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Capital Weather Gang

Drenched city: 2018 is now Washington's wettest year ever recorded.

By Jason Samenow and lan Livingston

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An unprecedented series of drenching rain storms, culminating in this weekend's soaking, has catapulted 2018 to the wettest year on record in Washington. This year's rainfall tally shoves aside the previous top mark which stood for nearly 130 years.

The steady rain Friday night into Saturday elevated 2018's total past the previous record of 61.33 inches set in 1889. The National Weather Service announced the record was surpassed at 6:26 a.m. Saturday. After that, more than another inch of rain came down, and Saturday eclipsed the previous Dec. 15 rainfall record of 1.38 inches from 1901.

An additional inch or so of rain could fall through Sunday, pushing 2018 further ahead of historically wet years of the past. Weather records in Washington date back to 1871.

Washington joins Baltimore, which broke its annual rainfall record in November, in notching its wettest year. Dozens of other locations in the Mid-Atlantic, including Wilmington, N.C., Charleston, W. Va, and State College, Pa., have also set yearly rainfall records with two weeks still remaining.

The extreme rainfall in the Mid-Atlantic has stemmed from a

weather pattern unleashing a parade of storms through the region since May. Except for brief pauses in the first half of July and this month, it has seldom relented. The jet stream, which is the high-altitude air current along which storms track, has persistently directed moisture-packed storms through the region.

The pattern gave rise to the devastating flood in Ellicott City, Md., in late May, its second "1 in 1,000" year deluge in two years. Frederick, Md., also endured a severe flood event in May when its downtown area was engulfed by half a foot of water in two hours. Around this time, Washington witnessed a stretch of seven days in a row with at least 0.25 inches of rain, its longest such streak ever recorded.

In all, Washington has seen 122 days with measurable rain this year, which is not out of the ordinary considering the long-term average is 116. But very often when it has rained, it's poured. At least an inch of rain has accumulated on a record 23 days, including Saturday.

The frequent episodes of heavy rain have spurred multiple flood events on area waterways. As the torrents poured into the Potomac River, waters rose to the flood stage three times at the gauge at Little Falls, once in June and twice in September. In each of the three instances, the water level ranked among the top 75 crests in records that date to the 1930s.

The 62-plus inches of rain so far this year is 50 percent above the long-term average of around 40 inches. For perspective, other cities whose average yearly rainfall is between 60 and 65 inches include Miami (62 inches) and New Orleans (64 inches).

Although scientists hesitate from attributing the rainfall in a single year to climate change, an increase in heavy precipitation is an expectation as the planet warms. Washington's temperatures have risen over time, and 2018 is on track to rank among the top 10 warmest years on record.

The federal government's National Climate Assessment, published in November, documented a recent trend toward increasing rainfall intensity in the northeast U.S. and, due to climate warming, projects even heavier downpours in the coming decades.

The record-setting rainy year by the numbers

Four: The total rainfall in four months ranked among the top 10 highest on record.

May's 8.73 inches ranked as sixth wettest on record.

July's 9.73 inches ranked as fourth wettest on record, even after a record-dry first 15 days.

September's 9.73 inches ranked as fifth wettest on record. Measurable rain occurred on 16 days, a record for the month.

November's 7.57 inches ranked as the wettest in recorded history.

Eight: The number of calendar days which saw record rainfall. They happened on: Feb. 10 (1.06 inches); May 14 (1.49 inches); July 17 (2.79 inches); July 21 (4.00 inches); Aug. 21 (2.46 inches); Sept. 9 (1.59 inches); Nov. 5 (1.44 inches); Dec. 15 (at least 1.72 inches)

23: Days this year with at least one inch of rain. This number is the most on record in Washington, besting 21 from 1878. This data point tends to fit the idea of more precipitation falling on fewer days in a warming world.

29: Saturdays with rain, including this one. That's more than half of them in 2018. If you thought rain was occurring frequently on weekend days this year, you were right.

1,391: Flooding-related reports in the Washington-Baltimore region (as compiled by the National Weather Service). This compares to only 262 reports in 2017. The month with the most

was August, when 308 reports of flooding racked up. Overall, they were logged on 71 different days, with June 22 leading the pack with 101.

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