

NWS Las Vegas Forecast Discussions for Monday, June 27, 2016 Ozone Exceedance - abbreviated

FXUS65 KVEF 261006

AFDVEF

Area Forecast Discussion
National Weather Service Las Vegas NV
306 AM PDT SUN JUN 26 2016

.SYNOPSIS...Hot weather will continue into early next week under a ridge of high pressure. A trough of low pressure passing by to the south will bring the first influx of monsoon moisture next week, with slight chances for thunderstorms beginning in Mohave County Monday and spreading over much of the region by Wednesday and Thursday. This will also bring slightly cooler and more humid conditions.

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.SHORT TERM...Today through Tuesday night.

Not much has changed forecast wise with increasing temperatures expected today and Monday. Not a great deal of warming aloft is forecast through Tuesday with a couple degree rise in the 850-700mb layer. Surface temperatures are expected to warm a couple of degrees today compared to yesterday and maybe another degree or two on Monday with only slightly cooler numbers Tuesday. ...

Conditions today will remain dry area wide with little to no cloud cover expected. Winds will be a little breezy across the far southern and western portions of the CWA with light and variable winds elsewhere. ... Looking ahead to Monday, the moisture makes some progress northward as the trough continues westward with the one inch PWAT line reaching near Needles CA. ...

.AVIATION...For McCarran...South to southwest to continue overnight. Smoke from fires in nearby states will reduce slant range visibility, but probably not surface visibility. This pattern should continue through Monday, with thunderstorm chances arriving to the local mountains Tuesday.

For the rest of southern Nevada...northwest Arizona...and southeast California...Smoke from fires will remain aloft in most areas, reducing slant range visibility but probably not surface visibility except in high terrain. Expect typical diurnal winds in most areas with no significant clouds or weather today. Thunderstorm chances will begin in Mohave County and possibly far southern San Bernardino county Monday and spread to much of the region by Wednesday.

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FXUS65 KVEF 262209
AFDVEF

Area Forecast Discussion
National Weather Service Las Vegas NV
230 PM PDT SUN JUN 26 2016

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.AVIATION...For McCarran...Light winds will transition to a southwest flow with speeds around 7 kts overnight. Light northeast winds around 6-7 kts after 19z on Monday. A few clouds around 10-12k feet over the Spring Mountains with a slight chance of thunderstorms affecting the Peach Spring Corridor.

For the rest of southern Nevada...northwest Arizona...and southeast California...Smoke from fires will remain aloft in most areas, reducing slant range visibility but probably not surface visibility except in high terrain. Expect typical diurnal winds in most areas with no significant clouds or weather into Monday morning.

Thunderstorms will be possible across Mohave and far southern San Bernardino Counties Monday afternoon. Wind speeds will remain below 10 kts.

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FXUS65 KVEF 271015
AFDVEF

Area Forecast Discussion
National Weather Service Las Vegas NV
315 AM PDT MON JUN 27 2016

.SYNOPSIS...High pressure will shift across the southern Great Basin today with a weak disturbance moving across the southwest deserts.

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.SHORT TERM...Today through Wednesday night.

An inverted trough continues its push westward this morning with the upper circulation located over the northern Gulf of California at 2 am. As the trough turns in a northwest direction today, high pressure will transition over the southern Great Basin into Utah. This will allow moisture to spread further north today with an inch and quarter PWAT values reaching near Needles by late afternoon and one inch PWATs extending from Barstow CA east through Kingman AZ. Within this higher moisture content airmass lies the best instability and potential for shower and thunderstorm development. Forecast soundings show dry lower levels so any storms that are able to form will start out high based and present a strong wind gust

threat initially. With the trough axis lifting north across the area tonight, nocturnal thunderstorms are a possibility but overall coverage is not expected to be too widespread.

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.AVIATION...For McCarran...Areas of smoke are possible this morning with wildfires to the west of the valley. Southwest to west winds with speeds 5-7 kts becoming light and variable after 14z and then favoring a northeast direction around 6-7 kts after 19z. A few clouds around 10-12k feet over the Spring Mountains today with a slight chance of thunderstorms affecting the Peach Spring corridor.

For the rest of southern Nevada...northwest Arizona...and southeast California...Smoke from fires will remain aloft in most areas, reducing slant range visibility but probably not surface visibility except in high terrain. Expect typical diurnal winds in most areas with no significant clouds or weather over most of the area through the morning. More cloud cover is expected today across the southern areas including KEED, KIFP and KDAG. Thunderstorms will be possible across Mohave and far southern San Bernardino Counties this afternoon into the evening hours. Outside of thunderstorm outflow, winds will generally remain below 10 kts.

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Area Forecast Discussion

National Weather Service Las Vegas NV
915 AM PDT MON JUN 27 2016

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.UPDATE...Attention today will be on the inverted trough located near Yuma this morning and the associated moisture which was spreading up over southeast San Bernardino and southern Mohave counties. The 12Z Yuma sounding measured 1.36" of precipitable water but lifted indices showed a fairly stable airmass. The 12Z Las Vegas sounding was quite stable. However...mesoanalysis charts indicated moderate instability in between Lake Havasu and Yuma. Cloud cover will limit surface heating for nearby zones much of today but we may see isolated thunderstorms developing late afternoon and early evening for southeast San Bernardino and southern Mohave county zones. This is reflected in the going forecast. No immediate changes are needed.

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FXUS65 KVEF 272152
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Area Forecast Discussion
National Weather Service Las Vegas NV
250 PM PDT MON JUN 27 2016

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.SHORT TERM...tonight through Wednesday night.

Thunderstorms were developing on the trailing edge of the inverted trough/easterly wave that was lifting into northwest Arizona and southeast California. The thunderstorms moving into east central Mohave county were clearly producing light to moderate rainfall but radar rainfall estimates up to 0.75" were likely way overdone. The latest high resolution models indicate thunderstorms will be confined mostly to central and southern Mohave county late this afternoon and evening but there will be the potential for strong winds from these storms that may push across the Colorado River Valley and possibly into southern Nevada this evening.

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.AVIATION...For McCarran...Through Wednesday, expect southeasterly winds under 10 knots in the afternoons and south southwesterly winds around 10 knots overnight. ...

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FXUS65 KVEF 272207 CCA
AFDVEF

Area Forecast Discussion
National Weather Service Las Vegas NV...Corrected
250 PM PDT MON JUN 27 2016

.SYNOPSIS...A weak disturbance moving up from the south will bring an increase in moisture to the area and a chance of thunderstorms for portions of the region through at least midweek. Slightly cooler temperatures and considerable cloud cover can be expected tonight and Tuesday.
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FXUS65 KVEF 280124 CCA

AFDVEF

Area Forecast Discussion
National Weather Service Las Vegas NV
624 PM PDT MON JUN 27 2016

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.UPDATE...Inverted trough pushing westward across southern Mohave County this evening and has been responsible for initiating convection over portions of Mohave County. The initial band of convection that pushed through Kingman produced 60 mph gusts in Kingman, and a storm from Kingman northward through Dolan Springs. Outflow from the thunderstorms has pushed to the west and has gradually weakened and has reached the lower Colorado River Valley. The outflow is now near Boulder City, NV and may make it into the eastern portions of the Las Vegas Valley by 7 pm with wind gusts of 20 to 30 mph possible. Overall convection has been diminishing but isolated thunderstorms are expected for the next few hours over Clark, Mohave and easetrn San Bernardino County. Updated the forecast to increase clouds across the area for the rest of the evening.

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