED IN AND NEAR ANY STORMS.

FOR THE REST OF SOUTHERN NEVADA...NORTHWEST ARIZONA...AND SOUTHEAST CALIFORNIA...AWAY FROM THUNDERSTORMS OR OUTFLOW BOUNDARIES WINDS WILL MAINLY FOLLOW DIURNAL DIRECTIONAL TRENDS. THUNDERSTORMS AND ANY OUTFLOW BOUNDARIES WILL ALLOW FOR GUSTY AND ERRATIC WINDS ONCE AGAIN NOT SHOWN IN THE TAFS. BLDU MAY BE A CONCERN IN SOME AREAS AS WELL WITH REDUCED VSBY. TSRA WILL BE POSSIBLE ACROSS ANY PORTION OF THE AREA TODAY...HOWEVER ACTIVITY MAY BE FOCUSED MORE INTO THE SAN BERNARDINO COUNTY DESERTS AND THE SOUTHERN SIERRA NEVADA. MAINLY SCT-BKN CLOUDS AOA 7K-10K FEET WITH LOWER CIGS AND VSBY IN AND NEAR ANY TSRA.

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.CLIMATE...THE 0.74 INCH AT MCCARRAN AIRPORT ON SUNDAY TIES FOR THE 11TH WETTEST DAY SINCE 2000 WITH FEBRUARY 12TH 2003. THE WETTEST DAY SINCE 2000 AT MCCARRAN WAS DECEMBER 29TH 2004 WHEN 1.13 INCHES FELL. ONLY ONE OTHER DAY SINCE 2000 HAD AN INCH OR MORE OF RAIN FALL ON IT AND THAT WAS DECEMBER 22ND 2010 WHEN 1.01 INCH FELL.

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.VEF WATCHES/WARNINGS/ADVISORIES...  
NV...NONE.  
AZ...NONE.  
CA...NONE.

PIERCE/STACHELSKI

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