NWS San Diego All-Hazard Reference Guide

<u>Warnings and Advisories</u> are issued 12 to 48 hours in advance. <u>Watches</u> are issued when *warning* level conditions are forecast within the next 36 to 48 hours, or up to 72 hours with high confidence.

High Winds/Blowing Dust

Region	Wind Advisory	High Wind Warning	Blowing Dust Advisory	Dust Storm Warning
Coastal and	Sustained ≥ 30 mph	Sustained ≥ 40 mph	Visibility	Visibility
Valley areas	or gust ≥ 35 mph	gust ≥ 58 mph	¼ to 1 mile	<¼ mile
Mountains and Deserts < 7000 feet	Sustained ≥ 35 mph or gust ≥ 40 mph	Sustained ≥ 45 mph or gust ≥ 58 mph	Visibility ¼ to 1 mile	Visibility <¼ mile
Mountains > 7000 feet	Sustained ≥ 40 mph	Sustained ≥ 40 mph	Visibility	Visibility
	or gust ≥ 55 mph	or gust ≥ 75 mph	¼ to 1 mile	<¼ mile

Winter Weather

Region	Winter Weather Advisory	Winter Storm Warning	Blizzard Warning	Wind Chill Advisory	Wind Chill Warning
Mountains > 7000 feet	4-8" in 12 hours, or 8-12" in 24 hours	12" in 12 hours, 18" in 24 hours, High Impact	Sustained winds ≥ 35 mph and visibility <¼ mile in blowing snow	Wind Chill Temperatures from -10 to -20 °F	Wind Chill Temperatures < -20 ∘F
Mountains 3000 to 7000 feet	3-6" in 12 hours, 4-8" in 24 hours	8" in 12 hours, 12" in 24 hours, High Impact	Sustained winds ≥ 35 mph and visibility <¼ mile in blowing snow	Wind Chill Temperatures from -10 to -20 °F	Wind Chill Temperatures < -20 ∘F
Other areas including High Deserts and Valleys	1-4" in 12 hours, 3-6" in 24 hours	4" in 12 hours, 6" in 24 hours, High Impact	Sustained winds ≥ 35 mph and visibility <¼ mile in blowing snow	Wind Chill Temperatures from -10 to -20 °F	Wind Chill Temperatures < -20 ∘F

Heat Advisory Criteria

(Ambient maximum temperature)

Heat Advisory		Inland	San Diego	Inland	Nation	Des	erts
Criteria (°F)	Orange and San Diego	Orange	Valleys	Empire	Mtns	High	Low
Oct Thru May	95	100	100	100	90	105	108
June	95	100	100	103	95	107	112
July	95	100	100	103	95	107	112
August	95	100	100	105	95	107	112
September	95	100	100	103	95	107	112

Heat Warning Criteria

(Ambient maximum temperature)

Heat Warning	Coastal	Inland	San Diego	Inland	Mtns	Des	erts
Criteria (°F)	Orange and San Diego	Orange	Valleys	Empire		High	Low
Oct Thru May	100	105	105	105	95	108	113
June	100	105	105	108	100	110	115
July	100	105	105	108	100	112	117
August	100	105	105	110	100	112	117
September	100	105	105	108	100	110	115

Heat Index - Warning Criteria

Heat Index	Coastal	Inland	San	Inland	Dittor	Deserts	
Criteria (°F)	Orange and San Diego	Orange	Diego Valleys	Empire	Mtns	High	Low
Day – All Year	105	110	110	110	100	110	115
Night – All Year	75	75	75	75	75	75	85

Frost and Freeze Products

NPW type	Zone	Criteria	Time of year
Frost	Coastal, Valley, Lower Deserts	33 to 36	Anytime
Advisory	High Deserts	28 to 33	1 st and 2 nd occurrence*
	Coastal, Valley	28 to 32	Anytime
Eroozo Warning	Lower Deserts	25 to 32	Anytime
Freeze Warning	High Deserts	20 to 27	1 st and 2 nd occurrence*
	Coastal, Valley	Below 28	Anytime
Hard Freeze	Lower Deserts	Below 25	Anytime
Warning	High Deserts, Mountains below 5000 feet	Below 20 high impact	Anytime

^{*}Season is May 1 to November 30th

A Freeze Watch is issued when warning level conditions are expected in the next 24 to 48 hours, or up 72 hours for high confidence

Fire Weather

Fire Weather Watch	Red Flag Warning
Red Flag conditions expected in the next 24 to 96 hours (1 to 3 days).	Sustained wind > 25 mph and/or gusts > 35 mph with relative humidity < 15 % for 6 or more hours, or dry lightning,

Dense Fog

Dense Fog Advisory

Widespread visibilities $\leq \frac{1}{4}$ mile in dense fog for 3 hours or more. An Advisory can be issued for smaller areas if anticipated impacts are significant (i.e. morning commute).

Severe Thunderstorm and Tornado Warning

Severe Thunderstorm Warning	Tornado Warning
Hail size 1 inch or greater and/or	A tornado is spotted, or if radar or other data indicate
wind gusts ≥ 58 mph	existence or formation likely

Floods

Flash Flood Watch	Flash Flood Warning*	Urban Small Stream Advisory	Areal Flood Warning	Flood Warning
1. Atmospheric and/or ground conditions are favorable for heavy rain and flash floods within 6 to 48 hours. 2. Or Potential for dam failure.	 Flash flooding (≥ 6 inches of moving water or debris). Dam break imminent or occurring within 6 hours. Flooding reported or indicated on radar. 	Minor or nuisance flooding, street flooding or small streams within banks, poor drainage areas. Low impact unless other conditions presented	1 or more streams are having rapid flows, rising water, or are flooding their banks. Can last more than 6 hours.	River flooding its banks that typically lasts more than 1 day and is slower to rise than Flash Floods (e.g., San Diego River).

^{*}A flash flood emergency may be issued for extreme events

Marine

Small Craft	Gale	Storm	Special Marine
Advisory	Warning	Warning	Warning
Winds gusts from 21 to 33 knots, steep waves, and/or combined seas ≥ 10 feet.	Gale Force Winds of 34 to 47 knots.	Storm Force Winds of speeds 48 to 63 knots.	Thunderstorms, waterspouts or funnel clouds. Also for wind gusts > 33 kt.

A Gale Watch or a Storm Watch is issued when Gale or Storm warning level conditions are expected in the next 24 to 48 hours, or up 72 hours for high confidence.

High Surf Advisory	Beach Hazards Statement
Widespread surf heights of 7	Elevated surf, strong rip currents, minor tidal overflow,
feet or greater	lightning, or an outlook for high surf

Coastal Flooding

Coastal Flood Advisory	Coastal Flood Warning
Localized minor flooding of low-lying areas along the beach and/or adjacent streets and parking lots within the next 24 hours. Factors include unusually high tides, storm surge, strong onshore winds, and/or high surf.	Widespread flooding of beaches and adjacent streets, lots, and buildings within the next 24 hours. Factors include extreme tides, significant storm surge, strong onshore winds, and/or very large surf (20+ feet).

A Coastal Flood Watch is issued when conditions for major coastal flooding are possible within the next 24 to 48 hours, and up to 72 hours in high confidence.

<u>Tsunami</u>

Location	Tsunami	Tsunami	Tsunami	Special Weather
	Watch	Advisory	Warning	Statement
San Diego and Orange County Coastal Zones.	Typically issued with earthquake magnitudes > 7.8.	A series of small waves less than 3 feet (1 meter). Very strong currents.	Anticipated inundation from series of waves of 3 feet or higher (1 meter). Very strong currents. Earthquake magnitude > 7.8 and observed tsunami.	Issued by local WFO to add additional detail and relevant information (e.g., local impacts, tide levels, storm surge)