

DROUGHT

It is likely* that future severe droughts in their multiple forms in North Carolina will be more frequent and intense due to higher temperatures leading to increased evaporation. It is expected that severe drought **impacts** will become more frequent in a warmer North Carolina.

While it's true that we have experienced an extremely wet spring and somewhat wet early summer here in the Piedmont in 2020 and similarly in 2018 (the wettest year on record in NC), think back to 2007 when drought conditions were critical; the state's worst ever drought led to water restrictions in municipalities, some having less than a 100-day supply of water available for residents.

Droughts are a natural part of the climate of North Carolina and drought variability is normal. Future droughts are projected to be warmer than historical events with a high level of confidence. This confidence is based on data collected, analyzed and published in March 2020 and updated in May by climate scientists and meteorologists in The NC Climate Science Report. This report can be found, along with a Plain Language Summary, on this webpage. It contains all the charts, graphs and numbers you could want, spanning 1895-2018, with predictions to 2100.

Of course, the concerns for NC are the **impacts** resulting from more frequent and intense droughts. These are detailed in the NC Climate Risk and Resiliency Plan (also on this webpage) and include the following: stress on agriculture, forestry and municipal and agricultural water resources, causing widespread economic damage, the risk of catastrophic wildfires, and temporarily reducing the availability of suitable habitat for wetland and aquatic animal populations.

*The words "likely," etc. have very precise definitions in the reports cited. These definitions are conveniently located in a graphic on this webpage. They are also given here in their entirety.

- very certain – 99-100% probability of outcome
- very likely – 90-100% “ “
- likely – 66-100% “ “
- about as likely as not – 33-66 “ “
- unlikely – 0-33% “ “
- very unlikely – 0-10% “ “
- exceptionally unlikely – 0-1% “ “