

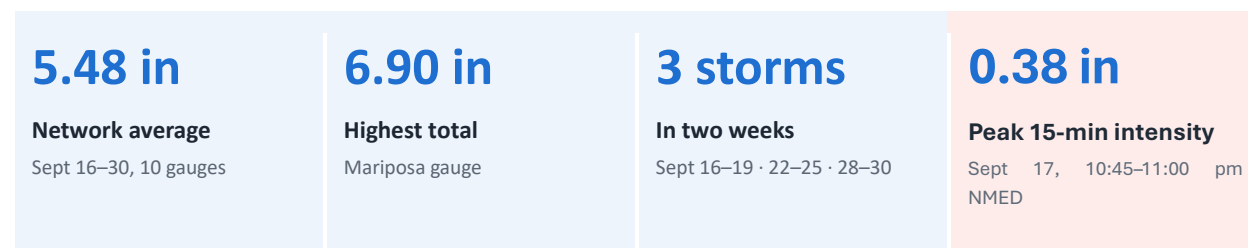


STORM EVENT REPORT

September 2026 Storms

Rainfall across the SSCAFCA rain-gauge network, September 16-30, 2026

Data period: Sept 16, 00:00 – Sept 30, 08:30 MDT · 10 rain gauges ·



How much rain fell near you

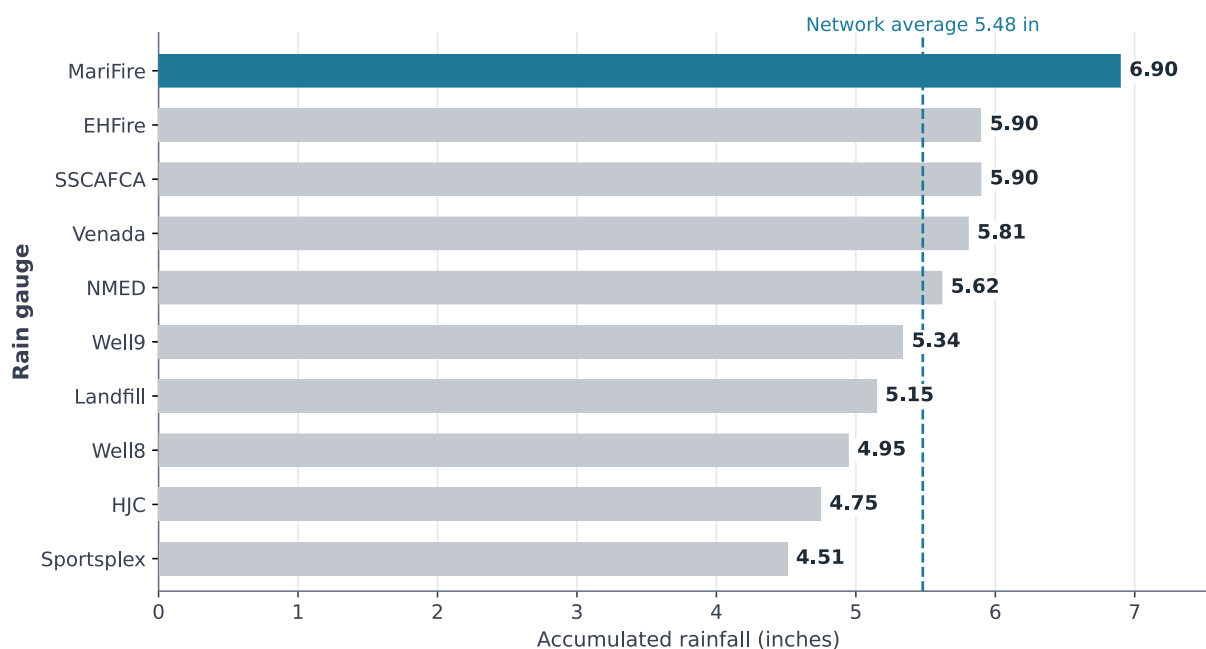


Figure 1. Accumulated rainfall by reporting location. The dashed line shows the unweighted network average. These compiled records can include nearby replacement-station observations.

- **4.5 to 6.9 inches of rain in two weeks.** Every gauge recorded at least 4.5 inches between September 16 and 30; the network average was **5.48 inches**.



- **Three separate storms.** Rain arrived on **Sept 16–19, Sept 22–25 and Sept 28–30**, with only two to three dry days in between. Each storm fell on ground that was **still wet** from the last, so more of the rain ran off instead of soaking in.
- **The heaviest rain fell around midnight.** Every gauge's wettest hour came overnight, on **Sept 17–18 or Sept 28–29**.
- **Two nights stood out for different reasons.** On Sept 17–18, MariFire rain gauge (Mariposa) recorded 1.31 inches in just 2 hours, the highest 2-hour rainfall total at any gauge during either storm and the sharpest rise in Figure 3. During the storm that began on the night of Sept 28–29, Lower Venada rain gauge recorded 2.92 inches over 34 hours and 10 minutes, the highest storm total in the network. Its 12 to 24-hour rainfall totals reached or exceeded NOAA's estimates for rainfall with a 50-year recurrence interval. Overall, the first storm brought the strongest short bursts, while the Sept 28–30 storm brought the most rain over longer periods.
- **Rain was uneven across the area.** In the first storm, MariFire rain gauge located at Mariposa collected about **3.8 inches** while HJC (Harvey Jones Channel) collected **1.0 inch**. What you saw in your neighborhood may differ from the numbers at the nearest gauge.

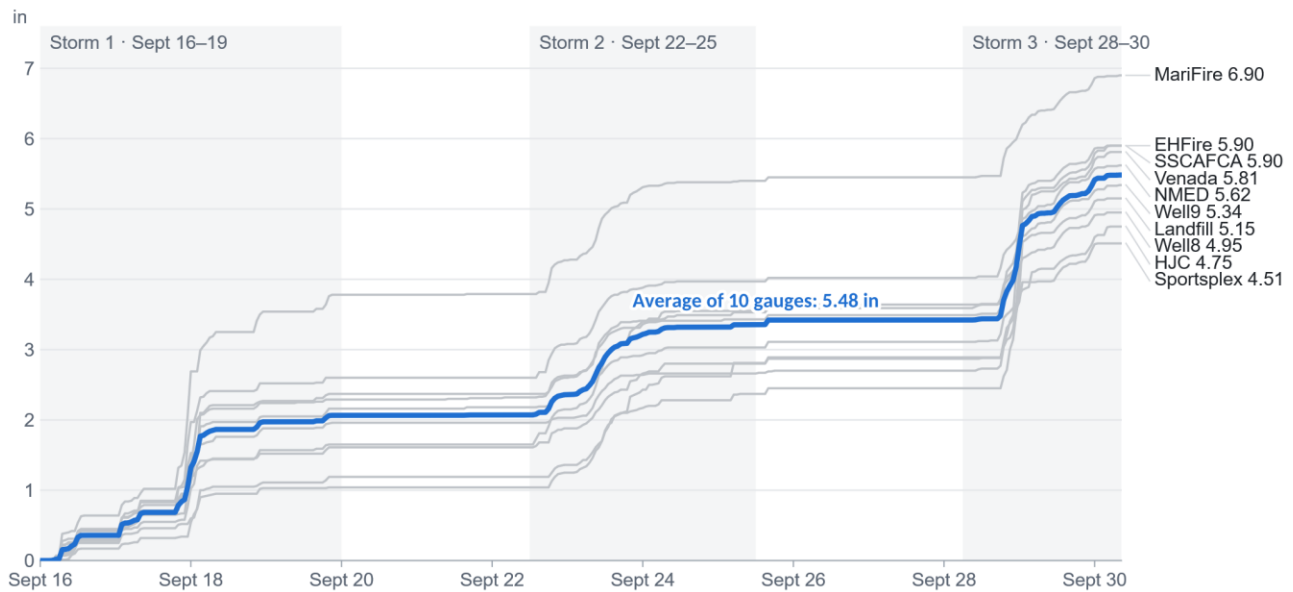


When the rain arrived

Rainfall accumulated during three distinct storm events. The gray curves on Figure 2 show the ten reporting locations; the teal curve shows their average. The steps make it easy to see when rainfall added up and when there was little additional rain.

All ten gauges climbed in three steps to between 4.5 and 6.9 inches

Cumulative rainfall since Sept 16, 2026, in inches. Grey lines = individual gauges; blue = average of all ten.



Source: SSCAFCA rain gauges (5-minute data); closest Weather Underground station where SSCAFCA data were missing. Sept 16 00:00 – Sept 30 08:30 MDT.

Figure 2. Rainfall accumulated through the reporting period. Curves are replotted from the supplied cumulative figure; gray shows individual locations and teal shows their arithmetic average.



Temporal distribution

Every gauge's wettest 60 minutes fell around midnight, in either Storm 1 or Storm 3.

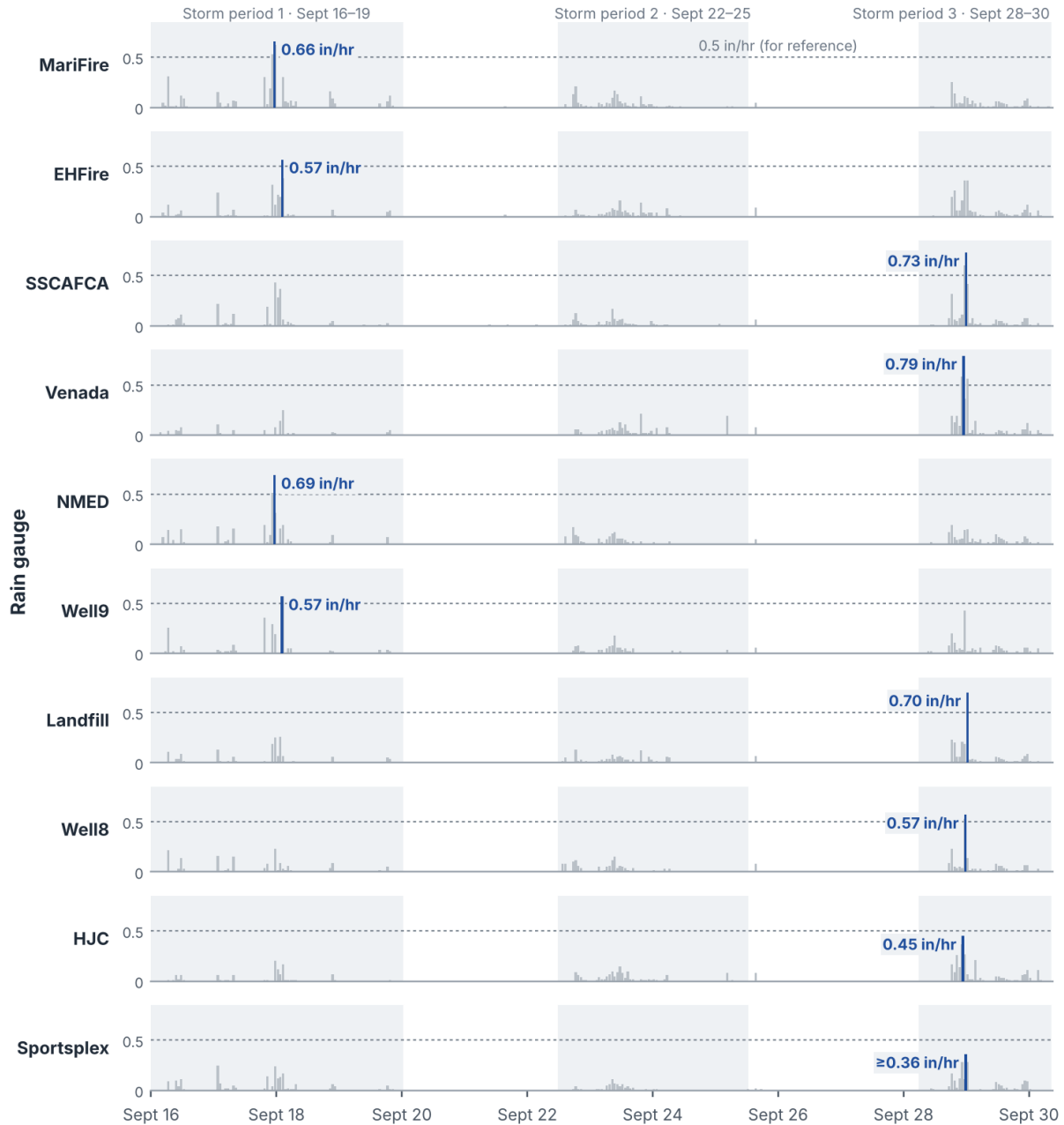


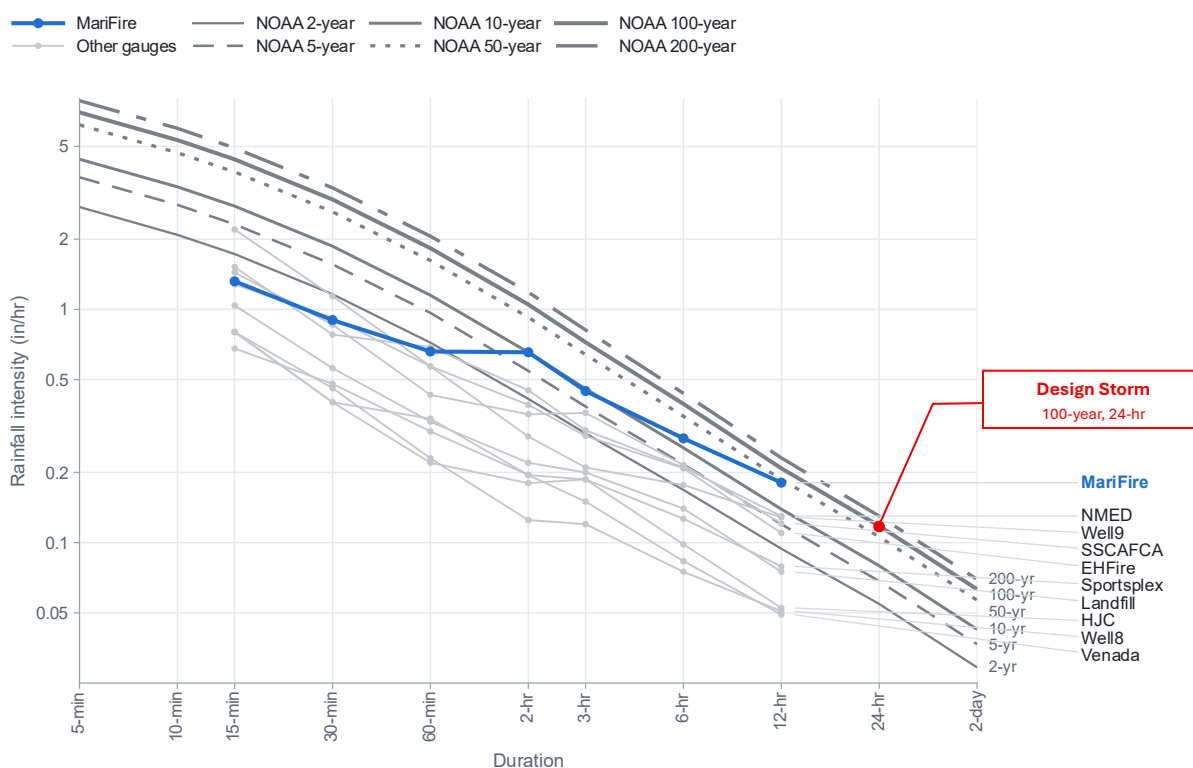
Figure 3. Hourly rainfall at each gauge. Grey bars = rain in each clock hour; blue bar = the wettest 60 minutes at that gauge (a moving window, so it is usually a little higher than the tallest grey bar). Dashed line = 0.5 in/hr for reference.



Precipitation frequency

A storm may not have one single recurrence interval. Storm recurrence interval depends on both location and duration: the same storm can have a shorter recurrence interval over 15 minutes and a longer one over 12 hours. For each gauge, we compared rainfall totals over durations from 15 minutes to 2 days with NOAA's official precipitation-frequency estimates (NOAA Atlas 14) to determine the corresponding recurrence intervals.

As shown in Figure 4, rainfall during the September 17–18 storm varied considerably across the 10 rain gauges. MariFire rain gauge located at Mariposa recorded the highest recurrence intervals for sustained rainfall. Short-duration intensities were below or near NOAA's 2-year curve, while longer-duration intensities ranged from approximately the 10-year curve to near the 50-year recurrence interval curve at 12 hours. Prolonged rainfall characterized the event at MariFire rain gauge, while most other gauges recorded lower intensities.



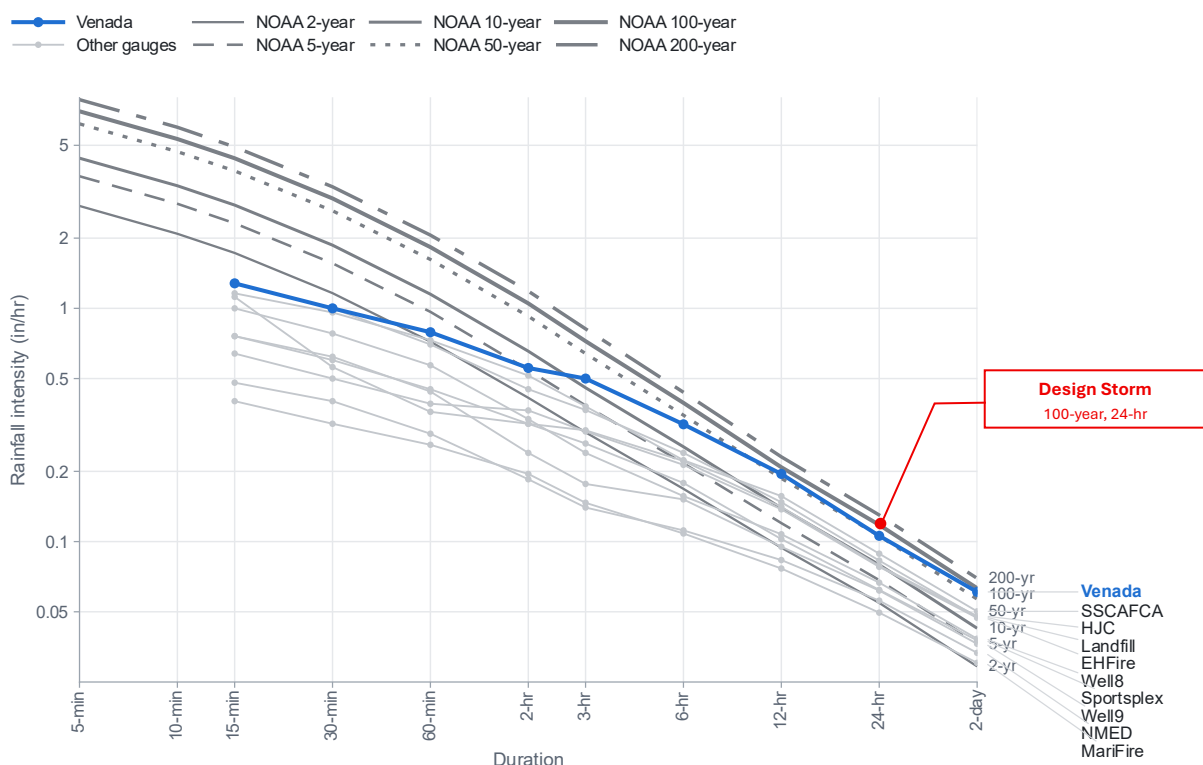
Source: NOAA Atlas 14 Vol. 1 v5 (point 35.31° N, 106.68° W); SSCAFCA rain gauges, with the closest Weather Underground station where SSCAFCA data were missing

Figure 4. Comparison of rainfall intensities measured at 10 rain gauges during the September 17–18 storm, with NOAA Atlas 14 intensity-duration-frequency curves. Gray curves represent recurrence intervals of 2 to 200 years.



As shown in Figure 5, Venada rain gauge recorded the highest intensities during the September 28–30 storm. Short-duration intensities were below or near the 2-year recurrence interval curve. Longer-duration rainfall corresponded to higher recurrence intervals, reaching between the 50- and 100-year curves at 12 hours and approximately the 50-year curve at 24 hours. Other gauges recorded lower intensities, showing how unevenly rainfall was distributed across the monitored area.

Individual intensity–duration–frequency curves for each gauge are provided in the appendix.



Source: NOAA Atlas 14 Vol. 1 v5 (point 35.31° N, 106.68° W); SSCAFCA rain gauges, with the closest Weather Underground station where SSCAFCA data were missing.

Figure 5. Comparison of rainfall intensities measured at 10 rain gauges during the September 28–30 storm, with NOAA Atlas 14 intensity–duration–frequency curves. Gray curves represent recurrence intervals of 2 to 200 years.

Return periods describe storm event rarity at individual gauges and durations, **not the frequency of resulting flooding**. A 50-year rainfall has a 2% chance of being equaled or exceeded in any given year; it does not occur only once every 50 years.



From rainfall to runoff: What it means for our arroyos

Arroyos collect water from upstream drainage areas. Conditions at one location do not necessarily show what is happening farther upstream. The rainfall differences during the first round illustrate why one gauge cannot represent every drainage basin.

Rainfall is one part of the flood story

Flooding also depends on how rain is spread across a watershed, how wet the ground was beforehand, how quickly water moves through channels, and how much detention storage is available. A rainfall comparison near a 50-year curve does not prove that a 50-year flood occurred. This report summarizes rainfall; it does not rate facility performance or identify flood damage.

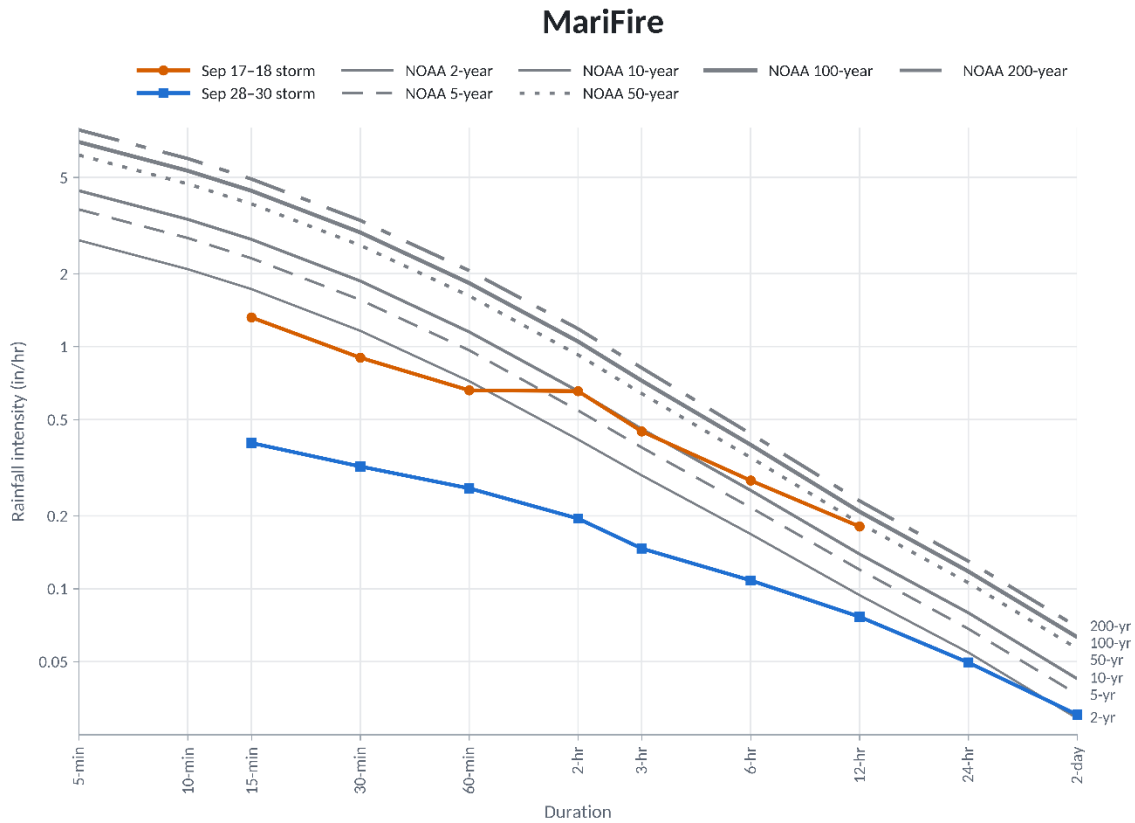
Stay out of arroyos during rain

Avoid arroyo channels and flooded crossings during storms. Rain falling upstream can create a hazard even when little rain is falling where you are. At night, flowing water and washed-out surfaces are especially difficult to judge. Follow official weather alerts and local emergency guidance.



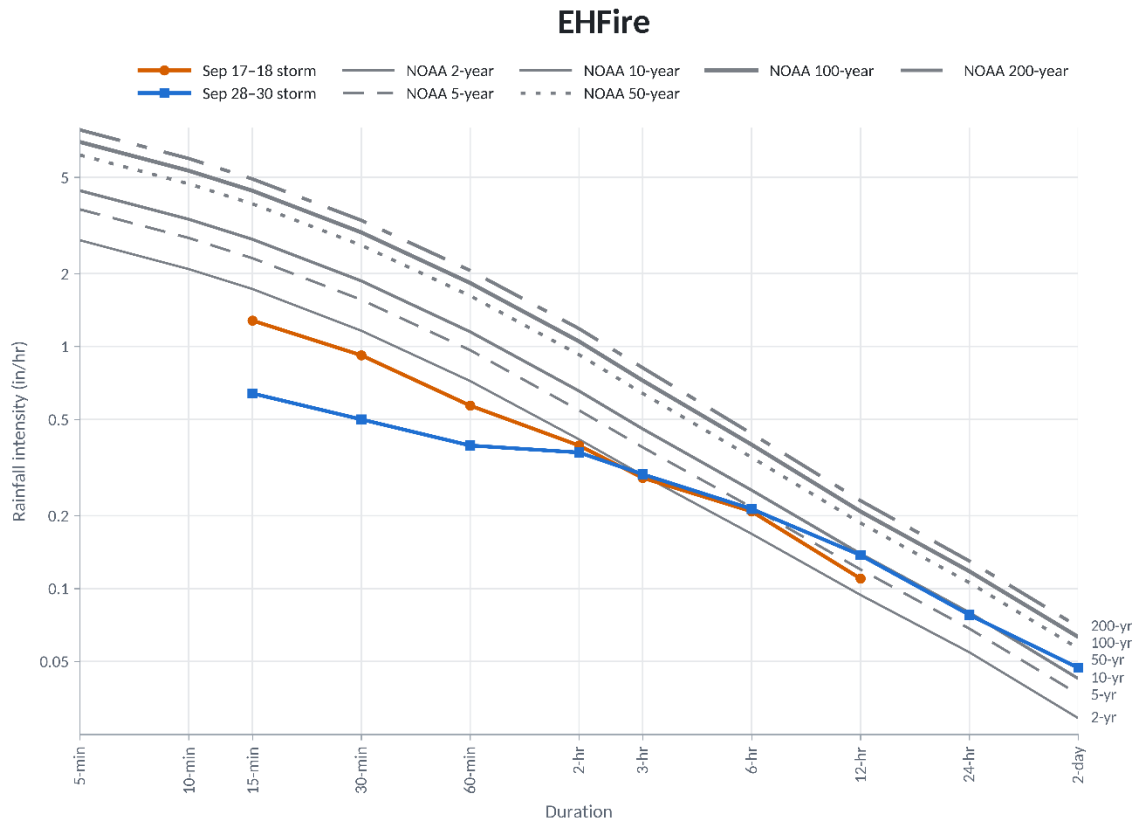
Appendix: Intensity–duration–frequency curves by gauge

Each figure compares the two principal storms at each rain gauge with the NOAA Atlas 14 curves (gray) for the 2- to 200-year recurrence intervals.



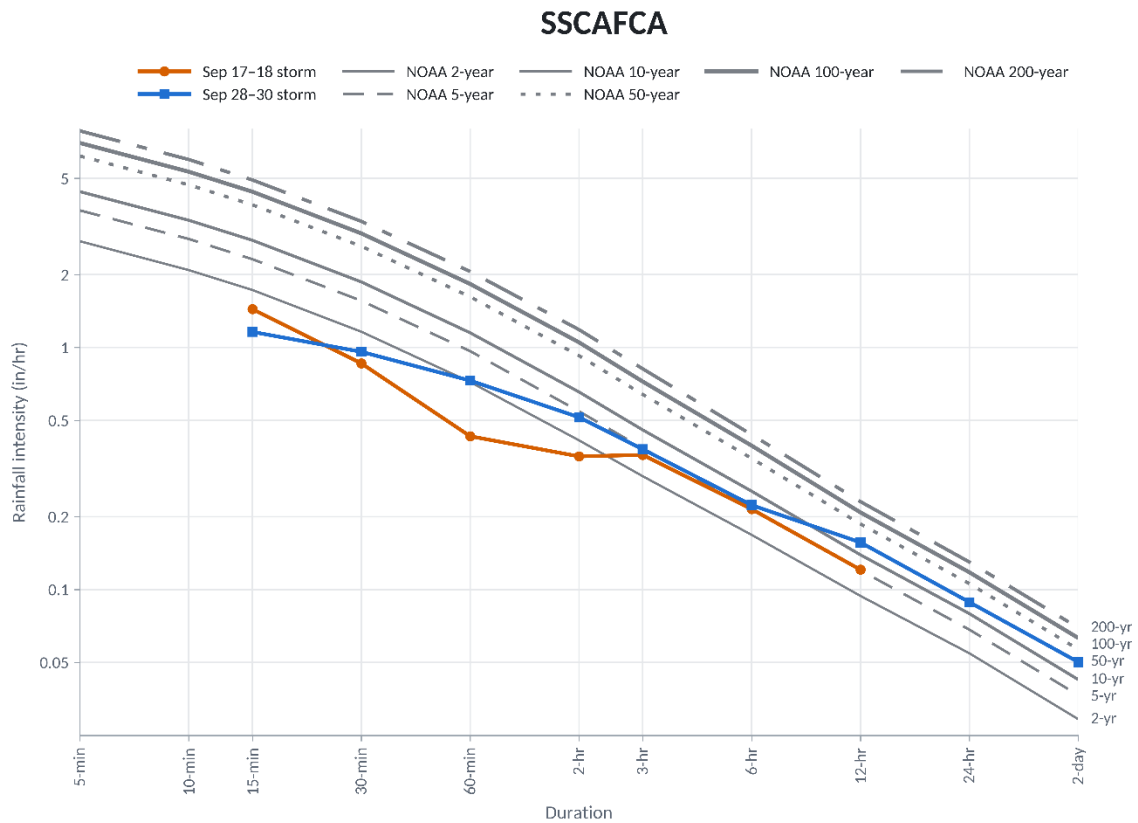
Source: NOAA Atlas 14; SSCAFCA rain gauges, with the closest Weather Underground station where SSCAFCA data were missing.

Figure A 1. Comparison of intensity-duration-frequency curves (gray) and precipitation data from the MariFire rain gauge for the storm events of Sep 17 to 18 (Orange) and Sep 28 to 30 (Blue).



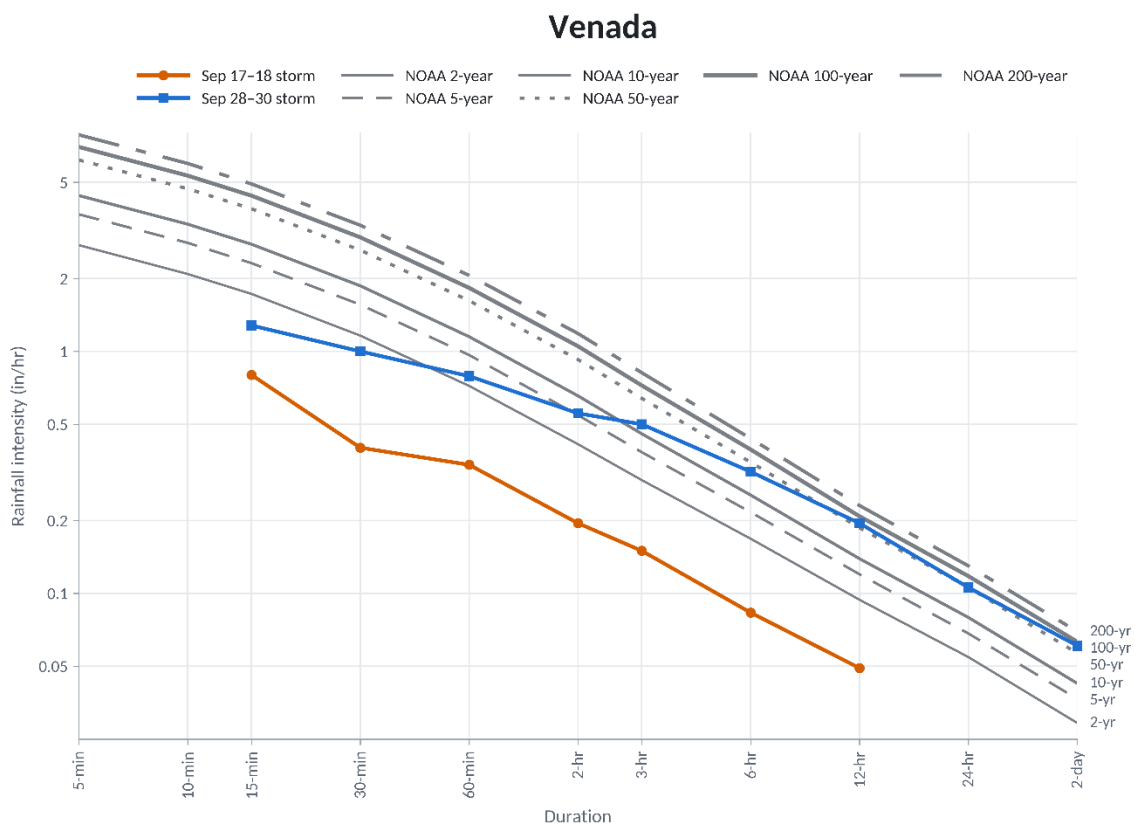
Source: NOAA Atlas 14; SSCAFCA rain gauges, with the closest Weather Underground station where SSCAFCA data were missing

Figure A 2. Comparison of intensity-duration-frequency curves (gray) and precipitation data from the EHFire rain gauge for the storm events of Sep 17 to 18 (Orange) and Sep 28 to 30 (Blue).



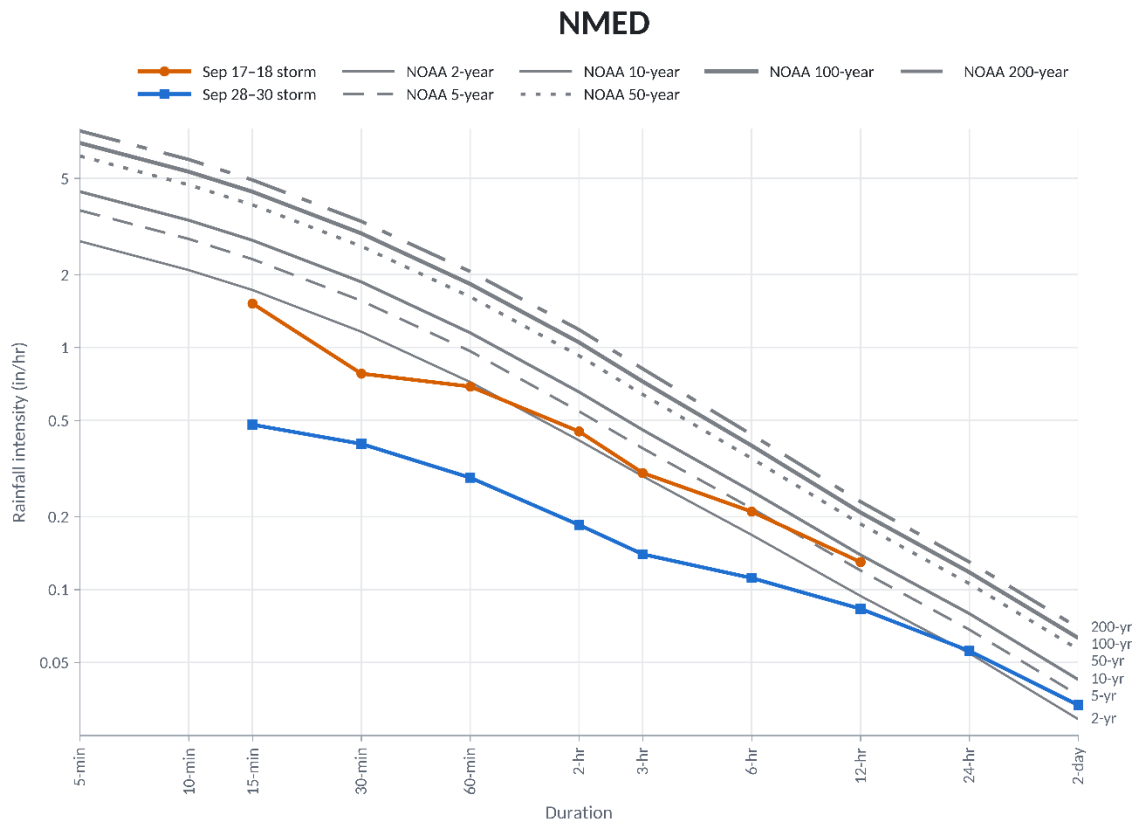
Source: NOAA Atlas 14; SSCAFCA rain gauges, with the closest Weather Underground station where SSCAFCA data were missing

Figure A 3. Comparison of intensity-duration-frequency curves (gray) and precipitation data from the SSCAFCA rain gauge for the storm events of Sep 17 to 18 (Orange) and Sep 28 to 30 (Blue).



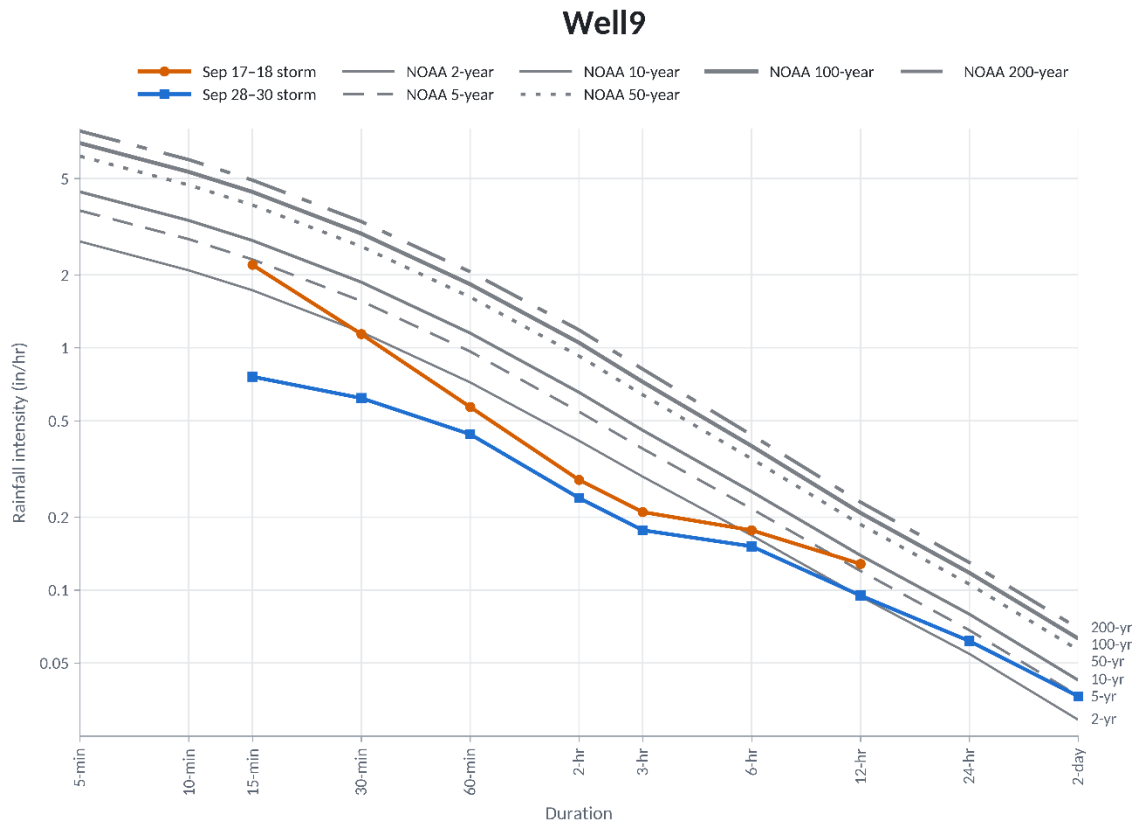
Source: NOAA Atlas 14; SSCAFCA rain gauges, with the closest Weather Underground station where SSCAFCA data were missing

Figure A 4. Comparison of intensity-duration-frequency curves (gray) and precipitation data from the Venada rain gauge for the storm events of Sep 17 to 18 (Orange) and Sep 28 to 30 (Blue).



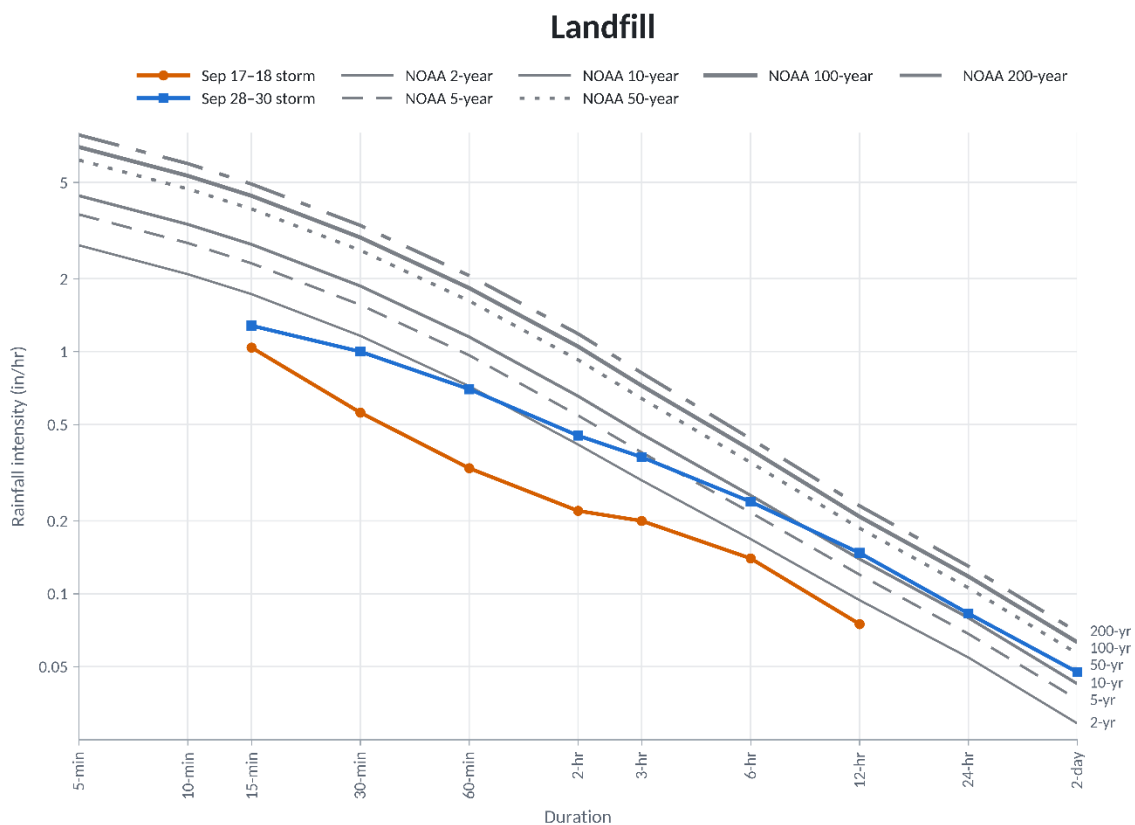
Source: NOAA Atlas 14; SSCAFCA rain gauges, with the closest Weather Underground station where SSCAFCA data were missing

Figure A 5. Comparison of intensity-duration-frequency curves (gray) and precipitation data from the NMED rain gauge for the storm events of Sep 17 to 18 (Orange) and Sep 28 to 30 (Blue).



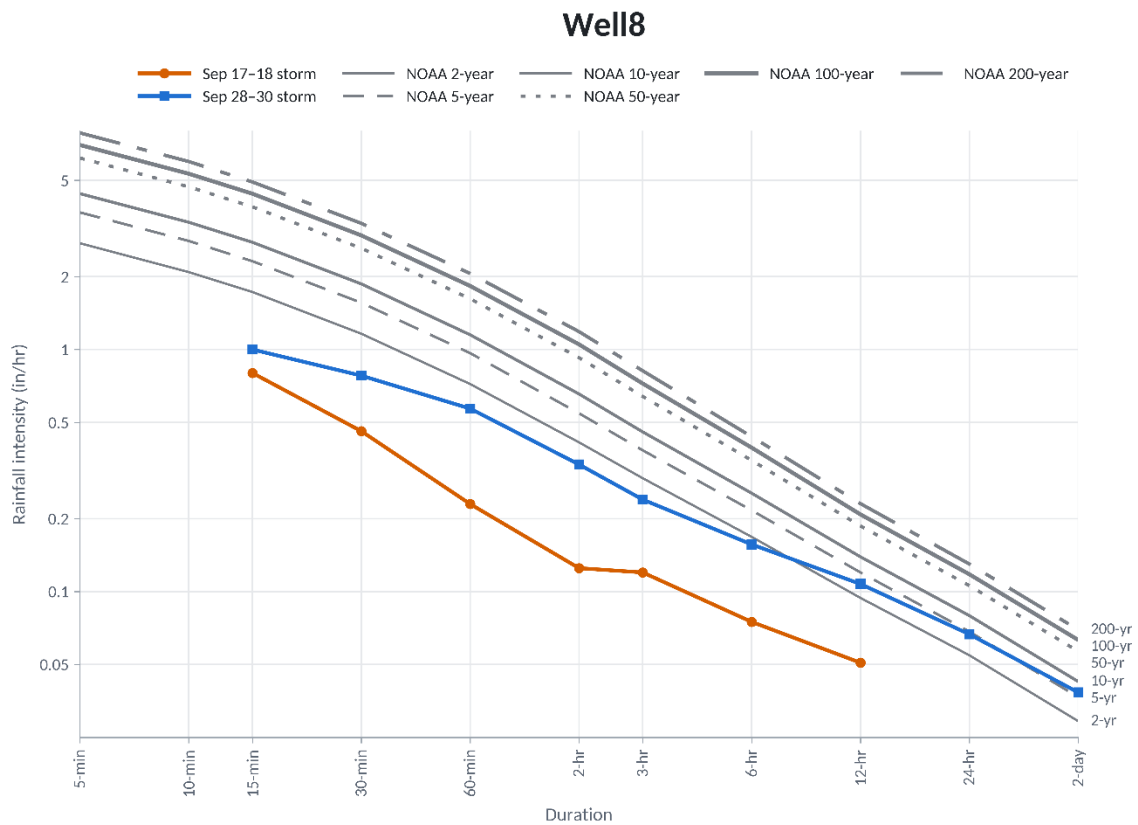
Source: NOAA Atlas 14; SSCAFCA rain gauges, with the closest Weather Underground station where SSCAFCA data were missing

Figure A 6. Comparison of intensity-duration-frequency curves (gray) and precipitation data from the Well9 rain gauge for the storm events of Sep 17 to 18 (Orange) and Sep 28 to 30 (Blue).



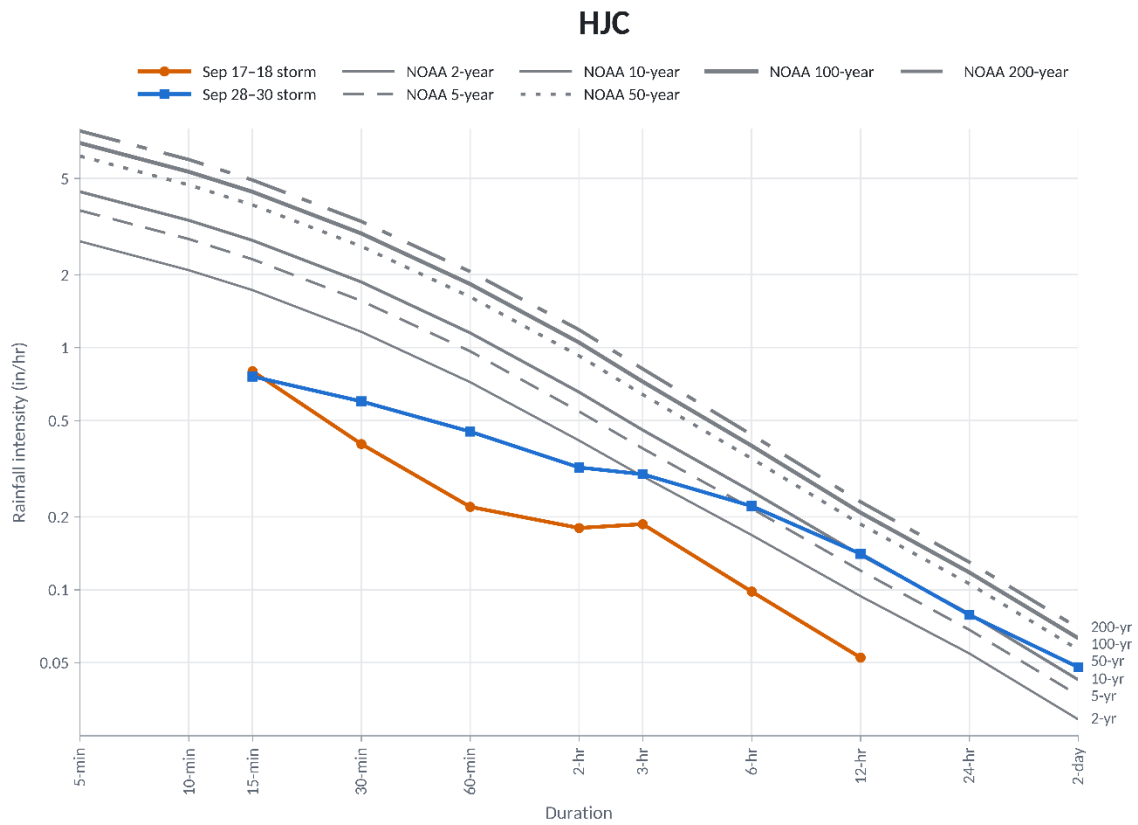
Source: NOAA Atlas 14; SSCAFCA rain gauges, with the closest Weather Underground station where SSCAFCA data were missing

Figure A 7. Comparison of intensity-duration-frequency curves (gray) and precipitation data from the Landfill rain gauge for the storm events of Sep 17 to 18 (Orange) and Sep 28 to 30 (Blue).



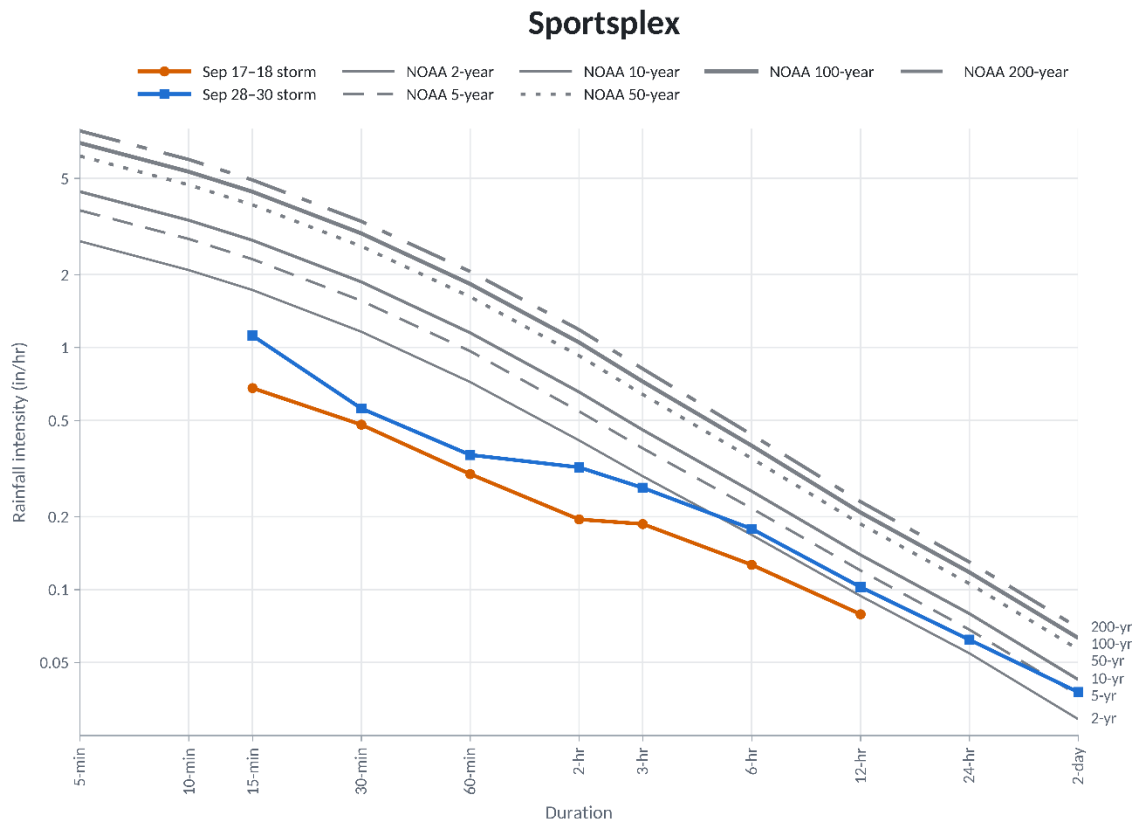
Source: NOAA Atlas 14; SSCAFCA rain gauges, with the closest Weather Underground station where SSCAFCA data were missing

Figure A 8. Comparison of intensity-duration-frequency curves (gray) and precipitation data from the Well8 rain gauge for the storm events of Sep 17 to 18 (Orange) and Sep 28 to 30 (Blue).



Source: NOAA Atlas 14; SSCAFCA rain gauges, with the closest Weather Underground station where SSCAFCA data were missing

Figure A 9. Comparison of intensity-duration-frequency curves (gray) and precipitation data from the HJC rain gauge for the storm events of Sep 17 to 18 (Orange) and Sep 28 to 30 (Blue).



Source: NOAA Atlas 14; SSCAFCA rain gauges, with the closest Weather Underground station where SSCAFCA data were missing

Figure A 10. Comparison of intensity-duration-frequency curves (gray) and precipitation data from the Sportsplex rain gauge for the storm events of Sep 17 to 18 (Orange) and Sep 28 to 30 (Blue).