Streamflow conditions across North Carolina
Assessment of hydrologic conditions observed through April 2019...

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https://www2.usgs.gov/water/southatlantic/

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Access to USGS real-time records for NC Streamflow (279)
- https://waterdata.usgs.gov/nc/nwis/current/?type=flow&group_key=basin_cd
Groundwater (45)
- https://waterdata.usgs.gov/nc/nwis/current/?type=gw
Water quality (30)
- https://waterdata.usgs.gov/nc/nwis/current/?type=quality&group_key=basin_cd
Precipitation (148)
- https://waterdata.usgs.gov/nc/nwis/current/?type=precip&group_key=county_cd

2018WY records to be finalized by May 31, 2019
This year’s streamflow theme...”water water everywhere” (or at least, parts of the past six months...)

Figure 6. U.S. Geological Survey personnel use an acoustic Doppler current profiler to make a streamflow measurement of flood waters from the Cape Fear River in Kelly, North Carolina, on September 20, 2018.
Peak stages and streamflow after Florence

The report includes streamgages having at least 10 years of record and for which the September 2018 was in the top 5 for the period of record:

- 18 sites in NC (new POR)
- 10 sites in SC (new POR)
- 49 sites recorded peak streamflows in the top 5 of record (45 in NC and 4 SC)
- 4 stage-only gages had new peaks of record

Available online only: https://pubs.er.usgs.gov/publication/ofr20181172
New record minimum monthly average discharges

...No sites during April 2018 through March 2019
New record POR minimum daily discharge

Sta. 02087183 Neuse River near Falls, NC
POR since July 1970 (regulated by Falls Lake since December 1983), DA = 771 sqmi
POR min daily Q = 0 cfs on 09/17/2018 (previous at 5.20 cfs, 09/24/1980)

Sta. 02146600 McAlpine Creek at Sardis Road near Charlotte, NC
POR since April 1962, DA = 38.6 sqmi
POR min daily Q = 0 cfs on 07/04/2018 (previous at 0.01 cfs, 08/14/2002)

Response to Florence flooding...

...Two sites during April 2018 through March 2019

What??!!!!!
Overall 7-day average flows

Available at URL http://waterwatch.usgs.gov/index.php
Percentage of sites with 7-day average flows below normal (< 25th percentile)
Overall 28-day average flows...as of April 01

Available at URL http://waterwatch.usgs.gov/index.php
Percentage of sites with 7- and 28-day average flows below normal (< 25th percentile)

...since January 1, 2018
Waiting to see what conditions will evolve going forward…

7-day average streamflows

28-day average streamflows

Explanation - Percentile classes

- Low
  - Much below normal
  - Below normal
  - Normal

- 10-24
- 25-75
- 76-90
- >90

- High
- Not-ranked
In closing...

- Questions
- Concerns

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Flat River at Bahama
Durham County